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GOLD COAST
IRONWORKS

SAFETY PROGRAM

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SAFETY PROGRAM

The primary objective of Gold Coast Ironworks is to adopt a proper and positive accident prevention program requiring all employees, and subcontractors and our suppliers to comply with the Safety rules and regulations set forth in the attached program.

This Safety Program, including any additions and/or modifications that may be required during the life of the project, should assist in keeping accidents to a minimum. This program is to be used in conjunction with the owner's, general contractor's, and/or subcontractor's own Safety Programs and all applicable Federal, State, and Local Safety Codes and Regulations.

We must realize that accident prevention is mandatory, beneficial to all, and the responsibility of every individual, whether in management, shop fabrication, field erection, or any other position. Safety is the concern of everyone.

Gold Coast Ironworks expects the full cooperation of all employees, subcontractors, and their suppliers in monitoring, supervision, and enforcing the Safety Program. It is mandatory that all personnel engaged in work on our projects comply with all Federal, State, and Local Safety Codes and Regulations throughout the duration of the project. Please note that in the event of conflict between various programs, codes, and regulations that the most stringent will be the one considered applicable.

Gold Coast Ironworks

Rich McFerron

Richard McFerron

President

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EMERGENCY MEDICAL PROCEDURES

The purpose of this program is to establish standard jobsite procedures for reporting accidents, administering first aid and emergency medical procedures.

Should any condition arise where serious injury, illness or potential exposure of Gold Coast Ironworks' liability occurs, where the incident is reported to our insurance carrier(s) (worker injury/illness, general public injury, liability, fire, theft or other insurance related claim), Gold Coast Ironworks' Safety Director will be notified as soon as possible.

A person/employee with a valid certificate of First Aid Training must be on any project on which medical assistance is not readily accessible to render first aid. The certificate must be obtained from the American Red Cross, US Bureau of Mines or equivalent training that can be verified by documentation.

The Company and each subcontractor shall maintain a Cal/OSHA approved First Aid Kit on the project at all times. The kits shall be readily available and shall consist of appropriate items determined to be adequate for the environment/ job site in which they are used. The kits shall be periodically inspected to verify the contents and ensure that adequate supplies are available.

Each subcontractor shall designate an employee qualified in first aid treatment as his or her Safety Coordinator. It shall be the Safety Coordinators responsibility to treat minor injuries and complete and submit required accident reports to Gold Coast Ironworks.

The project must always have the means and systems in place to contact emergency response personnel or to summon ambulance services if necessary. 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 at each job site.

The project must always have the means and systems in place to provide for eye or body washing and flushing when chemicals or corrosive materials are present. Suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

MINOR INJURIES

Minor injuries are those that required only immediate first aid treatment and do not result in lost work time.

In the event of a minor injury, the subcontractor's Safety Coordinator shall treat the injury and/or send the injured employee to a designated medical center for treatment and checkup if necessary.

Persons who have encountered head injuries, major impacts, or whose injuries are the result of a fall shall be provided transportation to the medical facility by the subcontractor.

Upon returning from treatment, the employee shall return to work ONLY if so released in writing by the attending physician.

All minor accidents shall be a topic of discussion at the subcontractor's next scheduled Safety Meeting, to include cause of accident and preventive measures to be taken to avoid future similar accidents.

MAJOR INJURIES

Major injuries are those that require extended medical treatment, use of emergency vehicles, result in loss of work time, or result in death.

In the event of a major injury, the first person to encounter the injured shall summon others to notify the Gold Coast Ironworks field staff and provide the appropriate first aid treatment if qualified. Any subcontractor may dial 911 to request medical assistance.

While awaiting arrival of the Emergency Vehicles(s), the injured shall not be moved unless he/she is in immediate danger of additional injury in his/her current location. Equipment and material involved in or responsible for the accident shall not be disturbed unless it presents an additional danger to the injured person(s).

The closest Emergency Medical facility is:

The subcontractor's Safety Coordinator shall coordinate between their respective insurance carrier and the medical facility.

Immediately after the accident, Gold Coast Ironworks will meet with the responsible subcontractor's Superintendent and/or Foremen and review the conditions and direct the appropriate corrective action. The subcontractor's Safety Coordinator shall complete and submit a copy of all required reports to Gold Coast Ironworks.

Immediately, following a major injury, Gold Coast Ironworks shall conduct a Safety Meeting with attendance required of all affected jobsite personnel. Topics or include cause of accident, Nature of injury, immediate prognosis for full recovery from injury (if available), and preventive measures to be taken to avoid future similar accidents.



EMERGENCY PHONE NUMBERS

AMBULANCE / LIFE SQUAD	911
NEAREST HOSPITAL	St. Johns Hospital 1600 North Rose Avenue Oxnard, CA 93030
Urgent Care Center	1555 West 5 th Street Oxnard, CA 93030 (by the Oxnard Airport)
FIRE DEPARTMENT	911
POLICE DEPARTMENT	911
Gold Coast Ironworks	805 485 6921
UNDERGROUND ALERT	1 800 642 2444 7 am TO 5 pm WEEKDAYS
EDISON	1 800 611 1911
GAS COMPANY	1 800 427 2000
PACIFIC BELL	611
ALL ACCIDENTS MUST BE REPORTED TO Gold Coast Ironworks IMMEDIATELY.	
Rich McFerron	CELL PHONE: 805 797 7059
Adam Bennett	CELL PHONE: 805 861 9535



SAFETY PROGRAM

ACCIDENT PREVENTION is the responsibility of each individual for the good of us all.

A. PURPOSE

Prevent accidents by preplanning our work with the emphasis on Safety.

Outline the duties and responsibilities of all parties.

Establish a plan for Safety education to promote management and worker identification and elimination of hazards.

B. ORGANIZATION

Designated Safety Person - Gold Coast Ironworks Superintendent

Safety Coordinator - if required, the Superintendent may appoint a Gold Coast Ironworks staff member

Subcontractor – Appoint an on-site Safety supervisor (may be the foreman) who is designated as the primary responsible person for his/her company on the project. This designated representative shall be knowledgeable in Safety and have the authority to mitigate hazards relative to the subcontractor’s operations.

All Personnel associated with a project.

Gold Coast Ironworks Safety Team Consultants

Safety Director - Richard McFerron

Great American Assurance Company Loss Prevention Department

Subcontractor’s Safety Director

Subcontractor’s insurance carrier safety representative

C. OVERALL SAFETY RESPONSIBILITY

The person with overall responsibility/accountability for this Safety Program is Richard McFerron. This person is directly responsible to the President.

The person responsible for implementing this Safety Program, at the project level is the Project Manager or Superintendent.

D. INDIVIDUAL RESPONSIBILITIES

1. Project Superintendent – designated responsible for safety

- To enforce compliance by all parties with the principles of the Safety Program, which includes a requirement for timely reporting and mitigation of potential hazards for all jobsite operations.
- Assist all subcontractors in preplanning their operations to prevent personal injury or property damage, to employees, subcontractors employees or the public.
- Conduct monthly Safety meetings
- Appoint a Safety Coordinator, if needed, or perform all the responsibilities of the Safety Coordinator himself.
- Prepare, issue and periodically update the Code of Safe Practices and other documents as the Safety Director advises.
- Issue Safety Bulletins for the project.
- Review and enforce the recommendations of the Safety Coordinator (if any), Safety Audits and of minutes from the Tailgate Meetings.
- Conduct periodic Safety Audits to ensure compliance.
- Investigate Gold Coast Ironworks employee accidents, and review all subcontractor accident investigations, directing any corrective action necessary of a hazardous condition that may exist.
- In the event of a life threatening hazard or a hazard that may cause impairment or property damage, the Project Superintendent or his designated representative is authorized to stop operations until such time as the condition is corrected.

2. Project Safety Coordinator (May or may not be required)

- Make at least a weekly formal Safety inspection and submit a written report. When applicable adverse Safety conditions will be addressed to the responsible subcontractor for **immediate correction**.
- On a daily basis, observe all operational safety practices.
- Attend weekly Gold Coast Ironworks Tailgate Meetings with employees.
- Gather facts on accidents and thefts for action by the Project Superintendent.
- Take the lead in recognition and abatement of hazardous situations.
- Periodically attend trade and subcontractor Tailgate Safety Meetings.
- Distribute and post all Safety Meeting Minutes, Safety Bulletins, and Accident Data.

- Prepare Minutes of Tailgate and monthly Safety Meetings.

3. Subcontractor Designated Safety Coordinator

By law, every employer is required to have a designated safety person/coordinator on site. This person is identified in the Contractor Reply/Safety Profile. Their duties include:

- Assist the Safety Coordinator in recognition and abatement of hazardous situations.
- Conduct Tailgate Meetings on a weekly basis with all their workers. Issue Safety material to workers related to the Safety of their operations, review project Safety concerns with their workers, preplan upcoming work, discuss and unsafe work practices and/or conditions noted, review accidents and encourage Safety suggestions.
- Issue minutes of the weekly Tailgate Meetings to the Safety Coordinator by Friday, at the end of the work day.
- Effectively utilize and train your workers in preplanning, as well as the recognition, and abatement of hazards.
- Attend all Project Safety Meetings.
- Prepare accident reports and perform follow up accident investigations. Submit any accident reports immediately to the Safety Coordinator.
- Per California Safety Code requirements, Inspect all work areas on a minimum of a weekly basis, documenting the inspection and ensuring that unsafe acts and/or conditions are identified and corrected. All corrections must be documented in a timely manner.
- Ensure that all of his/her workers and subcontractors adhere to all Safety requirements.
- Provide and require use of personal protective equipment, including suitable tools for each task.
- Set a good example for his/her crews with respect to Safety and compliance with the Safety Program.
- Maintain copies of all required subcontractor Safety reports. The subcontractor shall maintain this documentation for the period of time prescribed by law.

4. All Employees

- Perform work to prevent accidents to yourself, fellow workers, and property.
- Alert supervisors to dangerous situations, including unsafe tools and equipment.
- Follow all supervisor, safety, health, and environmental instructions.

- Only use appropriate tools and equipment meeting the required safety standards.

E. BASIC PRINCIPLES OF THE SAFETY PROGRAM FOR ALL EMPLOYEES AND SUBCONTRACTORS

1. Preplan your work to eliminate or minimize the risk of personal injury or damage to workers or the public.
2. All subcontractors must submit their company's Safety Program to the project Superintendent prior to the start of their work. This program shall list the positive steps the subcontractor intends to utilize for the prevention of accidents to its workers, other subcontractors, and the public during operations on this project. As a minimum, the subcontractor's Safety Program shall incorporate all the Basic Principles of this Safety Program. Each subcontractor's Safety Program will include an Injury and Illness Preventions Program, IIPP. Subcontractor will certify in writing, to the Project Superintendent, that their program(s) meet or exceed all respective Codes of applicable Safety Regulations.

Gold Coast Ironworks' Project Superintendent will not certify that any subcontractor's written Safety Program meets the minimum safety standard requirements. Compliance is the responsibility of each subcontractor only. With the assistance of the Gold Coast Ironworks Safety Director, the Project Superintendent may review each subcontractor's Safety Program from time to time, with additional written Safety procedures or Codes, as may become necessary to address the potential operational hazards an/or exposures. The Safety Director or Field Operations Manager must approve any deviation.

3. Provide his workers all protective equipment and tools, with all necessary training, and enforce their use as required by the Safety Program and all Federal, State, and Local Safety Codes and Regulations.
4. Have a documented scheduled maintenance program for all tools and equipment.
5. Each week the Project is to submit in writing minutes of Tailgate Meetings containing the following:
 1. Name of the Meeting Conductor and date
 2. Names of all employees and any subcontractors
 3. Subjects discussed applicable to working exposures
 4. Safety observations of workers
 5. Names of others in attendance.
6. Minutes in handwritten form are acceptable, and if a subcontractor has a standard for, it may be used. Gold Coast Ironworks may supply blank Tailgate Meeting minutes forms for subcontractors use if necessary. However, Gold Coast Ironworks will not

provide any subcontractor any site-safety inspection form. By law, every employer must provide their own format, inclusive of all exposures inherent to their scope of operations and exposures.

7. Each contractor, regardless of tier, shall have at least one (1) qualified First Aid person present on the job at all times. This will include on “qualified” and/or “competent” person on site, for any operational exposure (trenching/excavation, confined space entry, fall protection, etc.) The names of the each qualified individual and date of certification and/or competency training shall be submitted to the Safety Coordinator (see the Contractor Safety Profile for names).

Each contractor shall make their First aid /CPR trained person aware of the potential hazards of blood borne pathogens and other infectious material. Note: “Good Samaritan” acts such as assisting a coworker with a nosebleed or laceration are not to be considered as occupational exposures and are not subject to the OSHA Blood borne Pathogens Standard.

8. Each job shanty, gang box and/or working vehicle shall be equipped with at least an ABC 20# fire extinguisher in good working order, with prominent signage leading to its location and a Cal/OSHA approved First Aid kit. Shanties with phones shall have posted telephone numbers of the following: a list of doctors, hospital, ambulance service, Fire Department, and Police Department.
9. Each Project Superintendent and any subcontractor shall enforce the wearing of ANSI approved hard hats, during total construction of the project and shall remove from the project anyone from his forces not complying with this requirement. Wearing hard hats is mandatory and a condition of employment on this project, and all Gold Coast Ironworks projects, at all times. Gold Coast Ironworks will not loan, rent, or sell hard hats, or any other personal protective equipment.
10. Unless the project is being conducted in a fully operational hospital emergency room a person who has a valid certificate in First Aid shall be on site to render first aid.
 - The certificate must be issued by the American Red Cross or an equivalent program that can be verified by documented evidence.
 - The individual’s certificate must be renewed on an annual basis.
 - First aid supplies must be on site, in a weather proof container, and readily available, and must include the appropriate items for the work being completed and the environment in which it is done. Individual items must be maintained in their original sealed packages.
 - The Project Superintendent has responsibility to check the first aid supplies before the job begins, to maintain the safety supplies, to check them weekly for resupply, and to adjust the inventory as required.
11. When applicable, building perimeter, shafts, and floor openings shall be protected, as safety standards require. Personnel working within 6’ of the building perimeter, 10’

for floors having machinery located below, or at the edge of a shaft or a floor opening, will wear a full body harness and be tied off with an appropriate life line.

Any personnel removing guardrails or toe boards shall replace them immediately after completion of their task. Areas where guardrails, mid-rail, end rails and toe boards, or other fall protection was preset, and then removed, shall be replaced immediately by the same contractor.

12. All work areas shall be kept free of debris and excess materials.
13. Clothing: All personnel shall wear shirts with minimum T-shirt length sleeves, long trousers, and proper sturdy foot wear at all times. No shorts, tennis shoes, tank tops, etc. will be permitted at any time in work areas. This includes all visitors.
14. There are many Safety factors involved with portable aluminum and other lightweight metal ladders. **Portable aluminum or metal ladders are not and must not be used on this or any project.**
15. Each subcontractor is responsible for all his or her subcontractors and suppliers compliance with the Safety Program.
16. Any person not directly involved with the onsite construction of this project must not enter the site without first going to the Gold Coast Ironworks job site office, obtaining permission to enter and signing a visitor's release. Subcontractors are responsible for providing hard hats for their visitors, and are responsible for the Safety of their visitors.
17. All equipment used on the project shall conform, at a minimum to all applicable Local, State, and Federal Codes and Standards, including industry standards. Equipment shall be operated in a Safe manner, and in accordance with all the applicable codes and standards and shall be equipped with operable backup alarms.
18. Playing of radios of any kind in work areas throughout the job is prohibited.
19. Each subcontractor is responsible for providing necessary fall protection for their employees, in compliance with all applicable requirements of Cal/OSHA.
20. All crane operations require a pre-lift Safety meeting to be attended by a representative of: the crane supplier, the contractor utilizing the crane, the crane operator, Gold Coast Ironworks, and the owners representative, if possible. All crane manufacturer requirements for set-up will be strictly enforced. This does not outline the entire requirements for safe crane operations. Each subcontractor, where crane operations exist, is responsible for compliance of all applicable safety laws and regulations.

21. Each subcontractor shall enforce the wearing of Safety Glasses during total construction of the project, where exposure exists, and shall remove from the project anyone from his forces not complying with this requirement.
22. Mandatory Fall Protection Requirements include the following:
- All subcontractors will comply, at a minimum, with any and all applicable safety regulations, for fall protection.
 - Body Belts/Positioning Devices, (except where approved for use in certain applications) used as a sole means or method of personal fall restraint system, without a full body harness, will not be permitted at any time.
 - Only the use of approved lanyards having an approved deceleration device which complies with both ANSI and OSHA Standards in conjunction with an approved full body harness, with D-ring at shoulder level only, will be permitted as an approved fall arrest system at any time. No lanyards will be used without this protection.
 - Use of roll-out, no-locking connector type snap hooks, used on any type of personal fall protection apparatus or equipment is strictly prohibited.
 - When a subcontractor cannot comply with requirements set forth in any fall protection standard, it is the duty of each subcontractor to establish a Fall Protection Plan, prepared by a qualified person, which meets and complies with fall protection requirements. Gold Coast Ironworks site management will only offer consultation, however, will not advise subcontractor as to what measures to take for compliance. When this occurs, the subcontractor shall determine the necessary fall protection methods to be followed. Strict compliance with, as a minimum, any and all Cal/OSHA fall protection requirements will be adhered to.
22. All necessary precautions shall be taken to prevent injury to the public or damage to property. The public is defined as all persons not employed by or under contract or subcontract to Gold Coast Ironworks. Installation of temporary barriers to protect the public shall be pre-planned with Gold Coast Ironworks at the start of work in public areas.
- Altered walkways that have planking, trench plate or similar material shall not have deviations from one surface to another greater than one (1”) inch. If such deviations exist, they will be reduced by placement of asphalt, concrete or other acceptable material to soften the change in elevation. Prior to opening public access to walkways, supervision will inspect to assure that no trip hazards exist.
 - Building entrances, public sidewalks, doors, lobbies, corridors, aisles and exits shall be kept clear of obstructions to permit Safe public ingress and egress at all times.
 - Traffic control, both vehicular and pedestrian, shall be provided by the subcontractor performing the work in public areas. All flag person(s) properly trained by the subcontractor) shall control the movement of vehicles and/or equipment and shall coordinate the movement with public vehicles and pedestrians, and shall not cause undue delay to the movement of pedestrian or public vehicles. All required signage and traffic control shall comply with

CalTrans standards, and/or The Code for Streets and Highways or as may be required by the conditions.

- Trenches, stockpiles or other operations which remain in public areas overnight shall be protected by barricades with flashers. When barricades are temporarily removed, a watchperson shall be placed at all openings.
 - Temporary sidewalks shall be provided when a permanent sidewalk is obstructed by a subcontractor's operations. Guardrails shall be provided as required by code.
 - Warning signs, lighting and barricades shall be maintained from dusk to dawn in public areas where hazards remain overnight. Lighting shall be maintained at a minimum as required by Cal/.OSAHA.
 - Periodic 35mm dated photographs will be taken of all safety precautions (signs posted, lighting, etc.) taken.
23. Each subcontractor shall enforce the wearing of gloves during total construction of the project, and shall remove from the project anyone from his forces not complying with this requirement.

Wearing gloves is a condition of employment on this project. Use of glove protection is universally required by the Gold Coast Ironworks Project Superintendent. This practice is to be mandatory, strict compliance will be followed.

F. SUBCONTRACTOR INJURY / ILLNESS REPORTING REQUIREMENTS

If a subcontractor worker is injured and/or medical attention is required, or if the employee becomes ill due to any work environment:

1. Provisions shall be made by each subcontractor for immediate and proper First Aid and doctor treatment for every work injury.
2. The Gold Coast Ironworks Safety Coordinator is to be notified immediately providing the required documentation.

The Project Superintendent must notify the Safety Director immediately after all serious accidents or incidents occur, including close calls.

Employees First Report of Injury (Accident Report) is only required from the employer with the injured employee. No Gold Coast Ironworks report will be submitted unless injured worker is a Gold Coast Ironworks employee.

Documentation required from subcontractor(s) involved:

- Copy of subcontractors Worker's Compensation Injury Report 5020
- Copy of subcontractors Supervisor's Accident Report.
- Copies of Witness Statements, if any.
- Copy of Subcontractor's Accident Investigation Report.
- Diagram of accident scene
- Photographs of accident scene

- Copy of Gold Coast Ironworks Accident Investigation Report if a serious accident or fatality occurs.
3. All reports involving subcontractor's employees shall be promptly forwarded to the Gold Coast Ironworks Project Superintendent and copies included in the projects Monthly Safety Report for that month.
 4. Subcontractors are individually responsible to notify all Federal, State, and Local authorities, in the event of an accident to an employee, including the following:
 - A single accident in which one (1) or more individuals are hospitalized for treatment. Any employee suffering any amputation and or health condition warranting same, notify authorities within 8 hours from time of accident.
 - Should a worker be injured, requiring medical care by an attending medical facility, admitted as inpatients for other than medical observation (treatment), the appropriate authorities are required to be notified by the Subcontractor within 24 hours from time of injury.

Gold Coast Ironworks' Safety Director is to be notified by the Project Superintendent in the event of a fatality and/or serious injury or illness.

If a member of the public is injured:

- Gold Coast Ironworks' Project Superintendent is to be notified immediately. The Project Superintendent will notify the Safety Director immediately.
- Send Public Liability Report to your insurance carrier promptly and forward one (1) copy of the report to Gold Coast Ironworks.

G. CONCLUSION

All contractors are responsible for instructing their employees in the recognition and abatement of unsafe conditions and the regulations applicable to their work environment to control or eliminate any hazards or other exposures to illness or injury.

Good Safety Practices implemented on this project will increase production, reduce accidents and their associated costs to all parties concerned.

Neglecting Safety is neglecting your job responsibilities.



NEW EMPLOYEE ORIENTATION and SAFETY TRAINING

Welcome to Gold Coast Ironworks. The Management of the company wants provide for you a new beginning, a way for you to earn a good living while working closely with your new fellow employees, and wants to introduce you to our Safety Program, which will allow us to all work safely together, “get ‘er done,” and go home at the end of each day to enjoy our family and friends. Doing our work SAFELY is more important than the completion of the work itself.

SAFETY PRACTICES

The following is a list of general company safety practices. Specific jobs, machines and other equipment will have additional safety precautions pertaining to them.

1. Smoking is prohibited in company vehicles and is restricted on company property. Smoking is offensive to many people and you should respect their right to not smoke or breathe in your bad habits. If your momma never told you to quit smoking then I’m telling you now, you should quit.
2. All injuries, no matter how slight, should be immediately reported to the foreman who will arrange for proper medical attention, and immediately alert management personnel.
3. Abuse of Alcoholic beverages, controlled substances and firearms is strictly prohibited on company property, including company vehicles. Anyone known to be under the influence of alcohol or drugs will not be allowed on the job or in company vehicles.
4. Horseplay, misuse of equipment and other acts which tend to have adverse influences on the safety and well-being of the employees is prohibited.
5. Housekeeping is one of the first rules of a good accident prevention program. Keep operations, equipment, tools, supplies, etc. in a neat and orderly arrangement. Do not block aisles or doorways.

6. Do not attempt to operate machinery or equipment that you have not been trained on at Gold Coast Ironworks.
7. Equipment shall not be repaired or adjusted while it is in operation unless it has adequate safeguards for doing so.
8. Never wear loose clothing, finger rings, etc. around moving equipment. Loose clothing and long hair must be restrained so that it does not interfere with the normal operation of the machinery.
9. It is mandatory that all employees wear safety glasses on company property.
10. All moving parts on machinery must be properly guarded at all times.
11. Defective equipment or machinery and hazardous conditions should not be used and must be reported immediately to your foreman.
12. Fire fighting equipment must be clear and accessible at all times.
13. When a fire extinguisher is used, it must be reported to your foreman immediately so that it can be regenerated and placed back in proper working order.
14. All employees shall wear personal protective equipment in designated areas as required.
15. Do not use any equipment on which the safety devices have been made inoperative.
16. Work boots must be worn on all company property and jobsites. Boots or safety shoes are to be of hard leather construction and must be approved by foreman or department manager.
17. When necessary to lift manually, proceed in the following manner:
 - A. Crouch down to load, keeping your back straight.
 - B. Grasp load by standing straight with legs, keeping your back in a nearly straight up and down position as possible.
 - C. Turn feet in direction in which you wish to move, avoid twisting motions.

- D. When lowering loads, generally reverse the above procedures.
18. Under no circumstances are you to drive a company vehicle unless you have a valid California's Driver's License.
 19. All electrical hand tools must have a grounded plug. The electrical cords and wiring must be regularly inspected and immediately replaced when signs of being worn or unsafe are observed.
 20. No employee is allowed to do any welding or burning until he has been properly trained and authorized by the foreman.
 21. All oxygen, acetylene and LP gas tanks must be stored in a safe place (outside when not being used) and secured so they cannot be knocked down or fall over. The tops must be securely mounted on all containers when not in use.
 22. Only employees trained and licensed by Gold Coast Ironworks will be allowed to operate forklifts.
 23. Waste must be disposed of in proper containers. If you are unsure of the correct waste procedure, read the Waste Disposal procedure and check with your supervisor.
 24. Observe and heed all shop information and warning signs.
 25. Gloves, Hard hats and Hearing protection are not specifically required to be worn all the time but are strongly recommended, and available for your use.
 26. Medical records for individuals are stored in the company files. Only you and the person maintaining the files have access to them have access to any records the company has in your file. If you ever have questions about this policy or want to see your file, please talk to Rich McFerron for access.

SAFETY IS EVERY PERSON'S JOB – AND IT STARTS WITH YOU.

ANY OFFENSES TO THESE SAFETY RULES MAY RESULT IN DISCIPLINARY ACTION.

Although the law places primary responsibility for occupational safety and health on the employer, certain responsibilities have been designated by safety regulations to be the responsibility of the employees. These responsibilities include:

1. Obeying ALL occupational safety and health standards, rules, regulations, and orders issued according to the laws.
2. Not removing, displacing, damaging, destroying, tampering with, or carrying off safety devices, safeguards, notices, or warnings.
3. Not interfering with the use of safeguards by others.
4. Using any equipment (i.e. hardhats, safety belts with full body harness, eye protection, breathing respirator, required clothing, hand or foot protection) method or process adopted for employee protection.
5. To observe and follow Gold Coast Ironworks' "Code of Safe Work Practices".
6. To set a good example for fellow workers.
7. To cooperate with Supervisors in preventing accidents, and alert them to dangerous situations, including unsafe tools and equipment.
8. To make safety suggestions to Supervisors.
9. To take good care of company equipment and report an unsafe or defective equipment to a Supervisor.
10. To help keep the project and work areas clean at all times.
11. To report all injuries, and/or known serious incidents, including close calls, to Supervisors at once.

Thank you for your cooperation in our Safety Program. Here is my business card, with my cell phone number on it. You can call me anytime. On the following page I want you to print your name and sign it so we have a record of this discussion and the beginning of our journey together.

Rich McFerron

Richard McFerron – President



New employee orientation and Safety Training was completed.

Date:

New employee name:

Signature: _____

Orientation was completed by: _____



PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) includes the appropriate use of the following items.

1. Head Protection
2. Foot Protection
3. Eye and Face Protection
4. Hearing Protection
5. Use of Respirators
6. Hand Protection
7. Special Welding PPE

A Job Hazard Analysis (JHA) shall be performed by the Company to determine the type of hazards present, and the type of PPE which must be provided. The JHA must be documented, with the certifiers name, signature and date.

It is the responsibility of the Company to provide PPE for each employee, according to the need, to train each new employee in the proper use, and to provide re-training on at least an annual basis, whenever workplace conditions change, or when unsafe use (or non-use) is observed.

Documentation of the training and retraining of the employees shall be kept on file.

PPE must be provided, stored and maintained in good, clean, and sanitary condition, and fitted to the employee for proper use. Defective or damaged PPE shall not be used.

It is the responsibility of the Employee to use it, to maintain it, and to use it properly.

When an Employee provides his own PPE, the Company is responsible to assure it is adequate, and properly maintained.

Additional PPE requirements may exist at job sites under the control of owners and other customers, or when working at job sites that have exposure to unusual dangers, such as chemicals, working over water, or high traffic areas. The employee must also be aware of and abide by these minimum requirements, which may include wearing high visibility clothing, safety toe boots, side shields on glasses, special hardhat type welding hoods, and/or gloves at all times.

1. Head Protection

- Employees working areas where there is a possible danger of head injury shall wear Hard Hats.
- Hard Hats must meet the requirements of ANSI Z89.1.
- Always wear a hard hat when working on a job site with an active crane.
- Hard hats must not be worn backwards, unless it is to done so to provide for the use of face shields or some other reason approved by the superintendent.
- Hard hats must be inspected regularly and discarded if they are defective, cracked, damaged, or after some event which makes its ability to protect the employee questionable.

2. Foot Protection

- The Company requires the employee to wear sturdy shoes, suitable for work in a construction environment.
- Tennis shoes, soft leather, canvas, flip flops, or sandals are not allowed to be worn at work.
- Boot/shoe laces must always be properly tied.
- Safety toe boots are recommended but not a requirement.
- Safety toe boots are required at some job sites, and must meet the requirements of ANSI Z41.1

3. Eye and Face Protection

- Eye protection must be worn at all times.
- Eye protection must meet the requirements of ANSI Z87.1
- Employees who wear corrective lenses must wear goggles, or safety glasses which fit over the normal glasses.
- Eye protection must be kept clean and in good condition.
- Always wear double eye protection when using a grinder or chipper, safety glasses and a face shield. A welding hood may be used as face shield.
- Always wear dark lenses when using a cutting torch or welding.
- Always wear a face shield when working around chemicals and there is a danger from splashing.

4. Hearing Protection

- Hearing protection must be worn in noisy areas, over 85 decibels. Hearing loss can result from not only loud sudden noises, but also by exposure to low level noise over a long period of time.
- The Company provides hearing protection to all employees, free of charge, at all times, and recommends its use for personal protection.

- When information suggests that exposure to 85 dbA or more for extended periods exists, a monitoring program shall be put in place to identify the danger and the employees who are subjected.
- Audio tests shall be performed on employees who are subjected to the time weighted average of 85 dbA for 8 hours, within 6 months of that exposure, to establish a baseline test.
- Audio testing must be done when the employee has had at least 14 hours of non-exposure to workplace noise. The employee is to be notified of the test well in advance to accommodate this requirement and to avoid high levels of noise. Hearing protection may be used to assure the requirement is met.
- Testing on employees subjected to the time weighted average of 85 dbA for 8 hours, must be repeated on an annual basis.
- If the additional testing reveals a change in hearing loss from the baseline test the employee must be notified within 21 days. Additionally the use of hearing protection shall be re-evaluated and/or refitted, and if necessary a medical evaluation may be required.
- The Company must maintain records of any exposure and testing of individual employees.
- Always wear hearing protection when using a grinder or an abrasive cut off wheel.
- The Company will evaluate specific noise dangers and the type of hearing protection required.
- Employees may voluntarily wear individual ear devices, or head gear. Cotton balls and/or cloth are not acceptable.

5. Use of Respirators

- The Company must provide respirators to employees exposed to harmful vapors, and oxygen deficient atmospheres, at no cost to the employee. The Safety Director is responsible for determining when respirators are required and the implementation of the program.
- Respirators must be suitable for the intended use, and will be different for various jobs. When issued respirators must be NIOSH certified, and selected for the type of hazard present.
- A dust mask must be worn when working in dirty environments.
- An air purifying respirator, with filters, must be used when there is a danger from noxious fumes and particulates.
- The filter in the respirator must be designed for the type of fume being filtered and may be different for various types of heavy metals.
- Full Face Respirators with air supplied from a Self Contained Breathing Apparatus (SCBA) or Supplier Air Respirator (SAR) must be used in any environment which is Immediately Dangerous to the Life or Health of the employee (IDLH).
- The Company must provide for fit check and medical evaluation of the employee any time he is required to wear a SCBA or SAR type respirator, by a qualified Third Party, Physician or other Licensed Health Care Professional (PLHCP). The medical evaluation is always to be confidential and conducted during normal business hours, be as

convenient as possible, and understandable to the employee. The employee must be given the opportunity to discuss the test, ask questions, and be assured of confidentiality, with the physician or licensed health care professional. The fit testing must be done by either the qualitative (QLFT), or quantitative (QNFT) methods, and the employee must pass the test before initial use of the respirator.

- Recertification is required annually, or any time the employee reports, or the Company observes, a change in the employee's physical condition, such as facial scarring, dental changes, or a fluctuation in body weight, when this type of respirator is being used.
- Recertification is also required when job site conditions change, when the employee requests it, or when the Company observes the employee is unable to use the respirator properly.
- The qualified Third Party, Physician or other Licensed Health Care Professional, must maintain certification in accordance with OSHA standards.
- The Company shall maintain copies of the fit tests and physical examinations of the employee on file.
- Facial hair which interferes with the proper and safe use of a respirator is not allowed.
- Each time you use a respirator check it for a tight fit and proper seal.
- Maintain your respirator in a sanitary environment. Keep it clean, and do not share it with others.
- If it is necessary to share a respirator between employees, the respirator must be disinfected to restore the clean, sanitary condition.
- The employee must leave the work area to remove the respirator, as may be required to wash your face or the face shield, fix a leak, or to replace the filters.
- When working in an IDLH area, there shall also be an employee outside of the area with visual, voice or signal line communication to workers inside the area, who is trained in emergency response and who has his own SCBA or SAR, and either the appropriate retrieval equipment for removing worker inside, or an equivalent means for rescue.
- Respirators must be stored with protection from sun, contamination, dust, or extreme temperatures.
- Inspection respirators for damage, for pliability of elastomeric parts, and for cleanliness. Defective or damaged respirators must be removed immediately from service and repaired.

6. Hand Protection

- The Company promotes the use of gloves at all times, but recognizes that gloves are not always practical in all work conditions.
- Wear gloves whenever possible.
- If you take your gloves off to handle, manipulate something, or perform other special operation, keep them close and put them back on as soon as you can.
- Gloves may have the finger tips cut off to provide for manual dexterity, when necessary.
- Use the right type of glove for the work being performed.
- Use rubber or latex gloves when handling paints, solvents or other chemicals.

7. Special Welding PPE

When performing welding or torch cutting operations the employee is required to wear additional PPE including:

- A welding hood with the proper lens for type of cutting and welding being performed.
- Gloves for hand protection.
- Full body clothing of a sturdy material.
- Leathers whenever possible and practical, and whenever you are welding overhead.
- Special welding hoods with a built in hard hat must be used when working on a job site with an active crane, or when there is special danger of overhead or falling objects.



DRIVING SAFETY

Gold Coast Ironworks has a fleet of vehicles which are used for company business purposes. The vehicles are used for transporting employees, materials and equipment to and from job sites, and on other company business as required. It is the responsibility of the operator of the vehicle to comply with the company policies as stated here.

1. Only authorized employees are allowed to operate company vehicles.
2. The operator of the vehicle shall have a valid and current license to operate the vehicle.
3. The operator is responsible for knowledge of and compliance with state and federal laws and regulations which govern the use of a vehicle on public roads. The company does not pay for traffic tickets or violations of the laws.
4. The operator is not allowed to operate the vehicle under the influence of alcohol, illegal drugs or medications which are likely to impair his or her judgment and driving ability.
5. The operator must immediately report any traffic violations and incidents which are related to accidents or damage to the vehicle or to any other vehicle and/or personal property.
6. The operator is responsible for checking out the vehicles safety and control systems prior to use. Checking the fluid levels, brakes, lights, and tires must be done on a routine basis. Maintenance logs are to be kept for each vehicle and the operator is responsible for compliance with the Company maintenance plan. Vehicles must be kept in safe working order.
7. The operator is responsible for knowing the safe working load limits of the vehicle as related to pulling, towing, or carrying equipment and materials. The manufacturers safe working load limits must not be exceeded. If the requirements of the job exceed the

capacity of the vehicle a different vehicle which meets the requirements must be used. Do not overload. Use a vehicle of the correct size and capacity.

8. Materials and equipment carried on or in a vehicle must be properly restrained with tie down straps and bolted in. The load must not exceed the capacity of the vehicle.
9. The operator and all passengers must wear the seat belts provided at all times when the vehicle is in motion. Defective or damaged seat belts must be reported and replaced immediately.
10. Operators must maintain focus on the requirements of driving at all times. Activities such as using a cell phone without a hands free device, texting, tuning a radio or operating other equipment in the vehicle which interferes with the driver's ability to drive safely are not allowed. Pull over if you need to.
11. Operators must be aware of the driving conditions, and posted speed limits, in order to maintain a safe speed and following distance between you and vehicle in front of you.
12. The vehicles must be kept clean on the inside and outside. The operator is responsible for the vehicle and for the passengers.
13. The operator must know where the current registration and insurance information is contained in the vehicle and be able to produce it on demand.



HAZARD COMMUNICATION PROGRAM

General Industry Safety Orders (Title 8, Chapter 4, Subchapter 7, Section 3203 and Construction Safety Orders (Title 8, Chapter 4, Subchapter 4, Section 1509 and the OSHA's Hazard Communication Standard 29 CFR 1910.1200, contain the rules and regulations for all employers relative Hazard Communications. The purpose of these state and federal legislations is to ensure that employees are made aware of the hazards due to chemicals or the use of those chemicals in their work environment. It is the responsibility of each contractor to comply with this standard by properly identifying/handling the chemicals workers use, describing the potential health hazards, providing proper safety equipment to be used, training the employees for the proper handling of the chemicals, defining first aid procedures to be followed, if necessary, and obtaining the material Safety Data Sheet (SDS) from the manufacturer.

Since a construction project is a multi-employer site, the Project Superintendent will obtain SDS' from each supplier and make them available to each subcontractor. There are over 575,000 known chemicals which can be hazardous. The AGC of California has prepared a "short list" which lists a majority of the type of substances that may be found on a typical construction project. A copy of all jobsite material Safety Data Sheets will be provided to the Project Superintendent who will maintain one general job file for review (copy attached).

It is the responsibility of all contractors to implement the following procedure to collect, review, and distribute the SDS's:

- All materials received on the jobsite are to be accompanied by an SDS.
- The SDS must be reviewed by the subcontractor and his work crews as to the proper storage, handling and disposal of the material, discuss the potential dangers of working with the material, and the first aid procedures to use, if necessary.
- A copy of the SDS must be maintained in the subcontractor's job office for future reference. Please note "how" and "where" the hazardous substance is being used.

The project SDS file must be maintained in the job office and will keep a cumulative list of the hazardous materials being used by the company and any subcontractors. This file will be available for review by all interested parties during regular job hours.

Additionally, the labeling of containers used to store or transport hazardous chemicals or substances is mandatory. This includes all secondary containers such as coffee cans, cups, etc. Labeling of the containers will include: the contents warnings such as reactivity (flammable, explosive, etc.), health hazards, (harmful if swallowed, avoid contact with skin, eyes; inhalation may cause dizziness or shortness of breath, etc.), and the name, address, and phone number of the manufacturer.

OSHA is prepared to issue \$1,000 fines for non-serious violations (those which do not present a potential for serious injury or death), up to \$10,000 for serious violations, which potentially could cause injury or death. If a contractor is cited again within a 3-year period, there is an automatic \$10,000 fine. This pertains to any job site at which the contractor is present.

Some of the chemicals used today are the same ones used for the past twenty years or more. In addition, many of the products have been re-formulated and there are many new products constantly being introduced into our industry. What is new today is the level of awareness and sensitivity to the dangers of dealing with these substances, and the long term effects of exposure to these substances.

This added responsibility is really a simple task to comply with, and the benefits to all are tremendous in reducing long-term health problems. Gold Coast Ironworks is committed to continuing to make the construction site a Safe and healthful environment.

A written hazard communication program must be developed, implemented and maintained at each work site. The site specific program must address labeling and warning placards, SDS sheets and the dissemination of information to employees and subcontractors.

Attached, please find the Gold Coast Ironworks policy for Hazard Communication for this project.

HAZARD COMMUNICATION STANDARD POLICY

1. Each subcontractor is to submit a copy of its written Hazard Communication Program to the Gold Coast Ironworks job site. An initial hazardous material / chemical listing for this specific jobsite must accompany the Program. In the event of an OSHA site inspection, any Hazardous Communication Program shall be submitted to the OSHA representative upon request.
2. All subcontractors are required to maintain SDS sheets on the project site and to provide them to the Project Superintendent.
3. A complete file of all SDS submitted is to be located at the jobsite office for review by all workers during job hours (Gold Coast Ironworks, Subcontractors and Suppliers).
4. Non-compliance with this portion of the Gold Coast Ironworks Safety Policy will be written up as a Safety violation.
5. Gold Coast Ironworks is only required to train Gold Coast Ironworks employees to comply and observe the policy. It is the responsibility of each subcontractor to train his own employees in the implementation and use of the Hazard Communication Policy.
6. Each subcontractor will discuss each new substance introduced on the jobsite at the weekly Safety meetings with his crews and the Superintendents of other subcontractors at the Project Safety Meeting.
7. The Project Superintendent must label the contents of all containers including secondary containers. The label must identify:
 - the substance
 - hazard warnings
 - name and address of manufacture

It is the duty of the Project Superintendent to maintain and care for the labels, signs, and any other form of warning, to ensure that the labels are not defaced or removed.

8. The Project Superintendent must:
 - Train his personnel regarding Hazardous Communications, and specifically as to the dangers of working with these substances, chemicals, or materials, especially when the employee is performing non-routine tasks, or working on unlabeled pipes. Keep copies of training certificates at the jobsite.
 - Provide proper personnel protective equipment, as required.
 - Train employees in the first aid and medical emergency procedures associated with each material.
 - Keep copies of all SDS's at the jobsite.
9. The format of the SDS forms will be in accordance with the Globally Harmonized System for identification, may vary slightly, but the information will be stated consistently.

HOT WORK PROGRAM

The Hot Work Program includes the operations of welding and cutting. Hot Work Programs, and Permits vary at different facilities depending on the type of construction project, chemicals that may be in the area, the level of occupancy, and other environmental and physical surroundings.

Employees and their supervisors must be trained the proper use of the equipment and tools required to perform the work safely.

It is the responsibility of the individual to be aware of the various factors which may affect your ability to do Hot Work safely. A Job Hazard Analysis is always required prior to performing Hot Work.

If the welding or cutting cannot be done safely, then it must not be done at all!

Job Hazard Analysis (JHA)

The JHA must include review of the following items.

- The operators training and experience with the equipment being used.
- The condition of the equipment and tools in use.
- The type of Hot Work to be performed.
- Combustibles in the area that must be removed or protected from becoming a source of ignition.
- Wind and weather factors.
- Occupancy of the building, smoke dissipation and respirator requirements.
- The location of the nearest fire extinguisher, and charged water hose.
- The training of the person assigned to Fire Watch duties.
- The effect the heat, slag, sparks, and hot metal may have on surrounding items, the other side of the wall, the bottom of the deck, and electrical equipment in the area which may share the same path to ground.
- Oxygen consumption of the operator, carbon monoxide generation and the explosive limit of gases at the job site.
- PPE required to perform the work.
- The protection of passersby from exposure to arc flash and physical dangers.

Hot Work Permit

Hot work permits have a variety of formats and appearance at various work sites. A Hot Work Permit is always required before welding, cutting, or heating can take place. After the JHA is completed the Hot Work Permit can be issued. Remember if the work cannot be done safely, it must not be done at all.

WELDING

1. Equipment

- When using a hand held electrode holder, the holder must be specifically designed for the intended use, for the amount of amperage being conducted and in good physical condition with respect to insulation.
- All arc welding leads and cutting cables must be completely insulated, flexible type cables, capable of carrying the amount of current being generated.
- Connectors on the cables must be in good condition and rated for the amount of current being generated, and fully insulated.
- Cables in need of repair shall not be used. Cuts, scrapes, and wear which expose the bare wire of the cable must be repaired with rubber and friction tape, or other equivalent insulation.
- The stinger lead must always be in good condition, without repairs or splices, and a minimum of 10 feet in length.
- Ground return cables must have the same current carrying capacity as the welding equipment in use. A single ground cable may not be used for more than one welding unit, unless it is rated for the safe current carrying capacity of all the units it services.
- Pipelines containing gases or flammable liquids, or electrical conduits, shall not be used as a path to ground.
- The ground clamp must be in good condition, with good strong connection of the grounding cable. If sparks, arc or heat are being generated at the grounding point or along the path of ground, corrective action must be taken to eliminate it.
- The frame of the welding machine shall be grounded.

2. Operation

- Wear the proper PPE for the job. Don't weld in a T-shirt or shorts with tennis shoes on.
- When electrode holders are left unattended, the electrode shall be removed, and the holder put in a safe position so that it cannot make electrical contact with persons or electrical conducting objects.
- Never dip a hot electrode holder in water to cool it off.
- Welding machines shall not be left powered on when not in use for extended periods, or when being moved.

- The operator is responsible for the maintenance, care and use of the equipment. Faulty or defective equipment shall not be used, and must be reported to the supervisor.
- When the welder is leaving a work area for any length of time, all objects, plates, materials which are hot to the touch and may be a danger to someone else must be marked HOT !.
- Non-combustible, flameproof screens must be used to protect other persons in the vicinity from the direct exposure to arc flash and physical dangers.

3. Fire Prevention

- Whenever practical the object being welded, cut, or heated should be moved to a safe location. If it is not practical to do so then precautions must be taken to prevent an accidental fire. Combustible materials must be removed from the area, or if that is not possible they must be covered and protected by the use of screens and/or fire blankets.
- No welding, cutting, or heating shall be done where there is a danger of causing an explosion caused by flammable paints, gases, paper dust, grain dust, or in areas where the heavy concentration of other flammable items may create a hazard.
- Fire extinguishers and when possible a charged water hose, shall be closely present at all times, within reach, and immediately available at all times.
- A Fire Watch is always required for the protection of the welder and the surrounding areas, and must be maintained for a minimum of 30 minutes after hot work is finished.

4. Ventilation

- Ventilation may be provided by natural or by mechanical means when necessary to protect the welding operator and other personnel. When natural ventilation is not sufficient, mechanical means must be used. The fan, or air mover, must be of suitable capacity for the number of workers and the amount of fumes being generated.
- Smoke scrubbers shall be used in close areas where the smoke and fumes produced by welding are a hazard that cannot be dissipated by ventilation.
- Respirators suitable for the type of welding being done shall be used to provide additional protection to the operator when needed.
- Any fresh air drawn in by ventilation shall be clean and not present some additional hazard.
- Oxygen must not be used for fresh air, for comfort cooling, or as a substitute for compressed air to blow off dust or for cleaning.
- Ventilation is always required when welding on any materials containing:
 - Zinc, or galvanized coatings
 - Lead
 - Cadmium
 - Chromium or chrome plating
- The Fire Watch is responsible for monitoring of the ventilation in the work area, and must take corrective action when fumes and smoke create additional hazard to the welder or to other persons.

- Before welding, cutting or heating is done on any surface which has a plating or coating which is unknown, a competent person shall conduct a test on it for flammability, and toxicity.

GAS CUTTING AND WELDING

1. Cylinders

- Valve protection caps must always be in place when a cylinder is being moved or in storage. Cylinders that are properly secured in a cart which is designed for manually moving them may be left with regulators in place, without a cap.
- Cylinders are heavy and must not be lifted by a single person.
- Cylinders must be lifted and transported in a safe and secure manner, using a lifting device which is rated for the weight being lifted and capable of securing the cylinders in an upright position at all times.
- A vehicle used to transport cylinders shall not carry more than 6 bottles at a time and must provide for the securing of the cylinders, to prevent them from striking each other or other objects.
- Cylinders in use must be secured with a chain or other suitable means to prevent them from being knocked over.
- The cylinder valve must be kept closed at all times except when it is actually in use.
- Oxygen cylinders in storage shall be separated from fuel-gas cylinders (acetylene) and other combustible materials (oil or grease) by a minimum distance of 20 feet, or by a barrier that is 5 feet high and having a fire-resistance rating of at least 30 minutes.
- Cylinders must be stored in well ventilated areas, and not kept inside a vehicle, confined space, or area where gases may be trapped. Ignition sources such as static electricity, a remote locking/unlocking device or even a cell phone could result in extreme danger.
- Cylinders shall be kept far enough away from welding and grinding operations so that sparks, hot slag, or flames cannot reach them.
- Never strike an arc on a cylinder. Never use a cylinder for ground.
- Cylinders are not to be used for rollers or skates, or for mechanical supports.
- Never try to mix your own gases or to refill a bottle.
- Never use a damaged or defective cylinder or valve body.

2. Regulators

- Before connecting a regulator to the cylinder inspect it for damage to the gauges or to the valves. Never use a defective or damaged regulator.
- Before connecting the regulator crack the cylinder valve open and immediately close it to clear the threads and any debris from the valve body. Use some caution when doing this.
 - Stand to the side of the valve not in front of it.
 - Check your surrounding area to make sure you are not creating a hazard to your self or others.

- No smoking or flicking your Bic.
- After connecting the regulator open the cylinder valve slowly. On a fuel cylinder (acetylene) the valve should be opened only 1-1/2 turns to allow for quick closing.
- Check the connection between the regulator and the cylinder to make sure it is not leaking. If a leak is detected, close the cylinder valve first, then take corrective action. If the leak persists the cylinder and or regulator must be removed from service and repaired. Report this to your supervisor.
- Before removing the regulator from the cylinder always close the cylinder valve and release the gas pressure from the regulator thru the torch.

3. Hoses

- Keep hoses and connections free of grease and oil.
- Fuel gas hose and oxygen hose must be easily identifiable to distinguish them from each other. The hoses must not be interchanged.
- Inspect the hoses before each shift or use. Defective or damaged hoses shall not be used and shall be removed from service. Report this to your supervisor.
- Do not use hose connections that can come apart with a straight pull.
- Keep stored hoses in a well ventilated area.
- Keep hoses out of walkways, traffic areas, off ladders, and stairs, where they may get damaged.

4. Torches

- Inspect your torch before each use. Check the valve bodies and threads. Defective torches must not be used. Replace faulty or defective equipment and report it to your supervisor.
- Check the tip for clogged or dirty holes. Clean them with tip cleaners, wires, or other suitable means.
- When not in use, store the torch in a protected area where it won't get damaged or dirty.

FIRE PREVENTION PROGRAM

The purpose of this program is to reduce to a minimum the possibility of fire damage and associated losses incurred during the construction of the project.

The following program, by no means complete, is the guide to be used on the project to aid in preventing the spreading of materials loosed by fires and gases associated with combustion, etc.

1. FIRE PROTECTION

- All temporary electrical power must be in accordance with all existing codes.
- Storage of any material within 10 feet of fire hydrants is strictly prohibited.
- Work areas shall be policed on a regular basis to prevent accumulation of material.
- No motors or machinery shall be left running during non-working hours except as specifically directed by Gold Coast Ironworks.
- All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable codes, rules and regulations.
- All tarps and blankets shall be of fire retardant material.
- All fuel and solvent containers shall be stored in approved Cal/OSHA containers and placed on drip pans.
- No open or burning fires shall be permitted on site. Anyone doing so will be subject to immediate dismissal.
- No solid fuel shall be permitted on the site.
- Fire extinguishers shall be placed and maintained on the job in conspicuous locations and each location marked. These fire extinguishers shall not be moved or discharged, except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal.
- All gas bottles such a propane, oxygen, and acetylene shall be stored and tied in a vertical position in areas designated by Gold Coast Ironworks. All stored bottles shall be capped. Oxygen and acetylene will not be stored within 25 feet of each other.
- All oxygen and acetylene in use shall be in proper carts with required separations and with an attached fire extinguisher.
- During welding or cutting operations, a fire watch with fire extinguisher will be required and shall be the responsibility of the subcontractor performing the work. Hot work permits are required.

2. FIRE FIGHTING

- Appropriate action is the key to the prevention of loss of life and property damage. This action in the first minute is worth gallons of water ten minutes later.
- If a fire occurs, notify the local fire department and Gold Coast Ironworks immediately.
- Extinguish fire with a non-combustible such as sand or an available fire extinguisher.
- Remove or shut off fuel supply, such as removing debris or stored material, or shutting off fuel supply valve.

3. SHANTIES, GANG BOXES, VEHICLES, ETC.

- Shall be constructed of fire resistive materials and heated with approved fire safe heating devices.
- Shall be constructed at least 10 feet from materials which present extraordinary fire hazards.
- Shall be equipped with a minimum of 20 lb. ABC fire extinguisher each.
- Shall have a covered 55 gallon metal waste container adjacent to it.
- Shall not be used to store oily rags, oily clothes, or fuels.
- Shall be constructed such that a shanty fire will not spread to adjacent areas.

The principles outlined above should provide a reasonable chance for a fire free project. Strict adherence to the intent of this program is to be considered a contractual requirement.

FIREWATCH TRAINING

Firewatch training is provided as part of the Gold Coast Ironworks' Safety Plan. All persons actively involved in hot work, welding, grinding, and cutting of metals, and their supervisors, shall be trained for Firewatch duty. Effective training allows workers to recognize, respond, and provide corrective action, as well as understand and retain the training information. The following information has been developed to assist in providing worker training on the specifics of Firewatch duties.

- General Evacuation Training
- Extinguishing small fires
- Firewatch
- Training Records

General Evacuation Training

All employees (whether they are doing hot work or not) must be trained on:

The emergency alarm signals for specific work sites, including system discharge alarms and employee evacuation alarms.

and;

The primary and secondary evacuation routes that employees must use in the event of a fire in the workplace.

Extinguishing Small Fires

All workers performing hot work, shall be trained on the following:

The general principles of using fire extinguishers and water hose lines, the hazards involved with incipient firefighting, and the procedures used to reduce these hazards.

Annual certification and monthly inspection of fire extinguishers, and the recertification requirement after an extinguisher is used.

Types of fire extinguishers and their application to various types of fires.

The hazards associated with fixed and portable fire protection systems that workers may use, or to which they may be exposed during discharge of those systems.

The activation and operation of fixed and portable fire protection systems that the company expects employees to use in the workplace. This includes but is not limited to the actual lighting and extinguishing of a small fire, during a hands-on, live fire, session.

Fire Response teams are given additional training, outside the scope of our employee training, for fighting large scale fires and providing emergency response.

Fire Watch

Fire Watch personnel must be trained:

- Before being assigned to perform Firewatch duties.
- Whenever there is a change in operations that presents a new or different hazard.
- Whenever the company has reason to believe that the Firewatch's knowledge, skills, or understanding of the training previously provide is inadequate.
- Annually.

Firewatch personnel must be trained in:

- The proper response, Just Say No, when they are assigned Firewatch duties and someone asks them to do something which interferes with those duties.
- Hot work permits, familiarity with facilities, and the procedures for sounding and alarm in the event of fire, for specific customers and job sites.
- How to inspect and a job site prior to hot work activities, to ensure that debris and combustibles are removed or covered, and that any nearby holes or penetrations in the floor and walls are sealed or covered with fire-safe materials.
- The amount of time they are required to be on the job after hot work has been completed, a minimum of 30 minutes, and often 1 hour, why this is important, and how that relates to break time, lunch time, and other interruptions of work.
- The basics of fire behavior, the different types or classes of fires, the selection and use of extinguishers and hoses, the stages of fire, and methods for extinguishing fires.
- Extinguishing live fire, in a hands-on session.
- Recognition of the adverse health effects that may be caused by exposure to fire.
- Hazards associated with Firewatch duties.
- Ventilation requirements and means of achieving a well ventilated area.
- Physical characteristics of the hot work area, and where to position himself for effective control of the job site.

- Personal Protective Equipment (PPE) required to perform Firewatch duties safely and how to wear it.
- Selection and use of fire extinguishers and fire hoses likely to be used in the work area.
- Effective use of fire blankets and welding screens.
- Effective use of barriers in the work area to keep unauthorized personnel out.
- When and how to start fire alarm procedures.

Firewatch personnel must be trained to alert others to exit the space whenever:

- The Firewatch believes an unsafe condition exists.
- The Firewatch believes that a work performing hot work is in danger.
- An evacuation is ordered, or an evacuation signal, such as an alarm, is activated.

Training Records

Records must be kept to demonstrate that workers have been trained.

Ensure that records include the employee's name, the trainer's name, the type of training and the date on which the training took place.

Training records must be kept for one year from the time it was made, or until it is replaced.

Training records are to be made available for inspection and copy by interested parties, customers, and or OSHA inspectors.

HAND TOOLS & POWER TOOLS

Tools are how we make our living. The proper use and care of our equipment and tools is vital to our success as a company and as individuals. All hand tools, power tools, and equipment, whether furnished by the company or by the individual, must be maintained in a safe operating condition.

It is the responsibility of the Company to provide adequate training in the use and care of the tools and equipment.

It is the responsibility of the individual to use the right tool for the right job, to inspect and maintain them, and to use them correctly and safely.

If you find a tool that is defective, or damaged, you have the responsibility to remove it from service, to tag it as unsafe, and to report it to your supervisor. Likewise if you see one of your co workers using a tool improperly, or in an unsafe manner, you have the responsibility to help him correct the situation.

1. Guards

- If it came with a guard use.
- Guards must be provided over reciprocating or moving parts, such as belts, gears, pulleys, flywheels, or sprockets.
- Fans must be guarded when the blades are less than 7 feet above the floor. The openings in the guard must be no more than ½” across.
- Abrasive wheel type, bench grinders, have special rules which govern their use to prevent injury. Ask your supervisor if the guards have been adjusted lately. If you are not sure, ask someone.
- Personal Protective Equipment, PPE is also part of our guard system. Wear your eye and ear protection, use gloves, respirators, and hard hats to guard yourself from injury.

2. Switches

- All hand held powered tools must have the proper operating switch in place. Some small tools have a locking on-off switch. But most power tools have a momentary contact switch, which must be held closed during operation. Don't wire or tape it shut. Do not try to by pass the safety switch.

3. Hand Tools

- The company shall not issue or permit the use of an unsafe tool.

- Wrenches, including pipe wrenches, crescents or other adjustable types shall not be used when the jaws are bent or sprung.
- Impact tools, such as hammers, chisels and wedges shall be used if the head is mushroomed or split.
- Wooden handles must be checked before each use for cracks, or damage, and for a proper tight fit in the tool.

4. Power Tools

- Always wear eye protection.
- Inspect your tools before each use. Do not use a faulty or defective tool. Take it out of service, tag it, and report it to your supervisor.
- Electrical power tools must be properly grounded.
- Inspect the power cord before each use. Do not use a frayed, damaged, cut, or scraped cord where the insulation is broken and the wires exposed, or where the grounding pin is damaged or missing. Remove the cord from service and report it to your supervisor.
- Do not use the power cord for lifting, lowering, hoisting, or moving the tool.
- The air hose on a pneumatic tool must be properly connected and secured.
- Do not use compressed air over 30 psi to clean or blow off something. Even if it is less than 30 psi you must still use eye protection, and guard your self and others from hazards associated with chips and dust.
- Hydraulic tools shall use a fire resistant fluid.
- Do not exceed the safe operating pressures provided by the manufacturer on air and or hydraulic tools.
- Powder actuated tools are not part of our normal inventory. If you need that kind of tool, you must be properly trained in its use.
- Grinders shall be supplied with guards from the manufacture.
- The guards on the grinders shall be used.
- Use the spindle nuts on grinders properly and keep them tight enough to hold the wheel in place.
- The abrasive grinding or cut off wheel must be inspected before use, and discarded when it is too small to do the job, or has been damaged, chipped, or cracked during operation.
- If you are using a circular saw, only expose the blade to the minimum amount necessary to achieve the desired cutting depth.

5. Ground Fault Circuit Interrupters (GFCI)

- All 120 volt single phase circuits on construction sites, which are in use by our employees, shall have approved ground fault circuit interrupters for personnel protection.
- All electrical power tools shall be connected to the power circuit thru a GFCI which is properly sized and in good working order.
- Inspect the GFCI device before each use. Check the Test and Reset buttons to make sure they are not damaged. It could save your life.

ELECTRICAL SAFETY

You don't have to be an electrician to be at risk from the hazards of electrical power on a job site, or in the performance of your duties. Electrical power is all around us.

The Company must provide training for all employees relative to the types of risks to which they are exposed in performance of their duties. Electrical shock is one of those risks.

All employees of Gold Coast Ironworks are considered unqualified to work on electrical circuits.

1. Type or Risks

- Shorting of power tools
- Damaged cords
- Wet environments
- Battery charging and jumping vehicles
- Connecting or disconnecting high power equipment
- Working in an area with energized equipment

2. General Requirements

- All electrical conductors, tools, and equipment shall be supplied with UL listing whenever possible and must in all cases be approved for use by your supervisor.
- Always use a piece of equipment for its intended use, as it was designed to be used.
- All equipment must be initially examined by your supervisor prior to use and checked to make sure it is free from recognizable hazards likely to cause harm or death. It must be checked for:
 - Suitability for the job being done
 - Mechanical strength and durability
 - Electrical insulation
 - Classification by type, size, voltage and current carrying capacity
 - Damage caused by heat, arcing, or physical damage.

3. Working around Energized Equipment

When working in an area where there is exposure to energized equipment, other electrical hazards, employees must be made aware of the dangers present. There may be dangers present associated with placing of materials, and the use of tools in the area.

Gold Coast Ironworks employees are to notify the customer representative for the project of any unique hazards in the workplace associated with the work being done. These hazards may have been planned for or may be unanticipated. A Job Hazard Analysis and safety plan needs to be written and approved to correct the hazards and to plan for safe execution of the work.

A qualified electrician must be called in to de-energize the equipment if at all possible. When it is not possible to de-energize equipment use the following guidelines to complete the work.

- Only qualified persons may work on energized electrical equipment. Additional training is required to become a qualified person who would be allowed to work around energized equipment, or within a Limited Approach Boundary. If you are an employee of Gold Coast Ironworks, you are not qualified.
- Use lights to illuminate dark spaces where electrical hazards are present. Employees may not enter spaces containing exposed electrical equipment unless illumination is provided to allow for safe work operations.
- Always maintain a 3' clearance in front of electrical circuit breaker boxes, switch boards, control panels, and similar equipment.
- Use protective shields, barriers, or insulating materials to separate yourself from electrical hazards. You can use plywood sheets, fire blankets, welding screens, or other barriers. You can also use yellow caution tape to delineate work areas from areas where hazards are known to exist, and to mark pathways thru or around.
- Warning signs must be posted where employees might come in contact with 600 volts or higher power.
- Always maintain a 10' clearance from any overhead power lines at all times with personnel, equipment, vehicles, cranes, poles, ladders, etc.
- Never hang lights from their cords. Protect all lights from damage and accidental damage, and always use a Ground Fault Interrupter.
- Never use aluminum ladders on a job site, end of story. All ladders must have non-conductive side rails.
- Protect your cords from damage when passing thru a doorway, a hole, over a wall, or in a similar condition.
- Always maintain cooling systems for electrical equipment to be in good condition.

4. Grounding

Electrical power tools and equipment must always have a path for the electricity to go to ground. This path to ground must always be continuous and in place to protect the employee. Normal industry standards dictate that the path to ground is colored green.

- Always use Ground Fault Interrupters at the source of power for hand held electrical power tools.
- Check your tools and extension cords prior to each use for proper ground lugs, and for damage to the insulation which may expose wires.

- Keep your self dry, especially when welding. Wet shoes, kneeling on a wet deck or putting your hand on one, can result in your body becoming the path to ground for your electrode.
- Damaged or defective cords and tools must be taken out of service immediately and reported to your supervisor.
- Vehicle mounted generators and welding machines should be firmly bolted to the frame of the vehicle and or connected by means of a grounding strap.
- Always use a twist lock style plug when possible.
- Never alter the grounding lug on a plug end to fit a receptacle that is a different rating or style.
- Never wear aluminum foil hats on a job site, or other conductive jewelry or clothing in areas with energized circuits. Aluminum hard hats are also barred.

5. Lock out – Tag out

- Always utilize the Lock Out – Tag Out safety program when working on machinery or equipment with electrical or other stored equipment.
- Conductors and parts of electrical equipment that have been deenergized but not locked out and tagged out must still be treated as live parts.
- Never work on or near equipment that is exposed and energized.
- Use shields, protective barriers, and insulating materials when ever you are working around equipment that cannot be deenergized.
- Only qualified electricians can work on energized circuits, parts, or equipment that have not been deenergized. They have special PPE and training for that work.

6. Training

Special training is required to become a qualified person who can work around energized circuits or with in a Limited Approach Boundary. Unqualified persons are not allowed to enter work areas that have these hazards.

Retraining is required when an employee is not complying with safe work practices, or when the hazards associated with the job require that employees have additional knowledge about those hazards and the safe work practices they might not normally use to complete their work.

Retraining is required in intervals not to exceed 3 years. All training records related to qualification are to be maintained for the duration of the person's employment.

New projects, new tasks, and new hazards are all issues related to the Job Hazard Analysis (JHA) and the safe work practices to be used. Prior to starting work the JHA is to be reviewed and discussed thoroughly to ensure all employees are up to speed on the specific hazards that may exist, associated with electrical energy.

NFPA 70E

NFPA is the National Fire Protection Association. NEC is the National Electrical Code. Adopted in all 50 states the NEC is the benchmark for safe electrical design, installation and inspection to protect people and property from electrical hazards. The NEC describes how to design and install electrical systems but not how to actually perform the work. The NFPA 70E addresses the installation of electrical conductors, equipment, and raceways; signaling and communications conductors, equipment, and raceways; and optical fiber cables and raceways in commercial, residential, and industrial occupancies.

NFPA 70E describes safe work practices for electrical construction and maintenance, but not how to design or install electrical systems. It has requirements for safe work practices to protect personnel by reducing exposure to major electrical hazards. It helps companies and employees avoid workplace injuries and fatalities due to shock, electrocution, arc flash, and arc blast.

NFPA 70E describes how to protect electrical works from three kinds of electrical hazards:

- Electrical shock and electrocution
- Arc-flash (electrical fireball)
- Arc-blast (electrical explosion at high energy levels)

NFPA 70E outlines a four step approach to electrical safety:

1. **TURN OFF THE POWER.** Work deenergized whenever possible. This isn't always feasible. When working on or near exposed live conductor an pars, NFPA 70 requires the following:
2. **LIVE WORK PERMIT.** Have the customer sign an Energized Electrical Work Permit.
3. **PLAN THE WORK.** Have a written plan for performing the live work safely.
4. **USE PPE.** This includes flame resistant clothing, insulated tools, face shields and flash suits.

TURN OFF THE POWER

NFPA 70E describes three methods of turning off electrical power and verifying that it stays off while work is being performed. Lockout/Tagout is part of the process. It can be done as"

- Individual qualified employee control
- Simple lockout/tagout
- Complex lockout/tagout

SAFE PRACTICES WHEN WORKING LIVE

NFPA 70E requires the following when working around live or exposed energized parts:

- **Live Work Permit.** Have the customer sign an Energized Electrical Work Permit. This describes the work to be performed and why it must be performed live. Live work must be authorized by the customer, engineers, or other person in charge.

- Determine Shock Hazard Boundaries. There are three types:
 - Limited approach boundary
 - Restricted approach boundary. Only qualified persons can enter the restricted approach boundary.
 - Prohibited approach boundary. Entering the prohibited approach boundary is considered the same as touching live parts.

Only qualified persons are allowed in Limited Approach Boundaries to do troubleshooting, testing, or voltage measurements. If you are an employee of Gold Coast Ironworks, you are not a qualified person.

Instruments and equipment used must be rated for the circuits and equipment to which they will be connected. Test Instruments must be verified to be in proper working order before and after a zero voltage test is performed.

Insulating PPE used in performance of this work is to be inspected prior to each use and immediately after any incident. Rubber insulating PPE must be tested for use on a monthly basis to check for degradation.

Determine the Flash Protection Boundary. The default flash protection boundary for systems operating at 600 volts is 48 inches. A qualified person who works closer than 48 inches to live parts must wear personal protective equipment, including flame resistant clothing. This PPE is for arc-flash and arc-blast protection, not protection against electrical shock.

Determine the Hazard/Risk Category (HRC). NFPA 70 has several tables that help electrical workers select the correct type of PPE to wear, based on the task they are performing live. There are five HRC levels, 0, 1, 2, 3, and 4. Workers must wear the appropriate PPE specified by the tables whenever they are within the Flash Protection Boundary, whether or not they are actually touching the live equipment. Tasks such as voltage testing, for equipment troubleshooting or to verify whether power has been turned off is 'live work' that requires workers to wear PPE.

MATERIAL HANDLING & RIGGING

1. Material Storage

- All materials stored in tiers shall be stacked, racked, blocked or otherwise secured to prevent sliding, falling or collapse.
- Keep aisles and walkways clear to provide free and safe access of personnel and materials.
- Keep materials at least 6 feet away from any deck opening or exterior wall where the wall is not taller than the stack of material being stored.

2. Rigging Equipment

- Rigging slings, ropes, or other equipment shall be inspected prior to each use and as necessary during its use to ensure that it is safe. Defective slings, or equipment shall be immediately removed from service and reported to your supervisor.
- Inspect slings for damage that may have been caused by chemicals, heat or sparks from welding, torch cutting, or grinding and excessive wear.
- Never load a sling or other rigging equipment beyond its rated capacity. Make sure you know the weak link in the rigging equipment, which may include a hook, eyebolt, ring, shackle, or some other coupling component.
- When not in use, remove rigging equipment from the work area to provide safe working conditions.
- Never shock load rigging equipment.
- Do not pull a sling out from under a load when the load is resting on the sling.
- Do not knot or kink slings and ropes. Do not use a knot to splice two or more together.
- When using a hook or other device with a safety latch, insure that the safety latch is fully closed, and that the weight of the load is not allowed to contact the latch.
- Keep solvents, chemicals, oil and grease away from the rigging equipment. Keep the slings clean and properly stored between uses.
- Tag lines must be used with hoisted loads. Always use two tag lines on diagonally opposite corners, of sufficient length to allow workers safe handling.
- Never walk or stand under a hoisted or suspended load.



INSPECTION CHECK LIST FOR RIGGING EQUIPMENT

DATE: _____ SITE: _____

NAME OF INSPECTOR: _____

ANY EQUIPMENT FOUND TO BE DEFICIENT MUST BE REMOVED FROM SERVICE.

ITEM	WHAT TO CHECK FOR	CHECK IF OK	N/A
Slings	Check for frayed covers or broken strands		
Slings	Check for load capacity		
Chains	Inspect for excessive wear or chain stretching. Visual check for nicks, corrosion, gouges, or distortion.		
Hooks	Visual check for damage.		
Safety Latch	Verify latch is present and proper operation.		
Load Plan	Review Load Plan Verify weight of load being lifted and capacity of the rigging equipment you are using. Check Load Plan for signatures and authorizations.		
Shackles	Inspect for wear. Inspect for locking nuts or cotter pins.		
Shackles	Check capacity and rigging plan		
Shafts or Couplings	Inspect for damage or excessive wear		
Gears/Cases	Inspect for damaged or worn gears, misalignment or missing keys.		
Load Hook Or Block	Inspect for damage, wear to sheaves, plates, loose pins, bolts, guards, capacity marking, drip pans, gaskets		
Wire Drum	Inspect for excessive wear, cracks, sharp edges, noise, vibrations, leaking oil		
Wire Rope	Inspect for broken wires, end connections and capacity Inspect for crimping, bends, smashed or kinked sections. Excessive corrosion, bird cage sections, or other damage.		

OTHER EQUIPMENT OR COMMENTS: _____

CRANE SAFETY

Gold Coast Ironworks does not own a crane. The Company does however own an extended reach forklift and does often perform jobs which use a crane for setting large or heavy equipment, erection of steel, and for reaching over other objects.

The Company must provide training to its employees who are working around cranes to enable them to do their job safely and to ensure the safe operation of a crane when we bring one in.

1. Job Hazard Analysis (JHA)

Prior to any crane operations being performed a JHA shall be performed which itemizes the dangers associated with performance of the work being done. The JHA shall be documented, dated, and signed by the project superintendent, the crane operator, rigger(s), GCI employees on the site, the Lift Director, and the owner or his representative. It shall as a minimum include the review and documentation of the following dangers.

- Ground conditions and the location of underground hazards.
- The rated capacity of the crane compared to the load.
- The sequence of the lifts.
- Overhead power lines, 20' clearance is required.
- Obstacles.
- Communication with the crane operator.
- Pinch points.
- Laydown and staging areas.
- Traffic control.
- Rigging and material handling issues.
- PPE required.
- Wind and weather considerations.

2. Equipment Setup and Inspection

- The owner/client of the job site has responsibility to ensure the ground conditions are safe for operation of the crane and any supporting equipment. A crane must not be used unless the ground is properly drained, compacted and graded sufficiently to meet the equipment manufacturer's requirements for safe operation. Additionally, underground hazards such as buried pipes, vaults, or other hidden hazards must be made safe for operation.
- Assembly and disassembly of the crane must be done according to the equipment manufacturer's instructions and any prohibitions must be enforced. Never use a crane for an unintended use. Follow the manufacturer's specifications and limitations.

- No modifications which affect the safe operation of the crane or rated lifting equipment are allowed without the manufacturer's written approval, or from a registered professional engineer.
- Annual and quadrennial inspections, by a competent person, of the crane must be up to date, maintained by the owner of the crane, and available for inspection by all interested parties.
- Additionally, a monthly inspection of the crane equipment, by a competent person must be completed and documented. The documentation must include as a minimum:
 - The items checked
 - The results of the inspection
 - Name and signature of the inspector

Inspection records must be kept for a minimum of 3 months. The monthly inspection is not required if daily inspections are documented and kept for a minimum of 3 months.

- Before each use, and/or each shift, a competent person must visually inspect and certify that the crane and associated lifting equipment is safe and ready for use. Inspection must include the ground conditions, control mechanisms, rigging and lifting equipment, hooks and load lines, wire rope and latches, electrical systems, tires, outriggers, and must any changes in job site conditions.
- All Safety Devices must be in place and in good working condition before crane operations begin. Some examples of Safety Devices include:
 - Crane level indicator
 - Boom and or jib stops
 - Anti- 2-block devices
 - Foot pedal brake locks
 - Horns

Any deficiencies, defects, or damage must be repaired or replaced before use.

- Any person operating a crane with more than a 2000 lb rated lifting capacity must be qualified and certified for that crane. Qualification must be documented by one of the following methods:
 - An accredited crane operators testing organization
 - An audited employer program
 - The US Military
 - Licensing by a government entity
- Any person supporting the operation, assembly and disassembly, maintenance, or repair of the crane must be competent and qualified.
- The work zone for a crane has been increased to 20' clear of any live power lines. When it is determined that work must be done within 20' of a power line, at least one of the following additional measures must be taken.
 - Ensure the power line has been de-energized and visibly grounded.
 - Ensure no part of the equipment, load line, or the load itself gets closer than 20' to the power line.
 - A qualified person, familiar with the operations, may determine the power lines voltage and the minimum approach distance as listed in the CFR 1926.1408.
- Any hazard associated with crushing or pinching an employee or other person at the job site must be removed by delineating the area of the cranes swing radius with barriers, caution tape, or railings.

3. General Conditions and Requirements

- The load charts, operators manual, operating procedures, and any other materials relevant to the operation of the equipment must be handy to the operator at all times, (in the cab).
- Never let loads free fall.
- The operator is not allowed to use a cell phone, texting, or have any other distracting device excepting those used for communication.
- Operators cannot leave the controls with a load suspended.
- The operator must have a fire extinguisher of 5BC or higher rating readily accessible at all times in the cab.
- A competent person is required to be on the job site to supervise when the crane is traveling with a load.
- Always use barriers, delineators, caution tape, or other barricades to control traffic and personnel entering a work zone.
- No one is ever allowed under a load.

4. Use and working considerations

- All manufacturer's procedures applicable to the operational function of the equipment, and any associated or attached components, must be followed.
- All employees and equipment operators have 'Stop Work Authority' at all times. Anyone who sees an unsafe condition, senses a danger, or anticipates a problem has the authority to stop work, but simply yelling STOP!. When this occurs the problem or danger must be mitigated to everyone's satisfaction before work begins again. In all cases the equipment operator has the authority to stop work and refuse to handle loads whenever there is a safety concern.
- There is only one signal man for communication with the operator. A signal man must be provided whenever the operator's view is obstructed, when site specific conditions require it, or if the operator determines it is necessary. The signal person must be knowledgeable in basic operations of the crane, must use industry standard type signals for that crane, must understand how the signal is going to affect the capacity of the crane, and must pass a written and a practical test to be qualified.
- Always wear your PPE. Hardhats, safety glasses, steel toe boots, protective clothing, and gloves are mandatory.
- Inspect rigging and material handling slings and components for defects or damage prior to each use. Immediately discard any defective or damaged equipment and report it to your supervisor. Refer to the Rigging and Material Handling Safety Program.
- Avoid pinch points.
- Stay out of the Fall Zone, unless you need to be there for rigging and handling purposes.
- Always use two tag lines, on diagonally opposite corners for handling loads.
- Monitor the exhaust of the crane and equipment to ensure that workers are not exposed to toxic gases or oxygen deficient environments.
- The use of a crane to hoist employees is prohibited unless the hoisting apparatus is man rated man basket or other certified, approved and tested equipment.

STEEL ERECTION

A. Purpose

Steel erection activities include material handling, rigging, laying out, connecting, and welding. These activities require training of the employee in Hot Work, Fall Protection, Personal Protective Equipment, Material Handling & Rigging, and other aspects of the Safety Program. Sometimes ladders, scaffolding, or cranes may be in use and the Company must train the employee in all aspects of the hazards that may be encountered in performance of his duties.

B. Job Hazard Analysis

A Job Hazard Analysis (JHA) shall be completed to identify the hazards associated with performance of the work. The JHA shall review various aspects of the erection and result in a Site Specific Erection Plan which covers all of the known hazards that will be encountered.

Consideration should include as a minimum:

- Hot Work, Permitting, and Fire Prevention
- Fall Protection
- Material handling and rigging
- Ladder safety and Scaffolding systems
- Forklifts and Aerial Lifts
- Hand and Power Tools
- Noise Exposure
- First Aid and Emergency Response issues

Before any erection or work can begin the Controlling Contractor or Owner must provide a safe working area which at a minimum meets the requirements of our own Safety Plan. Additional considerations must be given to other trades working, ground conditions, electrical issues, crane safety, trucks, and the laydown area. **If the job site is not safe we don't do the work.**

When the requirements for safe erection are agreed upon and met the JHA shall be signed off by all involved parties, including our company representative, employees, and the controlling contractor and/or owner.

C. Performance

The Project Superintendent shall conduct an inspection and review process prior to the start of each shift. The work site must be inspected for changing conditions, and the JHA reviewed for hazards associated with changes or new conditions.

- Hoisting and rigging of materials must be done safely with consideration given to the operator of the equipment, the condition of the equipment, and the safe use of the equipment.
- Never stand or walk under hoisted or suspended loads.
- Keep your hands and feet clear of pinch points and lay down points.
- Inspect the rigging equipment prior to each use for damage or defects. Discard any damaged or defective equipment and notify your supervisor immediately.
- Never use the bundle strapping for hoisting a load.
- Keep the work site clean of debris and free from tripping hazards.
- Openings in decks, roof holes, sky lights, and the perimeters of elevated work areas require safety barriers and special considerations. Use the Fall Protection Plan to protect yourself and others on the job site. Roof holes must be covered and marked.
- Columns and beams must remain connected to the hoisting equipment until at least two bolts are in place at each connection, and drawn up wrench tight.
- When landing beams, decking, or other materials on top of structural supports ensure that the load is evenly distributed and properly supported to prevent excessive sagging or collapse. Secure materials as necessary to ensure the safety of the work area.
- All materials, tools and equipment at elevated heights shall be secured to prevent accidental falling.



FALL PROTECTION PROGRAM

A. PURPOSE

Gold Coast Ironworks is dedicated to the protection of its employees from on-the-job injuries. All employees of Gold Coast Ironworks have the responsibility to work safely on the job. The purpose of this plan is: (a) To supplement our standard safety policy by providing safety standards specifically designed to cover fall protection on our job sites and; (b) to ensure that each employee is trained and made aware of the safety provisions which are to be implemented by this plan prior to being exposed to job site conditions.

B. RESPONSIBILITY

Gold Coast Ironworks requires that all employees protect themselves from fall hazards when working with their feet at heights over six (6) feet, by the use of appropriate personal protective equipment (PPE), guardrails, or safety nets, and the application of this program. All employees have the responsibility of complying with the 100% tie-off rules at all times.

C. TRAINING

GCI will provide training for each employee who might be exposed to fall hazards. The program will enable each employee to recognize the hazards of falling and will train the employee in the procedures to be followed in order to minimize the risk of falls and injury.

Employees will be trained in the uses of the following fall protection equipment and understand the use and application of each item.

- Full Body Harness
- Positioning lanyards
- Shock lanyards
- Self retracting lanyards
- Carabineers
- Snap hooks

GCI will have employees trained by a competent person qualified in the following areas:

- The nature of fall hazards.

- The correct procedures for erecting, maintaining, disassembling and inspecting the fall protection systems to be used.
- The use and operation of guardrails systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used.
- The role of each employee when a Safety Monitoring system is used.
- The limitations on the use of mechanical equipment for tie off points during roof work.
- The correct procedures for inspecting, handling, and storage of PPE and fall protection equipment.
- The role of the employees in fall protection plans.
- Familiarity with Industry standards and regulations and their application.

Training records will be kept by GCI and include the names of employees trained, the date, and signature of the instructor.

Retraining will be conducted anytime a supervisor has reason to believe that the employee does not have the understanding and skill required by this procedure, when changes in the job site require it, or when changes in the type of equipment or fall protection system occurs.

D. FALL PROTECTION SYSTEMS

Each job site must be surveyed to determine if fall hazards exist. If so, a Fall Protection System must be identified and in place prior to the start of any work.

Approved fall arrest, personal fall restraint or positioning systems shall be worn by employees who are working within 6 feet from the leading edge and may fall greater than 6 feet. Typical applications of the System include:

- Perimeter of a structure
- Erection of steel structures
- During ship repair operations
- Working over water
- Working near skylights or holes in a roof
- Unprotected sides of balconies, mezzanines, air shafts, elevator shafts, and roof openings
- Sloped surfaces steeper than 4 inches per foot

1. Guardrail Systems

- The top edge height of a guardrail system must be 42", plus or minus 3" above the walking/working surface. When necessary the height may exceed 45" provide the guardrail system meets all other criteria.
- Midrails, screens, mesh intermediate vertical members or equivalent intermediate structural members shall be installed between the top edge of the guardrail system and the walking/working surface when there is no wall or parapet at least 21 inches high.

- Midrails when used, shall be installed a height midway between the top edge of top edge and the walking/working surface, and not more than 19 inches apart.
- Screens and mesh, when used shall extend from the top rail to the walking/working surface and along the entire opening between top rail supports.
- Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point along the top edge.
- When the 200 pound test load is applied in a downward direction, the top edge shall not deflect to a height less than 39 inches above the walking/working surface.
- Midrails, screens, mesh, intermediate vertical members, panels, or equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds in any downward or outward direction at any point along the midrail member.
- Guardrail systems must be free of sharp edges to prevent injury to employees and prevent snagging of clothes, tools, cords or other equipment being used.
- The top and midrails should not project beyond the end posts, unless the projection helps block off open areas, or does not create some other hazard.
- Steel or plastic banding is not acceptable for use as a top or midrail.
- Top and midrails must be at least 1/4" diameter in cross section to prevent cuts and lacerations. If wire rope is used for the top rail it must be flagged at not more than 6' intervals with a high visibility material.
- When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place.
- When guardrail systems are used around holes they shall be erected on all unprotected sides or edges of the hole. No more than two of the sides may be removable for access to the hole.
- Guardrail systems used on ramps and runways shall be erected along each unprotected side or edge.
- Guardrail systems must be re-inspected as frequently as necessary to ensure that it continues to meet the strength requirements discussed above.

2. Personal Fall Arrest Systems

- A full body harness is required. Body belts shall not be used.
- Horizontal lifelines shall be designed, installed, and used under the supervision of a qualified person as part of a complete personal fall arrest system and must maintain a safety factor of two.
- Each employee shall be attached to a separate vertical lifeline.
- Lifelines shall be protected from being cut or abraded.
- Self-retracting lifelines, which automatically limit free fall distance to two feet or less, shall be capable of sustaining a minimum tensile load of 3,000 pounds applied in the fully extended position.

- Self-retracting lifelines, which do not limit free fall distance to two feet or less shall be capable of sustaining a minimum tensile load of 5,400 pounds applied in the fully extended position.
 - Ropes and straps used in lanyard, lifelines, etc., shall be made of synthetic fibers except for when they are used in conjunction with hot work where the lanyard may be damaged by heat or flame.
 - Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,400 pound per employee attached, or be designed, installed and used as part of a complete personal fall arrest system which maintains a safety factor of at least two, and under the supervision of a qualified person.
 - When stopping a fall, personal fall arrest systems shall:
 - i. Limit the maximum arresting force on an employee to 1,800 pounds when used with a body harness.
 - ii. Be rigged such that employees can neither free fall more than four (4) feet nor contact any lower level.
 - iii. Bring an employee to a complete stop and limit maximum deceleration distance to 3.5 feet.
 - iv. Have sufficient strength to withstand twice the potential impact energy to an employee free falling 6 feet or the distance permitted by the System, whichever is less.
 - The attachment point of the body harness shall be located in the center of the wearer's back near the wearer's shoulder or above the wearer's head.
3. Positioning Device Systems
- Be rigged such that an employee cannot free fall more than two (2) feet.
 - Be inspected prior to each use for wear, damage, and other deterioration. Defective components must be removed from service.
 - Be used only for employee protection and not to hoist materials.
 - Not use non-locking snap hooks.
 - Have anchorage points that are capable of supporting two times the intended load or 3,000 pounds, whichever is greater.
4. Personal Fall Restraint
- Harnesses and lanyards may be used.
 - Anchorage points shall be capable of supporting four times the intended load.
 - Shall be rigged to allow the movement of employees only as far as the sides of the working level or area.
 - The anchor end of the lanyard shall be secured at a level not lower than the employee's waist, limiting the fall distance to 4 feet maximum.
 - Lanyards shall be secured to a substantial member of the structure or to securely rigged lies using energy absorbing devices or methods.
 - Lanyards shall be rigged in a manner to allow horizontal movement if necessary. This shall be required for all suspended staging, floats, and all other catwalks or

walkways 6 feet or more above the ground. When working at heights where it is necessary to disengage a lanyard to move around equipment or obstacles, a double lanyard (100% tie-off) must be utilized to assure fall protection.

- Any lanyard, safety harness, lifeline or other component subjected to in-service loading, (loading equivalent to that received in a drop test) as distinguished from static load testing, shall be immediately removed from service and shall not be used again for employee safeguarding.
- Lifelines and anchorages shall be capable of supporting a minimum dead weight of 5,400 pounds.

5. Safety Lanyards, Lifelines, and Belts

- Lifelines, safety belts, and lanyards shall be used only for employee's protection, not for rigging or other uses.
- Lifelines shall be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,400 pounds.
- Lifelines used in areas where the lifeline may be subjected to cutting or abrasion, shall be at least 7/8 inch diameter wire core manila rope. For all other lifeline applications, a minimum of 3/4 inch diameter manila or equivalent, with a minimum breaking strength of 5,400 pounds shall be used.
- Safety belt lanyard shall be a minimum of 1/2" inch nylon, or equivalent, with a maximum length to provide for a fall of no greater than 6 feet. The rope shall have a nominal breaking strength of 5,400 pounds.
- All safety belt and lanyard hardware shall be drop forged or pressed steel, cadmium plated in accordance with Type 1, Class B plating specified in Federal Specification QQ-P-416. Surface shall be smooth and free of sharp edges.
- All safety belt and lanyard hardware, except rivets, shall be capable of withstanding a tensile loading of 4,000 pounds without cracking, breaking, or taking a permanent deformation.

6. Safety Nets

- Where the use of ladders, scaffolds, catch platforms, temporary floors, safety lines or safety belts is impractical, Safety nets shall be provided.
- Where safety net protection is required, operations shall not be undertaken until the net is in place and has been tested. The drop test shall consist of a 400 lb bag of sand, with a 30 inch diameter, plus or minus 2 inches, dropped from 42" above the highest walking/working surface. Alternately the net shall be certified in accordance with the regulations specified in 29 CFR 1926.502.
- Nets shall extend 8 feet beyond the edge of the work surface where employees are exposed and shall be installed as close under the work surface as practical but in no case more than 25 feet below such work surface. The employee shall not make contact with any surface beneath the net.
- The mesh size of nets shall not exceed 6 inches by 6 inches. All new nets shall meet accepted performance standards of 17,500 foot pounds minimum impact resistance as determined and certified by the manufacturer, and shall bear a label

of proof test. Edge rope shall provide a minimum breaking strength of 5,000 pounds.

- Forged steel safety shackles or hooks shall be used to fasten the net to its supports.
- Any connections between nets shall develop the full strength of the net.

7. Working Over Water

- Employees working over or near water, where the danger of drowning exists, shall be provided with a US Coast Guard approved life jacket or buoyant work vests.
- Prior to and after each use, the buoyant work vests or life preservers shall be inspected for defects, which would alter their strength or buoyancy. Defective vests shall not be used.
- Ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. The distance between two ring buoys shall not exceed 200 feet.
- At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water.

E. FALL PROTECTION PLAN

1. A written Fall Protection Plan is required for all construction operations where conventional fall protection is impractical or creates a greater hazard.
2. The Plan shall be created by a qualified person, such as the Site Manager or Site Safety Officer, and developed specifically for the site where construction is being performed. The plan must be maintained up to date, be kept at the job site, and follow these provisions:
 - A qualified person shall approve the Plan and any changes to the Plan.
 - The Plan shall document reasons why the use of conventional fall protection is infeasible or creates a greater hazard.
 - The Plan shall include other measures that will be taken to reduce or eliminate the fall hazard for workers who cannot be provided with protection by conventional means.
 - The Plan shall identify the means by which a worker will be promptly retrieved in the event of a fall, or assure that employees are able to rescue themselves and/or climb back to a safe location.
 - The Plan shall identify each location where conventional fall protection methods cannot be used.
 - These work areas shall be classified as Controlled Access Zones (CAZ) with a safety monitoring system in place.
 - The Plan shall include a statement which provides the name or other identification method for each employee approved and designated to work in the controlled access zone. No other employees may enter the CAZ.

3. Should an employee fall or some other related serious incident occur, the employer shall investigate the circumstances to determine if the Plan needs to be changed and shall implement those changes immediately.
4. The employer shall designate a competent person (Safety Monitor) to monitor the safety of other employees and the employer shall ensure that the Safety Monitor complies with the following requirements:
 - The Safety Monitor shall be competent to recognize fall hazards
 - The Safety Monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
 - The Safety Monitor shall be on the same walking /working surface and within visual sighting distance of the employee being monitored.
 - The Safety Monitor shall be close enough to communicate orally with the employee.
 - The Safety Monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.

F. INSPECTIONS AND MAINTENANCE

1. All fall protection systems and rescue equipment must be inspected on a routine basis based on OSHA regulations and ANSI standards. Equipment found to be defective must be immediately removed from service, tagged as defective or destroyed and replaced. Inspections shall be documented on the form which follows on the next page. Frequency of inspection is as follows:
 - Prior to each use for wear, damage and other deterioration and defective components.
 - On a regular basis not to exceed one year (or more frequently if required by the manufacturer's instructions) by a competent person or competent rescuer, as appropriate, to verify that the equipment is safe to use. The inspection shall be documented.
 - Formal inspections shall be made by either a competent or qualified person on at least a semi annual basis. Document the inspections
2. Inspections should include all of the following components:
 - **Body Harness**
 - i. Inspect stitching, rivets, buckles and buckle tabs, D-rings. Look for rust, abrasions, buns, cuts, tears.
 - ii. Starting at one end, hold the body side of the belt towards you holding the belt with your hands 6-8 inches apart. Bend the belt in a U shape and look for frayed edges, broken fibers, pulled stitches, cuts or other damage such as burns or chemical damage.
 - iii. Check D-ring and D-ring metal wear pads for distortions, cracks, breaks and rough or sharp edges. The D-ring bar should be at a 90 degree angle with the long section of the belt and should pivot freely.
 - iv. Look for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut or burnt stitches will be easily seen.

- Buckles and D-rings
 - i. Look for unusual wear or distortion of the buckles and D-rings. Look for frayed or cut fibers near the buckle. Rivets should be tight and not removable with your fingers. The rivets should appear flat against the material. Bent rivets will fail under stress.
 - ii. Buckle tongue should be free of distortion and should move freely. Rollers should turn freely on the frame. Check for distortion or sharp edges.

 - Lanyards and Lifelines
 - i. Begin at one end and work to the opposite end. Slowly rotate the lanyard looking for burns, cuts, tears and inspecting hardware. Spliced ends require close inspection.
 - ii. Steel lanyards – Rotate the lanyard and watch for cuts, grayed areas, or unusual wear patterns on the wire. The use of steel lanyards without a shock absorbing device is not recommended.
 - iii. Rope lanyards – Rotate the lanyard and look for any fuzzy, worn, broken, or cut fibers. Weakened areas from the extreme loads will appear as a noticeable change from the original diameter of the rope. The diameter should be uniformly the same. When a rope lanyard is used for fall protection a shock absorbing system should be included.
 - iv. Self retracting lanyards – Check the snaps, hooks, and hardware. Pull the wire rope out slowly to full extension and check the cable for broken wires and sharp kinks. Test the locking system by jerking on the wire rope with various lengths of wire extended.

 - Hardware
 - i. Snaps – Inspect closely for hook and eye distortion, cracks, corrosion, or pitted surfaces. The keeper or latch should be seated into the nose without binding and should not be distorted or obstructed. The keeper spring should be strong enough to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes.
 - ii. Thimbles - The protective plastic sleeve must be firmly seated in the eye of the splice, and splice should have not loose or cut strands. The edges of the thimble should be free of sharp nicks, distortion or cracks.
3. Indications of damage can include:
- Heat – Nylon gets brittle and has a shriveled brownish appearance. Fibers will break when flexed. Heat above 180 degrees F will start melting the fibers.
 - Chemical – Changes in color, brownish smears, and smudges may represent chemical damage to the harness.
 - Ultraviolet Rays - Do not store webbing and rope lanyards in direct sunlight because UV rays can reduce the strength of some materials. The colors will be extremely faded and cracks will show up when the material is bent over tight.

- Burns – Webbing and rope strands may be fused together by welding sparks, slag or flames. Look for hard, black or shiny spots or a hard and brittle feel. Webbing material will not burn, but nylon will.
 - Paint and Solvents – Paint will penetrate into the webbing and dry. This restricts movement of the fibers. Drying agents and solvents in some paints will cause chemical damage.
4. Maintenance of Equipment
- Wipe off all surface dirt and wash with a sponge or rag in plain water. Mild soap can be used with water, if needed. Rinse and wipe off soap.
 - Harness, belts, and other equipment should be dried without exposure to heat, steam or direct sunlight. Hang them up free to dry.

References:

29 CFR 1926.104 and 105
29 CFR 1926.501 and 502

FALL PROTECTION QUESTIONS

Circle your answer, or answers.

1. At what height is fall protection required to be worn?

3' 4' 6' 10' 15'

2. Is fall protection required to be worn in/on

Aerial Lifts, Boom Lifts or Both or Neither

3. Does Gold Coast Ironworks have a written policy on fall protection?

Yes or No

4. How often are you supposed to inspect your fall protection equipment?

Before each use Don't worry about it After a Fall

5. If you are closer than ____ to the edge of a roof or open area you must have a fall protection system in place.

3' 4' 6' 10' 15'

6. Name a good reason not to have a fall protection system in place when working.

7. When you have a fall protection problem, who do you contact?

8. How much weight can a body harness/personal fall arrest system support?

250 lbs 500 lbs 5,000 lbs

9. Guardrails need to support _____ lbs when you push on it.

100 150 200 250 500

10. What is the minimum strength of an anchor point for attachment?

2500 lbs 5000 lbs 5400 lbs

LADDER SAFETY

Ladders are an important tool in our work, and the proper use of ladders on a job site is responsibility of all employees.

1. Design of ladders.

In general, portable ladders used on construction sites are purchased from a supplier. This type of ladder is manufactured in accordance with OSHA rules and has an inherent safety factor of 3.3 built into its design. The ladder is capable of supporting 3.3 times the maximum intended load, usually 250 lbs.

When we fabricate ladders for job sites they are subject to the following design criteria.

- A design safety factor of 4 times the intended maximum load of 250 lbs.
- Testing the ladder requires that two 250 lb loads be applied at the center of two adjacent rungs, with the ladder placed at a 75-1/2 degree angle.
- Rungs on the ladders must be uniformly spaced and parallel.
- Rungs shall be spaced no more than 14" and no less than 10" apart.
- The minimum distance between side rails shall be not less than 16".
- The rungs shall be skid resistant material or treated to minimize slippage.
- The minimum distance for clearance for your feet, between the rung and the supporting wall, shall be 7 inches.
- The minimum distance for clearance between the rung and any object on the climber's side shall be 30". The clearance can be a minimum of 24" if a deflection device is used to protect the climber.
- At the top and bottom of a ladder the 'step across distance' shall be no more than 12" and not less than 7". If it is more than 12" a platform must be provided.
- The minimum clearance on each side of the ladder shall be not less than 15" measured from the center of the ladder.
- At the top of a step-through ladder, the side rails must be flared out to a 24" width, and must extend 42" above the last rung.
- A ladder cage, or other safety device, is required when the length of climb is 24' or more.
- A landing must be provided at a maximum of 50' intervals, and the next ladder section offset from the first.
- A ladder cage must extend not less than 42" above the last rung, and not less than 27" in width.

- The bottom of the cage shall be not less than 7' above the ground and no more than 8'. The bottom of the cage shall be flared not less than 4" all around.
- The inside of the cage shall provide at least 27" and not more than 30" clearance, with horizontal bands no more than 4' apart, and vertical bands with no more than 9-1/2" clearance. The vertical bands must be attached on the inside of the horizontal bands.

2. Use of ladders on job sites.

- The rails of a ladder must extend 3' above the top of a higher surface you are climbing to. When that is not possible, the top of the ladder must be secured, tied-off, and a grab rail or other device provided, to help the climber with safe access.
- Always tie off the top of a ladder whenever possible.
- Ladder must be maintained free of oil, grease, or any other slippery material, like wet mud.
- Ladders must not be overloaded beyond the manufacturers design load, usually 250 lbs.
- Ladders must be used only for the purpose for which they were designed.
- The distance from the wall to the bottom of the ladder should be approximately ¼ of the height of the ladder.
- Ladders must not be used on slippery surfaces, unless fully secured.
- The area around the top and bottom of the ladder must be kept clear.
- Ladders positioned in areas where other trades are working, or people passing by, must be secured to prevent accidental or unintentional movement.
- Never move a ladder when it is occupied.
- Aluminum ladders are not allowed on job sites.
- The top of a step ladder must never be used for standing, sitting, or as a step.
- Never climb up the back of a step ladder, unless it is a double ladder.
- Inspect ladders for damage any time an event occurs and periodically to make sure they are safe for use. Defective ladders must be tagged 'Do Not Use' immediately, and taken out of service until repaired. Discard any damaged or broken ladders.
- Always face the ladder when going up or down.
- Always keep one hand on the ladder at all times when climbing. Use the three point rule during climbing, one hand and both feet, or both hands and one foot, at all times.
- Never carry anything that could cause you to lose your balance or fall.

SCAFFOLDS

Special rules apply to the design and erection of scaffolding. Gold Coast Ironworks does not typically self perform the design and erection of scaffolding systems. We do however use scaffolding erected by Third Parties on some job sites. It is the responsibility of the Company to train any of our employees who work on scaffolding in its proper and safe use.

1. Training

- The Company must provide training for any employee who works on scaffolding systems.
- The training program requires familiarity with several aspects of the Safety Program including: Personal Protective Equipment, Fall Protection, and Ladder Safety.
- Additional aspects of the Scaffold Training program include discussion of the hazards associated with electrical power, falling objects, the load capacity of the scaffolding, inspection, tagging, and the proper use.
- Re training of employees who use scaffolding must occur whenever:
 - Work begins at a new job site with scaffolding
 - Whenever there are changes at a job site which affect the hazards to which the employee is exposed.
 - Whenever an employee is observed using the scaffolding incorrectly, or in an unsafe manner.

2. Design Features

- In general scaffolding systems are designed to support 4 times the maximum rated load capacity.
- Each platform, on all working levels must be fully planked or decked with no more than 1" wide gaps allowed, and at least 18" wide.
- Planks that are used to make a walking or working surface should overlap by at least 12".
- If the scaffold platform is 2' or more above, or below the point of access, a ladder must be provided. Do not climb on cross bracing for access.
- Stairs, ramps, and ladders used to provide access must provide safe access, with design features like any other staircase or ladder.
- Guardrails on stairs or working platforms must have a top rail, at between 38 and 45", and a midrail, with a toe or kick plate around.

3. Use of Scaffolding

- Scaffolding that is erected on a job site must be erected by a crew trained in its proper erection, under the supervision of a Competent Person.
- Prior to use of the scaffolding by any other persons the Scaffolding must be inspected and signed off by the Competent Person.
- A tagging system is used to indicate that the scaffold system is safe or unsafe. A green tag is used to indicate inspection is complete and the scaffold system is ready for use. A red tag indicates it is unsafe.
- Periodic inspections by the Competent Person must be completed to assure the scaffolding has not been changed, that work place conditions are being monitored, and that the scaffold system is still safe for use.
- You are responsible for your own safety too. Inspect your work area on the scaffolding for guardrails, access, openings in the walking surface, damage, or other defects.
- Do not load a scaffold system beyond its rated capacity.
- Do not alter, modify, change, or move a scaffold system after it is installed.
- Report any damage, defects, or unsafe conditions to your supervisor immediately.
- Do not work on a scaffold that has a slippery surface, oil, grease, snow or wet mud, or during a storm or high wind conditions.
- Do not let debris, materials, or other equipment collect on the scaffolding. Keep it clear of hazards and report any unsafe conditions to your supervisor immediately.
- Do not try to reach a higher point by building a makeshift stand, box, or using another ladder on the scaffold.
- When welding on or around a scaffold system do not use the scaffold frame for a ground connection.
- If you need to wear a fall protection harness in performance of your work on a scaffold, do not tie off to the scaffold frame or guardrails. Find a fixed secure point on the structure.

4. Rolling Scaffolds

- When assembling a rolling scaffold all cross bracing, horizontal, and diagonal members must be properly connected.
- Rolling scaffolds must be plumb, level and square when assembled.
- Casters and wheels shall be locked while in use.
- Do not move the scaffold when it is loaded.
- Inspect the scaffold before climbing up it, and whenever it is moved. Inspect the casters, locks, guardrails, ladder access, outriggers, and bracing. Report any defects or damage to your supervisor immediately, and do not use the scaffold until repairs or corrections are made.

LOCKOUT / TAGOUT & ENERGY CONTROL PROGRAM

PURPOSE

This procedure establishes the requirements for the lockout / tagout 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 / tagged out before employees perform any service or maintenance activities where the unexpected start-up or release of stored energy could cause injury. The stored energy may take a variety of forms, including that of electrical, hydraulic, steam, water, air, mechanical, gravity, or chemical energy.

RESPONSIBILITY

Appropriate employees shall be instructed in the safety significance of the lockout/tagout procedure. Each new or transferred employee whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout / tagout procedure.

Employees shall be trained in the methods of shutting down a piece of equipment as related to the dissipation of stored energy, the hazards to be controlled, the owner's procedures for stopping and shutting down the equipment, and how to avoid creating additional hazards by doing so. Training must be documented, and certified by the Safety Director, and must include the proper use of a tag and when a tag may be removed. Re-training must occur every time we enter a new job site, when a machine changes, a new hazard is introduced, or when un-safe use of the procedure is observed.

SEQUENCE OF LOCKOUT/TAGOUT SYSTEM PROCEDURE

1. Notify all affected employees that a lockout / tagout system is going to be utilized and the reasons why.
2. If the machine or equipment is operating, shut it down by the normal stopping procedure. Push the STOP button, open the circuit, close the valve, etc.
3. Operate the switch, valve, or other energy isolating device so that the equipment is isolated from its energy source. Stored energy, such as springs, elevated machine members, rotating flywheels, hydraulic, air or water pressure, must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
4. Lockout / tagout the energy isolating devices with lock and tags assigned to each individual who will be working on the equipment. The tag must have the name of the individual on it for identification.
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. Check the equipment for re-accumulation of stored energy, and ensure isolation from the energy source.

The equipment is now locked out / tagged out, and safe to work on.

Restoring Machines or Equipment to Normal Production Operations

6. After the servicing and or maintenance is complete, check to see that:

- all the tools and equipment are removed
- guards have been reinstalled
- employees are in the clear

Then remove all lockout / tagout devices and operate the energy isolating 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 lockout / tagout equipment, each shall place his or her own personal lockout / tagout device on the energy isolating device. When an energy isolating device cannot accept multiple locks or tags, a multiple lockout / tagout device (hasp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet, which allows the use of multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his or her own lock from the box or cabinet.

The Safety Director may designate himself or the Project Superintendent to take the lead role in responsibility for individuals working in a group. Individuals must still use individual tagout devices, but the Lead person has responsibility to insure safety of the employees working with him.

REMOVAL OF LOCKOUT / TAGOUT DEVICES

The employee who applied the device shall remove each lockout or tagout device.

EXCEPTION: When the employee who applied the lockout or tagout device is not available to remove it, that device may be removed under the direction of the Gold Coast Ironworks Project Manager, Safety Director or Superintendent, provided that the following specific procedures are followed:

- Ensuring that the machine or equipment is otherwise ready for startup and safe to return to normal operation.
- Verification by Gold Coast Ironworks that the employee who applied the device is not at the facility.
- Making all reasonable efforts to contact the employee to inform him or her that his or her lockout or tagout device is being removed.
- Ensuring that the employee has this knowledge before he or she resumes work at the facility.

INSPECTION AND CERTIFICATION

The Safety Director must review the Control Program whenever it is used to ensure compliance, at least annually, to document that procedures and requirements are being followed, the names of the employees, and the date of the inspection.

FORKLIFT SAFETY

Any piece of equipment can be dangerous if not operated properly. You are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, DO NOT USE THE EQUIPMENT!!! If this equipment requires the use of diesel fuel: Diesel engine exhaust and some of its constituents are known to cause cancer, birth defects, and other reproductive harm.

1. Only authorized and trained drivers are allowed to operate forklift.
2. Authorization shall be verified by a certificate or license to operate which requires a formal training program and includes formal instruction, practical hands-on training, and an evaluation in the workplace.
3. Training programs for authorization of the operator must be conducted by qualified instructors.
4. The training program must include instruction in load carrying capacity, visibility, controls, stability, refueling, and maintenance of the lift.
5. Refresher training for operators is required annually, and after any unsafe event or accident. Additional training is also required when the job site conditions change or the vehicle changes. Re-evaluation of the operators ability on site is required at least every 3 years.
6. Before operating any forklift, operators shall have read and be familiar with the operator's manual and shall abide by the safety rules and practices.
7. Inspect forklift daily (or the start of each shift) to ensure it is in proper working order. Check brakes, secure forks and all other controls before operating. Check fluid levels – coolant, engine oil, hydraulic fluid. Inspect for leaks, tire damage, and loose parts. Any defects shall be reported and fixed immediately.
8. Check capacity rating at the height you intend to reach, of the truck before loading. All ratings are with the mast in vertical position. DO NOT OVERLOAD! Center load on both forks.
9. Do not start lift from any place other than the operator's position. Always wear safety belt.
10. Do not stop, start or turn abruptly. You may spill load or tip over machine.

11. Do not allow anyone under elevated portion of lift whether loaded or empty. Never drive lift up to someone who is standing in front of a fixed object.
12. Set hand emergency brake when not in motion. Do not rely on chocking to prevent movement.
13. Do not put any part of body between uprights of mast, reach mechanism, or outside operator's compartments. Do not touch, lean on. Or reach through mast.
14. Go up or down a ramp with the load leaning back on the fork assembly.
15. When load is too big to see around safely, carry it carefully in reverse.
16. Always travel at safe speeds. Make sure work area and travel area are clear of all objects and people.
17. Reduce speed and sound horn at blind intersections and when approaching people.
18. Check clearances of doorways, canopies, and overheads.
19. Do not operate forklift within 10 feet of high tension lines up to 50,000 volts. Greater distances require over 50,000 volts. Failure to follow this warning could result in electrocution.
20. Only elevate personnel when you have approved, securely attached work platform. When personnel are elevated, never tilt mast. Place lift in neutral, set parking break, and operator must remain at the controls. Never transport or move lift with person on work platform.
21. Always wear safety harness and lanyard when working in basket. DO NOT exceed rated capacity of the basket.
22. While traveling, raise load only high enough to clear low obstacles. Travel with the mast tilted back to avoid spilling load. Carry load low for maximum stability.
23. Do not allow any riders on lift, including forks.
24. When in high range, use two wheel steering only or rollover may occur.
25. Before leaving operators position, stop truck, place in neutral, set parking break, fully lower load, and turn off engine.
26. Do not remove ROPS or load backrest from machine.
27. Do not operate on slopes greater than 20 degrees or rollover could occur.
28. Do not refuel indoors or while engine is running. NO SMOKING!
29. Modifications and additions which affect the capacity and safe operation shall not be performed by the customer without the prior written approval from manufacturer.
30. A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, platform or freight doors.
31. Forklifts shall not be used for opening or closing freight doors.
32. Inspect the work area thoroughly for all obstacles, debris, drop-offs, holes, slopes and depressions.
33. When loading or unloading a trailer the operator must check and verify that the trailer is chocked, and verify any plates or loading dock equipment is properly used.

**If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or safety of the equipment, DO NOT USE!!!
CALL US IMMEDIATELY!!!**

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH.

GCI

GOLD COAST
IRONWORKS

**This page left blank as a place holder for the Forklift Inspection Checklist
Excel spread sheet.**



CERTIFICATE OF CLASSROOM TRAINING

EMPLOYEE' NAME: _____

DATE: _____

POWERED CONSTRUCTION, ROUGH TERRAIN LIFT TRUCK TRAINING

OSHA 29 CFR Subpart N – Materials Handling and Storage, 1910.178(l) describes methods to use for compliance with powered construction, rough terrain lift truck operations, maintenance, inspection and training.

This is to certify that I have attended the above training program which has informed me of the following:

- _____ Proper pre/post operational inspection procedures.
- _____ Common forklift accidents.
- _____ Awareness of mechanical components and their function.
- _____ Safety procedures for picking up loads (load weight, lift truck capacities).
- _____ Load chart/lifting/boom extension.
- _____ Safety procedures for traveling with loads.
- _____ Safety procedures for stacking/placing and dropping loads.
- _____ Safety procedures for frame leveling operation.
- _____ Safety procedures for operating other lift devices.
- _____ Discussion on lift truck capacity, load center, center of gravity, and steering.
- _____ Lift truck classification. Class 7 (rough terrain forklift trucks (pneumatic tires).
- _____ Safe loading/unloading procedures.
- _____ General safe operating procedures.
- _____ How to handle emergency situations

Employee's Signature: _____

Trainer's Signature: _____

AERIAL LIFT SAFETY

Any piece of equipment can be dangerous if not operated properly. You are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, DO NOT USE THE EQUIPMENT!!! If this equipment requires the use of diesel fuel: Diesel engine exhaust and some of its constituents are known to cause cancer, birth defects, and other reproductive harm.

1. Only authorized and trained drivers are allowed to operate aerial lifts.
2. Authorization shall be verified by a certificate or license to operate which requires a formal training program and includes formal instruction, practical hands-on training, and an evaluation in the workplace.
3. Training programs for authorization of the operator must be conducted by qualified instructors.
4. The training program must include instruction in load carrying capacity, visibility, controls, stability, refueling, and maintenance of the lift.
5. Refresher training for operators is required annually, and after any unsafe event or accident. Additional training is also required when the job site conditions change or the vehicle changes. Re-evaluation of the operators ability on site is required at least every 3 years
6. Before operating any lift, operators shall have read and be familiar with the operator's manual and shall abide by the safety rules and practices.
7. Inspect lifts daily to ensure it is in proper working order. Check all systems and controls before operating. Check fluid levels – coolant, engine oil, hydraulic fluid. Inspect for leaks, tire damage, and loose parts.
8. Check capacity rating of the lift before loading. DO NOT OVERLOAD! DO NOT exceed rated capacity of the basket.
9. Check for a working back up alarm. If no alarm is working a spotter must be used on the ground when backing up.
10. Do not put any part of body between uprights of mast, reach mechanism. Do not touch, lean on. Or reach through mast.
11. Always travel at safe speeds. Make sure work area and travel area are clear of all objects and people.
12. Check clearances of doorways, canopies, and overheads.
13. Do not operate lift within 10 feet of high tension lines up to 50,000 volts. Greater distances require over 50,000 volts. Failure to follow this warning could result in electrocution.

14. Always wear an approved safety harness and lanyard when working in the basket. Tie off is required in snorkel boom lifts and any time you are working at elevated heights and reaching over the side. Always tie off to the manufacturers provided tie off points. Do not tie off to the railings.
15. Do not stand on the rails or climb out of the basket at elevated heights. The risk of tipping over is greatly increased.
16. Do not hoist tools, buckets, supplies, materials with a rope over the side of the lift. The risk of tipping over is greatly increased.
17. Do not operate on slopes greater than 20 degrees or rollover could occur.
18. Do not refuel indoors or while engine is running. NO SMOKING!
19. Modifications and additions which affect the capacity and safe operation shall not be performed by the customer without the prior written approval from manufacturer.
20. A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, platform or freight doors.
21. Inspect the work area thoroughly for all obstacles, debris, drop-offs, holes, slopes and depressions.

**If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or safety of the equipment, DO NOT USE!!!
CALL US IMMEDIATELY!!!**

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH.

GCI

GOLD COAST
IRONWORKS

This page left blank intentionally as a place holder for the Excel spreadsheet for Scissors/Aerial Lifts inspection checklist.

PROPANE TANK SAFETY

Any piece of equipment can be dangerous if not operated properly. You are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, DO NOT USE THE EQUIPMENT!!!

Propane gas is odorless. An odor-making agent is added to propane to help you detect a gas leak. However, the odor added to propane gas can fade. Propane gas may be present even though no odor exists.

Propane gas is heavier than air. If propane leaks from a hose, connection or fitting, it sinks to the floor, collecting there with the surrounding air, forming a potentially explosive mixture.

To avoid serious injury or death, understand the following warnings:

1. Smoking is not permitted while handling or transporting propane tanks. Keep open flame or other ignition sources away from tanks. Do not direct heat towards tanks.
2. Tanks must be transported in open spaces of trunk or bed in an upright position.
3. Tanks must be securely lashed in an upright position to minimize the possibility of tipping or rolling.
4. When transporting tanks, the safety plug must always be securely attached.
5. Check all hoses and connections for gas leaks. Never test with flame! Use soap suds solution.

**If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or the safety of the equipment, DO NOT USE!!!
CALL US IMMEDIATELY!!!**

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH.



BLOODBORNE PATHOGENS

Bloodborne Pathogens are microorganisms present in human blood which can cause disease in humans, such as hepatitis B virus (HBV) and the human immunodeficiency virus (HIV).

Under the OSHA rule, blood means human blood, blood products, or blood components. Other potentially infectious materials include human body fluids such as saliva, semen, vaginal secretions, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Occupation exposure means a “reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials, that may result from the performance of the employee’s duties.”

1. Exposure Control

The performance of our job duties does not normally bring us into contact with bloodborne pathogens. There are not circumstances in which our employees are likely to be exposed.

There are some unusual circumstances in which you the employee may be exposed in performance of his job duties. They are:

- Emergency medical response to a fellow employee or to another worker at a job site.
- First aid treatments with fellow employees or other workers at a job site.

All body fluids that you might come in contact with should be considered potentially infectious.

2. Training

If changes in our work place or type of work we do result in new exposure risks additional training is required for employees.

- Training will be provided at the initial assignment of an employee and annually thereafter.
- An Exposure Control Plan must be developed and copies given to the employee.

- More training on the HBV and HIV viruses must be presented and the vaccine for Hepatitis B must be made available to all employees that have a risk of exposure, without cost to the employee.

3. Communication

Communication of risks to employees consists of:

- Training
- Signs, posted to indicate area where biohazards may occur.
- Labels on containers that have biohazards

4. PPE

Personal Protective Equipment must be in place at all times, at no cost to the employee, to provide protection from Bloodborne Pathogens, including:

- Eye protection – safety glasses, or a face shield
- Rubber gloves
- Paper masks
- Water for hand washing or antiseptic towelettes.

In the event of exposure the employee must wash his hand with soap and running water as soon as possible.

5. First Aid Kits

All company vehicles and work sites must have a First Aid Kit which is maintained in good condition at all times. The Kit must be readily accessible and checked monthly for items which require resupply. The Kit must also be suitable for the type of work being done, and the number of workers for whom the Kit is dedicated.

6. Cleaning

PPE, clothing, or other materials exposed to bodily fluids shall be disposed of and not cleaned. The Company will provide new PPE, at no cost to the employee. All other surfaces, equipment, or tools which are exposed to body fluids must be cleaned and decontaminated, as soon as possible.

7. Record Keeping

Medical records on individual employees with risk of exposure to bloodborne pathogens must be kept for the duration of employment plus 30 years.

Training records on individuals with risk of exposure must be kept for no less than 3 years.

CONFINED SPACES

1. Introduction

A confined space, for the purpose of this program, means any space which has limited openings for an employee's entry or exit. In addition, a confined space is an area which has inadequate natural ventilation, contains or produces dangerous concentrations of flammable gases or toxic vapors and is determined to present a threat of injury, illness or death. Confined spaces include, but are not limited to, inside tanks and ducts, or open topped spaces, such as pits and trenches. All shafts, pits, or trenches over five (5) feet in depth into which employees are permitted to enter are considered as confined spaces.

2. Training

The Occupational Safety & Health Administration (OSHA) has specific rules which require precautions to be employed before and during employee entry into a confined space. An overview of the General Industry Safety Orders and Construction Safety Orders will be discussed with all personnel involved with any confined space entry project. A training session must be held by a competent person or qualified engineer to insure that operating procedures are understood by all. Training topics must include Proper Operating and Rescue Procedures, including instructions as to hazards they may encounter. The training must be completed prior to the initial assignment of an employee to the job site, prior to any change in duties being performed by the employee, if a new hazard has been created, or any special deviations have occurred.

Documentation of the training must be kept, and must include the name of the employee, the name of the instructor and his signature, the date, and the type of duties the employee is trained to complete, entrant, attendant, or entry supervisor. Certification must be available to the employee and any other interested parties. Recertification is required annually.

Confined space entry requires definite procedures. No one will be permitted to enter a confined space unless they are trained with those procedures involved and have completed the attached Entry Permit verifying that the individual has read and understands the Confined Space Entry Program.

After project completion, permits must be presented to the Safety Director for review on an annual basis. The Confined Spaces Program and all Entry Permits must be reviewed annually and modified if necessary to ensure employees are protected.

3. Entry Permit

A confined space entry permit must be obtained, along with signs posted: “DANGER - PERMIT REQUIRED CONFINED SPACE, DO NOT ENTER”, if a permit condition exists. Warnings must extend to all workers in the area to prevent accidental entry. If a non-permit condition exists (no dangerous air contaminants, oxygen enrichment or deficiency) signs are not required.

The Permit is used to help ensure the safety of the workers from hazards inside and outside of the confined space. The permit must document the following items:

- The location of the confined space, along with the date and time of entry, and the length of time the permit is valid.
- The names of the authorized entrants and attendants.
- All possible hazards that might affect the confined space and the allowable exposures to toxins, if any.
- Measure that must be taken to manage and minimize the hazards, including ventilation, safety equipment, and isolation if needed.
- Results of air quality testing.
- The type of work to be completed. Hot work will require an additional Hot Work Permit.
- Emergency contact phone numbers and procedures.
- The name, signature, and title of the person authorizing the entry.

Operations inside a Confined Space in which there are employees of two or more companies working at the same time must be coordinated to eliminate the hazards associated with one worker endangering another. This coordination must be handled at the permit stage and must include an analysis of the operations being performed, the hazards associated with each task and methods to mitigate or minimize the dangers.

When the confined space operations are complete, all equipment retrieved, and all entrants have left the confined space, the permit must be cancelled and space closed to prevent accidental entry by others.

4. Entrant’s Responsibilities

You become an entrant when any part of your body breaks the plane of the permit-required confined space.

The confined space entrant must:

- Know all the hazards within a permit space, including the signs of exposure to these hazards.
- Be able to use all confined space safety equipment.
- Keep in contact with the attendant and alert the attendant if any hazard arises in the space.
- Evacuate the permit space if ordered, an alarm sounds, or if any hazard arises.

5. Attendants Responsibilities

Attendants play an essential role. They must:

- Remain at the entrance of the space whenever entrants are inside, unless relieved by another trained attendant.
- Know the signs of exposure to all possible hazards within the space and monitor the entrants to see if they show any of these signs.
- Track the workers in the space and only allow authorized entrants who are listed on the permit to enter.
- Keep in constant communication with the entrants.
- Protect the entrants from external hazards such as vehicle exhaust and falling objects.
- Monitor work activities in the space and be on the lookout for hazards.
- Contact the rescue team if needed.
- Never enter the space to perform rescues.

6. Entry Supervisors Responsibilities

The entry supervisor is a qualified person who has the responsibility to:

- Make sure the space is safe to enter.
- Sign and maintain the entry permit and ensure it is done correctly.
- Coordinate operations with customers and other trades
- Ensure that all safety equipment and conditions for entry are met and maintained.
- Close the after all entrants have left the space and cancel the permit.
- Maintain the records associated with the entry.

7. Pre-Entry

Prior to employee entry, the confined space shall be tested by a qualified professional for the presence of dangerous air contamination, oxygen enrichment or oxygen deficiency. If it is determined that oxygen enrichment or deficiency exists, or that a presence of dangerous air contaminants exist, the competent person must immediately cease all entry operations and notify the Safety Director of these findings. Absolutely no entry may be made either at the beginning or during the course of the project if dangerous air conditions are discovered.

Entrants of a confined space may participate the in initial monitoring of the atmosphere in the confined space and must be given access to the data accumulated during the initial testing and the monitoring that is on going. All entrants, employees, or other interested parties have the right to request additional monitoring be done at any time and have the right to refuse to enter the confined space until they are satisfied with the safe working conditions.

Ventilation of the confined space will consist of installing a blower or other piece of equipment, which circulates fresh air into the confined space. Testing shall be down to determine the presence of combustible gases and the atmospheres percentage of oxygen. The minimum acceptable atmosphere is 1) Combustible gas level of no more than 5% of the lower explosive

limit and 2) An oxygen content range of 19.5% to 23.5%. Exposure to concentrations at or above the noted explosive gas limit or below the oxygen percentage could cause serious injury or death. If any detectable amount of a combustible gas or vapor is present, or the percentage of oxygen is not 19.5%, ventilation of the confined space shall be maintained at all times and the air quality monitored.

To ensure accurate testing, the testing should be conducted by a qualified individual who is trained in the instrument's calibration and operation as well as maintaining a permanent log of test results.

8. Confined Space Operations

Following the procedures noted for ventilation and/or testing, personnel shall be equipped with a safety harness and lifeline prior to entry. The employee shall also wear the appropriate personnel protective equipment (PPE) as necessary.

An attendant must be stationed outside of the confined space whenever an entrant enters the confined space. The attendant must be on station, immediately adjacent to the confined space, when ever the entrant is inside the space. No attendant is allowed to monitor more than one confined space at a time.

At least one First Aid and CPR trained employee shall standby on the outside of the confined space to give assistance in case of emergency, and additional employees shall be within sight or call of the standby employee. The standby employee will not leave his or her position.

Smoking is prohibited when in or near any confined space.

9. Additional Safety Considerations

- If opening or ventilating the confined space interfaces with vehicular or pedestrian traffic, appropriate warning signs and protective barriers shall be promptly setup.
- Continuous testing shall be performed throughout the project to insure that no air deficiencies or dangerous vapors exist.
- Protection of objects falling into the tank, shaft, pit or trench must be provided.
- Any above ground hazardous material must be properly stored away from confined spaces.

10. Emergency Situations and Rescue

In the event that communication between the individual located within the confined space and the standby employee is lost, the standby employee shall begin immediate rescue procedures, using the emergency response phone numbers listed on the Entry Permit.

1. The standby employee shall immediately summon by yelling loudly any additional personnel who are immediately available to assist in the rescue effort.
2. The employee shall secure the lifeline attached to the safety harness and connect it to a mechanical lifting device capable of lifting an unconscious body vertically, and begin extracting the entrant.
3. Under no circumstances shall the standby employee or any other individual be allowed to enter the confined space to assist in the rescue.
4. Once the individual has been removed from the confined space, the standby employee or other qualified person shall attempt to revive that individual.
5. At the same time use the facility phone, walkie talkies, or cell phone, using the emergency response numbers listed in the Entry Permit, to summon additional professional emergency authorities without delay.

Rescue services must be either:

- Provided by the owner/client
- Provided by a Third Party which is given the opportunity to examine the entry site, practice rescue, and decline as appropriate, or
- Proved by the employer by selecting a rescue team that is trained and equipped to perform the needed rescue services.

Gold Coast Ironworks does not perform work that is classified as Immediately Dangerous to Life and Health (IDLH). During those types of operations, a Rescue Service must be on site at all times during the entry.

ABRASIVE BLASTING

In general Gold Coast Ironworks does not perform Abrasive Blasting. Abrasive Blasting is most generally done in the performance of sandblasting for painting, or cleaning. Abrasive Blasting may also be done to clean sidewalks, parking lots, of graffiti covered surfaces.

1. Introduction

There are various types of blasting media, including sand, glass, aluminum oxide, garnet, and mixed water slurries.

When Abrasive Blasting is performed by us or by other contractors/persons there is a potential for hazardous substances to be produced, including dust, fumes, gases, lead particulates, mists and vapors, which could be harmful.

The abrasive material and the surface coatings on the material or surface being blasted get pulverized during the operation and the dust or vapor generated will contain particles from micro size to large chunks.

2. Toxicity Limits

Whenever hazardous substances are produced their concentrations must not exceed the limits specified in the 'Threshold Limit Values of Airborne Contaminants – 1970' of the American Conference of Governmental Industrial Hygienists.

Source of information: Cal/Osha T8 CCR 5151 and 5155

3. PPE

The toxicity of the particulate material must be evaluated on a site specific basis to determine the potential health hazards and the appropriate safe guards, including respirators, dust masks, face shields, ear protection, and the appropriate type of clothing/ PPE to be worn.

The appropriate PPE must be provided to not only the operator, but also to any other workers / persons who may be exposed to a safety risk.

When it is necessary to establish a respirator protection program GCI will utilize a third party to evaluate individuals performing the work, and the proper respirator for the job. It could also be necessary to provide breathing air systems.

The air for the operator, whether atmospheric or provided air, must be free of harmful dust, mists and vapors, gases, and debris.

Eye and face protection is always to be provided to the operator when the respirator design does not provide that type of protection.

4. Other Considerations

Compressed air shall not be used for cleaning purposes unless the pressure is reduced to less than 30 psi.

There is a potential for electrical static electricity to be generated by the blasting process. It is necessary for the blast nozzle to be adequately bonded and grounded to prevent the buildup of a static charge

The nozzle of the blasting equipment must have a 'dead man' type valve which must be held open manually by the operator during blasting operations. No locking type switch or tampering of the valve is allowed.

When not in use the blasting nozzle must be set aside in an appropriate location, on a steady rest or other support to prevent accidental discharge and injury to others/equipment.

Disposal of generated waste is another issue which will require a site specific analysis to determine the type of hazardous waste being generated, if any, and the proper disposal technique.

LEAD AWARENESS

1. Introduction

Gold Coast Ironworks does not perform lead abatement work and does not use lead in any manufacturing processes. Our projects are primarily related to new construction and the exposure to lead is in general insignificant.

Lead is known to cause various health issues which affect the central nervous system. Small doses or exposure over a long period time are known to collectively build up in the body and are poisonous to your health. Long term exposure to lead may cause severe damage to central nervous system, reproductive and urinary systems, and the ability of your body to generate new blood.

2. Hazard Recognition

Lead is a very dense material. Because of its' specific density and mechanical properties it has been used in manufacturing processes for items such as:

- Wheel weights
- Fishing weights
- Ballast control weights
- Concentrated mass weights for testing of cranes, or for counterweights on tractors
- Shotgun ammunition
- Batteries
- Electrical circuit boards and cathode ray tubes
- Stained glass and crystal/leaded glass
- Solder and pipes
- Paints
- Gasoline

The symptoms of exposure to lead above published acceptable limits are:

- A metallic taste in your mouth
- Loss of appetite
- Nausea, vomiting and stomach cramps
- Difficulty in sleeping
- Fatigue
- Constipation
- Moodiness
- Headaches, joint and muscle aches
- Anemia

3. Exposure

The types of places where lead exposure is possible include:

- In an old building or on a ship where lead paint may have been used in the past
- Demolition work
- Handling of lead weights
- Abrasive blasting or scraping of painted surfaces
- Welding on a painted surface
- Working on a job site where lead abatement is taking place

No employee shall be exposed to lead at concentrations greater than a Permissible Exposure Limit (PEL) of fifty micrograms per cubic meter of air averaged over an 8 hour period.

If the company suspects or has knowledge of a potential exposure of any employee to lead the company must provide for air monitoring for the exposed employees exposed to the greatest airborne concentrations of lead. Additionally, signs shall be posted in each work area where lead exposure is above the PEL which state:

WARNING
LEAD WORK AREA
POISON
NO SOMKING OR EATING

When initial monitoring for lead indicates that the exposure to airborne concentration exceeds the Action Limit of 30 micrograms per cubic meter of air, calculated as an 8 hour time weighted average, but at or below the PEL of 50 micrograms, the employer shall perform monitoring at least every 6 months. The monitoring shall continue every 6 months until two consecutive measurements, taken at least 7 days apart, are below the action level.

The company must notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to employees. The notice must be done as soon as possible but no later than 5 days after the results are known, along with the corrective action taken.

4. Compliance Programs

When exposure to lead is known, a written Site Specific Compliance Program must be established and implemented to limit the exposure of employees to/or below the exposure limits. The Compliance Program must contain the following:

- A description of each task or activity in which lead is emitted.
- A description of the specific means that will be employed to achieve compliance and to minimize exposure.
- A report of the technology considered in meeting the PEL.
- Air monitoring data
- A detailed schedule for implementation of the program
- A work practice program

- An administrative control schedule
- A description of arrangements made among contractors with respect to informing employees and the responsibility for compliance.
- Any other relevant information

5. PPE

Lead can be absorbed thru the skin, ingested, and may also be present in airborne particulate matter. Personal Protective Equipment must be worn which will limit the exposure and hazards and should include:

- Eye protection
- Hand and skin protection
- Respirators with lead/heavy metal filters

Specific PPE required to complete tasks identified by the Compliance Program shall be provided to the employees at no cost.

When a Compliance Program is established and during the time it is being set up, respirators are to be used during the time necessary to install or implement engineering or work practice controls, any time the engineering or work practice controls are determined to be insufficient, and in any emergency situation.

Work areas where lead is known to be present above the PEL must be separated from Change Areas, Eating Facilities and Showers.

6. Medical Surveillance

The company shall institute a Medical Surveillance Program for all employees exposed on any day to lead at or above the Action Level for more than 30 days in any consecutive 12 month period. The Medical Surveillance Program must include:

- Examinations and the necessary procedures performed by or under the supervision of a licensed physician, at no cost to the employees
- Blood sampling
- Medical examinations and consultations
- Chelation
- A full description of the medical benefits provided
- Written employee notifications and details of the monitoring required

7. Responsibility

It is the responsibility of the Safety Director and or the company representative to:

- Issue and implement this program and ensure that it meets applicable requirements.
- Provide Hazard communication training for Lead Awareness.
- Provide Respiratory Protection training and fit testing if applicable

- Ensure that all required personnel receive Lead Awareness training as required by the job site / project location
- Make inquiries of clients about hazards at the job site.
- Inform personnel that they are going to a known or suspected lead containing area.
- Remove the employees from the area when lead exposure is detected until the risk is mitigated

It is the responsibility of the employee to:

- Employees must wash their hands and face thoroughly when lead containing materials are contacted.
- Employees must adhere to and abide by any signs or labels indicating the presence of lead containing materials.
- Employees must follow good work practices to ensure the lead containing materials are not disturbed.

8. Training

Lead awareness training is required when new employees are hired, and whenever an employee is assigned to work at a job site where lead exposure is suspected. Refresher training is required annually.

Training will meet Client site specific requirements.

Training records for this program are retained in the form of a training roster/sign in sheet, with the date of training, the name of the trainer and individuals participating, and are maintained for a minimum of three years.

BENZENE AWARENESS

1. Introduction

Gold Coast Ironworks does not use benzene in any manufacturing processes. Our projects are primarily related to new construction and the exposure to benzene is in general not significant.

Benzene is known to cause various health issues which affect the central nervous system. Long term effects may result in blood disorders such as leukemia and anemia.

2. Hazard Recognition

Benzene is toxic, colorless and has an aromatic odor. Benzene does not mix with water. It is also very highly flammable, and the vapor may create an explosive environment

The symptoms of exposure to benzene above published acceptable limits are:

- Eye irritation
- Air way and nose irritation
- In ability to breathe normally
- Irritability
- Euphoria
- Headaches, dizziness and nausea

3. Exposure

The types of places where benzene exposure is possible include:

- Petroleum refining facilities
- Tank gauging operations
- Maintenance operations at oilfields

4. PPE

Benzene can be absorbed thru the skin, ingested, and may also be present in airborne particulate matter. Personal Protective Equipment must be worn which will limit the exposure and hazards and should include:

- Eye and face protection
- Hand and skin protection with gloves, and boots
- Aprons and sleeves

5. Responsibility

It is the responsibility of the Safety Director and or the company representative to:

- Issue and implement this program and ensure that it meets applicable requirements.
- Provide Hazard Communication training for Benzene Awareness.
- Ensure that all required personnel receive Benzene Awareness training as required by the job site / project location
- Make inquiries of clients about hazards at the job site.
- Inform personnel that they are going to a known or suspected benzene containing area.

It is the responsibility of the employee to:

- Employees must wash their hands and face thoroughly when benzene containing materials are contacted.
- Employees must adhere to and abide by any signs or labels indicating the presence of benzene.
- Employees must follow good work practices to ensure the benzene containing materials are not disturbed.
- Employees must abide by client specific safety rules for handling benzene, working at that job site, and be aware of their contingency plans.

Smoking is prohibited in areas where benzene is present. Fire extinguishers must be readily available in areas where benzene is used or stored.

6. Training

Benzene awareness training is required when new employees are hired, and whenever an employee is assigned to work at a job site where benzene exposure is suspected. Refresher training is required annually.

Training will meet Client site specific requirements.

Training records for this program are retained in the form of a training roster/sign in sheet, with the date of training, the name of the trainer and individuals participating, and are maintained for a minimum of three years.

TRENCHING, SHORING and EXCAVATIONS

1. Introduction

Gold Coast Ironworks does not perform trenching, shoring or excavation work. Our projects are primarily related to new construction, above ground, and the exposure to dangers associated with trenching, shoring, and excavating are in general not significant.

The dangers associated with Trenching, Shoring, and Excavating involve hazards to personnel, equipment, and property.

2. Hazard Recognition

Trenching is common when doing underground piping, running underground utilities, or trenching for access to an underground vault or storage container. Excavation is similar in nature, but is more likely just a single large hole, as opposed to a long trench. Shoring is the method of keeping the trench or excavated hole open.

A trench or trench excavation is defined as a narrow excavation, relative to its length, made below the surface of the ground. In general, the depth is greater than the width, and the width of a trench is 15' feet or less.

You don't always have to dig or trench very deep to find a hazard and create a problem. Some of the projects you may be involved with that have hidden dangers include:

- Concrete breaking with a jack hammer
- Working with a backhoe or excavator
- Using a concrete cutting saw

3. Hazard Mitigation

Whenever a trench or excavation is being planned it is necessary to identify what is already in the ground before beginning. The specific locations of underground utilities, such as phones, sewer lines, electrical conduits and water lines, or installations must be laid out first along with the path of travel of the trench or excavation.

Five easy steps to Safe Excavation - Underground Service Alert (USA)

1. Survey and Mark – survey the area and mark the site with white paint

2. Call before you Dig – call 1-800-227-2600 or call 811 at least two working days prior to starting work
3. Wait the required time – allow 2 days for utility lines to be marked
4. Respect the marks
5. Dig with care – hand excavate within 24” of each side of a mark

If USA fails to respond within a 2 day period the Safety Director or the company representative may make a determination on whether or how to proceed with caution. This may involve using some other kind of detection equipment or other method of locating and identifying underground hazards.

While the excavation is open underground installation shall be protected, supported or removed as necessary to safeguard employees.

4. Trenching Rules and Regulations

Structural ramps for a trench must be designed for access and egress by a competent person with consideration for the employees and or any equipment using the ramp.

A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees

Employees must be protected from cave-ins by an adequate shoring system. Shoring of trenches is required whenever there is a danger of cave-in. Shoring may not be required if the excavation is entirely in stable rock, or if the depth is 5’ or less and a competent person determines there is no danger of cave-in.

Shoring must be capable of providing protection and have the capacity to resist all loads that are intended or could be expected to be applied or transmitted to the system. Shoring must be designed, installed, and removed by a competent shoring contractor.

Excavations without shoring must have sloped and benched side walls which measure 1-1/2 horizontal distance for 1 vertical distance, which equates to a 34 degree angle. Any other sloping or benched excavations must be designed by a registered professional engineer with consideration of the soils and loads being imposed.

Employees exposed to vehicular traffic shall wear high visibility vests.

No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees are required to stand away from any vehicle being loaded or unloaded.

When mobile equipment is operated adjacent to an excavation or when it is required to approach the edge of the excavation a warning system such as barricades, hand or mechanical signals must be used.

Trenches and excavations must be inspected by a competent person with knowledge of atmospheric hazards prior to being used. This may be done with portable gas monitoring devices to measure the amount of oxygen present and to detect any other gases. If it is necessary to utilize equipment or controls to eliminate an atmospheric hazard testing must be done as often as necessary to ensure that the atmosphere remains safe. In the condition of a persistent atmospheric hazard Emergency Response Equipment, such as breathing air packs, safety harness and retrieval lines or a basket stretcher must be available and attended.

Employees shall not work in excavations in which there is accumulated or flowing water, unless adequate precautions have been taken to ensure the shoring is adequate and the employee is safe from other hazards. Lifelines and a safety harness may be required as well as a means of controlling the water level.

Adjacent structures such as buildings, wall or other structures must be considered with regards to any trench or excavation. Additional support may be required and must be designed by a competent person. Sidewalks, pavements, and other structures must not be undermined by the trench or excavation, or must be shored, and protection provided to prevent a collapse of the structure and a danger to the employee.

Loose rock and dirt protection shall be provided to protect employees from associated hazards. Loose dirt, rocks or other equipment must be kept at least 2 feet back from the edge of the excavation or prevented from rolling in by other means.

Trench excavations must be inspected daily by a competent person for evidence of changes to the shoring, job site operations, or other hazards, including atmospheric ones. When the inspection detects a new hazard it must be dealt with immediately, and employees must not enter the excavation until the hazard is mitigated.

Walkways shall be provided where employees or equipment are required or permitted to cross over the excavation. Such walkways will also be required to have guardrails if the walkway is 6 feet or more above the lower level.

5. Competent Persons

Given the Rules and Regulations associated with trenching and shoring the role of the competent person is obviously an important one. The competent person must have specific knowledge related to soils analysis and shoring systems. He must be familiar with the rules and regulations sited in the CFR 1926.650 and able to design shoring structures accordingly.

Soils must be analyzed and classified as Stable Rock, or Type A, B, or C as defined by the CFR1926.650 Appendix A. Some examples of classifications are:

- Stable rock – natural solid minerals
- Granular soil - Sand and gravel
- Cohesive soil – Clay or other soil that does not crumble
- Wet or moist soils - Compacted or loose soil that looks and feels damp
- Cemented soil – soil with a cementing agent in it which provides additional strength

The classification of the soil shall be based on the results of at least one visual and one manual analysis as defined in the CFR1920.650.

Shoring and employee protection systems must be designed in accordance with the results of the analysis.

6. Training

Trenching, Shoring and Excavation training is required when new employees are hired, and whenever an employee is assigned to work at a job site where exposure is anticipated. Refresher training is required annually.

Training will meet Client site specific requirements.

Training records for this program are retained in the form of a training roster/sign in sheet, with the date of training, the name of the trainer and individuals participating, and are maintained for a minimum of three years.

HYDROGEN SULFIDE PROGRAM

1. Purpose

The purpose of this program is to supply employees with knowledge regarding hydrogen sulfide (H₂S) and reduce employee hydrogen sulfide exposure. This program meets the requirement of OSHA Standard 29CFR 1910.1200 (Hazard communication), OSHA 1910.1000 Table Z-2 and ANSI Z390.

2. Scope

Gold Coast Ironworks does not own or operate any facilities that are in a known or suspected hydrogen sulfide area. It is however possible that one of our employees could be exposed to hydrogen sulfide at a client facility, in particular an oil and gas facility. Those customers also have H₂S Programs which may govern our operations there.

This program applies to all operations conducted by Gold Coast Ironworks where hydrogen sulfide is or could be present at concentrations of 10 ppm or greater in the breathing zone.

3. Responsibility

It is responsibility of the Safety Director and or the company representative to:

- Issue and implement this program and ensure that it meets applicable requirements.
- Provide Hazard communication training for hydrogen sulfide.
- Provide Respiratory Protection training and fit testing
- Ensure that all required personnel receive hydrogen sulfide training as required by the job site / project location
- Make inquiries of clients about hazards at the job site.
- Inform personnel that they are going to a known or suspected hydrogen sulfide area.
- Ensure that personnel going out to a known hydrogen sulfide area are provided respiratory protection and monitors.

It is the responsibility of the employee to:

- Comply with all aspects of this H₂S Program and specific requirements of our customers.
- Comply with all aspects of the Respiratory Protection Program
- Attend scheduled hydrogen sulfide and respiratory protection training.
- Know and comply with company and client work practice controls in place to prevent hydrogen sulfide exposure.
- Use personal protective equipment as necessary to prevent hydrogen sulfide exposure.

- Know and understand the facility's contingency/emergency plans

4. Hazard Recognition

Hydrogen sulfide, or H₂S, is a colorless, flammable gas that has distinctive 'rotten egg' odor. It may also be referred to as dihydrogen sulfide, sulfur hydride, sewer gas and stink damp.

Hydrogen sulfide is produced naturally by decaying organic matter released from liquid manure and natural gas, a by product of industrial processes including petroleum refining, mining, tanning, wood pulp processing, and used to produce elemental sulfur, sulfuric acid, and heavy water for nuclear reactors. Hydrogen sulfide exposure could occur as a result of:

- Drilling operations
- Recycling drilling mud
- Contact with water from sour crude wells
- Blowouts
- Tank Gauging
- Routing maintenance at refining operations

Exposure to hydrogen sulfide above published acceptable limits can result in adverse health effect including:

- Eye irritation
- Lung effects
- Central Nervous System effects on parts of the brain that control breathing
- Shock, convulsions and death at high exposures

The symptoms of exposure include:

- Eye irritation
- Nose and throat irritation
- Headache, dizziness
- Nausea
- Cough, and difficulty breathing

5. Hazard Evaluation

Monitoring for airborne concentrations of hydrogen sulfide at work sites is performed through the use of fixed and/or portable gas meters, whether it be a hydrogen sulfide specific meter, or a multi gas meter that detects for hydrogen sulfide.

Individual personal monitors may be worn at facilities where H₂S is known to have been detected previously or where exposure is perceived to be possible.

Gas meters are set to alarm when airborne hydrogen sulfide concentrations exceed the OSHA permissible exposure limits (PEL) of 10 ppm.

6. Hazard Control

Employees will not work in areas with airborne concentrations above OSHA PEL.

NIOSH approved self contained breathing apparatus (SCBA) or air-supplied respirators with escape SCBA will be used when the OSHA PEL is exceeded.

Other safety precautions include:

- When working at a job site where H₂S exposure is possible, employees are required to obtain, know and understand the facility's contingency plan.
- Whenever the gas monitor alarms, leave the area immediately to a fresh air area and do not reenter until conditions are proven safe or appropriate respiratory protection is used.

7. Training

A safety training program shall be provided to all personnel prior to working in a known or suspected H₂S environment. Refresher training is to be conducted annually for employees who frequently visit known or suspected hydrogen sulfide locations. The following areas must be covered in the program:

- What is H₂S?
- Hazards and characteristics of H₂S
- Toxicity and properties of H₂S
- Detection and monitoring
- Effects on individuals
- Symptoms of Exposure
- Use and limitations of respiratory protection equipment
- Contingency and emergency response plans

Additionally training in respiratory protection shall be conducted.

Training will meet Client site specific requirements.

Training records for this program are retained in the form of a training roster/sign in sheet, with the date, names of the trainer and individuals participating, and are maintained for a minimum of three years.

SPILL PREVENTION and RESPONSE

1. Introduction

The safety of personnel, equipment, and the environment, during work operations is a primary concern of Gold Coast Ironworks and its customers. While we are using equipment and handling materials we must always be mindful of the potential to release oils, fuels, or chemicals into the environment. This Spill Prevention and Spill Response Program establishes the procedures for the safe use of equipment, fuel transfer procedures, and the response procedures to be utilized in the case of a spill. It is imperative that all personnel adhere to the following procedures and plan.

2. General

If you come in contact with something you think may be hazardous or harmful to your health or the health of someone else, you must bring it to the attention of your supervisor immediately. Toxicity of the substance or material will be evaluated and dealt with appropriately. Hazardous materials must be dealt with by employees with training for proper disposal.

Whenever personnel are assigned a job which requires the use of mobile equipment, has stored chemicals on site, or requires the handling of fuels, oils, or chemicals, they are to receive training from this program in order to minimize the potential for release of a fuel, oil, or other hazardous products, and to understand the response procedure should a spill occur during the project.

3. Spill Prevention

The best way to handle a spill is don't let happen in the first place. We can help prevent spills by:

- Training
- Proper storage of chemicals, fuels, and oils, in safe containers, with lids
- Job site inspections before work begins
- Inspection of equipment and tools
- Good housekeeping
- Knowing your job and being aware of what is going on around you.
- Watching out for each other

Trucks and other areas where fuels, oils, and/or chemicals may be used or stored, must be maintained with good housekeeping procedures. This includes clean and organized storage, labeling, and secondary containment where necessary.

4. Potential Spill Sources

Machinery and Equipment

- Fueling operations
- Hydraulic leaks from cranes, forklifts or other mobile equipment
- Winches
- Generators
- Air compressors

Fuel, Oil or Chemical Storage Tanks and Containers

- Fuel tanks
- Drums
- Hoses
- Pails

Pneumatic and Hydraulic Tools

- Tools themselves
- Hoses
- Inline oilers

Paints, Solvents and Cleaning Products

- Buckets and pails
- Spray cans
- Storage lockers
- Cans or containers on the trucks

5. Spill Response Priorities

In the event of a spill, on-site personnel are in the best position to take prompt action to minimize and control the spill. Their priorities should be:

- Safety of Personnel
- Prevention of a fire or explosion
- Elimination of spill source
- Containment of the spill
- Collection and storage of contaminated debris and materials
- Notification of spill
- Preparation of reports

6. Spill Response Procedures

The response to a spill should be related to the nature and amount of the spill. A small spill (like a bottle of motor oil) can be treated differently than a larger spill (like a 55 gallon drum of diesel fuel leaking into a storm drain).

- Notify your supervisor of an injury right away. Call Rich McFerron on his cell phone: 805 797 7059. Call 911 for emergency medical or fire emergency assistance
- Isolate and administer to injured personnel
- Take the necessary steps to reduce the risk of fire, turn off equipment, valves, pumps, and turn off or extinguish any source of hot surfaces or flames.
- Stop the spill source if possible, turn off equipment, valves, or pumps, stop equipment leaks by crimping hoses, plugging holes or isolating parts, upright any overturned containers, stop tank leaks by placing them in another container or plugging the hole
- Contain spills with diapers, kitty litter, rags, or earth dams. Wipe up small spills with rags.
- Dispose of spill and clean up materials in a safe manner which will do no more harm.

7. Emergency Equipment and PPE

It is the responsibility of the Safety Director and/or company representative to evaluate the potential for a spill at all job sites. He must make plans before beginning the job to provide adequate spill response equipment, and spill kits, of adequate size to contain any anticipated spill, and make it readily available for use

Spill Response equipment should always be a part of the necessary equipment on any job site and include:

- Rags
- Clean up products, like Simple Green
- Gloves, latex or rubber
- Fire Extinguishers
- Eye protection glasses, and face shields

GENERAL WASTE MANAGEMENT

1. Introduction

Good housekeeping and waste management are part of our everyday responsibilities. Gold Coast Ironworks has a specific policy for handling of Hazardous Materials separately. General Waste Management is more related to handling of materials and waste generated in the course of normal working operations.

2. Toxicity Limits

If you come in contact with something you think may be hazardous or harmful to your health or the health of someone else, you must bring it to the attention of your supervisor immediately. Toxicity of the substance or material will be evaluated and dealt with appropriately. Hazardous materials must be dealt with by employees with training for proper disposal.

The type of construction debris being generated at a job site, and the appropriate method of handling it, as well as storage containers, must be considered before the work begins. Employees /workers must be made aware of the appropriate method for handling the waste and storage of the materials by their supervisor

Construction debris must be separated according to the method of disposal. Additional environmental protection may need to be provided to ensure runoff water does not carry a hazardous substance to a storm drain, and covers provided to prevent any dust or vapors from the waste being carried into the environment.

Scrap metal must be separated and set aside by type of metal, for appropriate recycling.

Wood products must also be separated and set aside for recycling.

3. PPE

Normal construction type PPE is always to be worn. That goes for handling of the waste we generate. Appropriate PPE must be worn for the job. That may include gloves, eye protection, face masks, boots and /or special clothing when handling the construction debris and waste.

Tools and equipment used to handle the waste are also subject to inspection like another tool you use. That includes waste cans, brooms, shovels, and forklifts, etc. If it is broken get rid of it and replace it with a good one.

Heat Injury and Illness

Heat Illness can be deadly. Every year thousands of workers become sick from exposure to heat, and some even die. Gold Coast Ironworks believes these illnesses and deaths are preventable.

Water, Rest, and Shade

The work can't get done without them.

Having a serious illness or injury occur at work affects everyone at the job site. Workers suffering from heat exhaustion are at greater risk for accidents because they are less alert and can be confused.

1. Heat Illness

Any employee exposed to hot and humid conditions is at risk of heat illness, especially those doing heavy work tasks, or wearing certain types of PPE. The body normally cools itself by sweating. During hot weather, especially with high humidity, sweating isn't enough. Body temperature can rise to dangerous levels if precautions are not taken. Heat Illnesses and symptoms include:

- Headache, dizziness, or fainting
- Weakness and wet skin
- Irritability or confusion
- Thirst, nausea, or vomiting
- Lack of sweating
- Heat rash
- Heat cramps
- Heat exhaustion - you may pass out or collapse
- Heat stroke – which requires immediate medical attention and can result in damage to your body's major organs, like the brain, heart, liver, kidneys, and muscles, and even death

2. Prevention

GCI is responsible for providing workplace environments that are safe from excessive heat. In general it is considered hot when the temperature exceeds 85 degrees Fahrenheit. Shade is required to be present and to accommodate 25% of the workers at any one time. When it is necessary to work under hot conditions employees can help preventing Heat Illnesses by:

- Drink water every 15 minutes, even if you are not thirsty
- Rest in the shade to cool down.
- Wear a light colored hat and clothing
- Learn the symptoms and signs of heat illnesses
- Keep an eye on fellow workers

3. Higher Risk Issues

Help keep an eye on each other, especially someone who is:

- Not used to working in the heat or doing heavy labor
- New to the working conditions
- Not physically fit or is possibly overweight
- Suspected of having a little too much alcohol last night
- Wearing dark or heavy clothing
- Wearing heavy PPE
- Has already shown heat related symptoms earlier in the day

4. What to do

When you suspect you are someone else is developing heat illness symptoms you should:

- Notify the supervisor
- Move the person to a cooler place to rest in the shade. Don't leave them alone
- Induce drinking water, a little at a time
- Loosen or remove clothing and any PPE
- Help the person cool down by fanning, ice packs or wet clothing

5. Training

The company must keep records that demonstrate the employees have been trained in:

- Symptoms related to Heat Illness and Injury
- Who may be at higher risk
- What to do if they suspect they or someone else may be suffering from heat

The company must provide training for supervisors related to:

- The same training employees get
- The importance of acclimatization
- How to monitor weather conditions
- Emergency response procedures that are job site specific

Subcontractor Management

When it becomes necessary or advantageous the company may utilize subcontractors in performance of our work. Such likely events include:

- Concrete work
- Crane support services

1. Selection of Subcontractors

The selection of subcontractors will be done with consideration for the following factors;

- Personal relationships
- Experience in the trade
- Evidence or proof of prior performance at a specific job site

2. Qualifications

The qualification criteria for subcontractors will include:

- Review of the subcontractors Safety Program
- Review of OSHA 300 documents and the contractors EMR
- Review of the subcontractors Safety Training program and documents
- Review of the subcontractors safety matrix data, such as the TRIR, EMR, DART, and Fatality Rate
- Ability to meet the necessary insurance and contractual obligations of the job

3. Management on the job

All subcontractors are to be pro-actively managed by the Project Manager to ensure:

- Any subcontractor is included in all Safety Audits and Inspections
- All subcontractors and employees are to be included in Job Hazard Analysis and Safety Task Assessments
- All subcontractors and their employees are to be included in Safety Tailgate Meetings and any other safety meetings

4. Post Job Management

Following completion of the subcontractors work the Project Manager is responsible to conduct a post job safety performance review to document:

- Any accidents or incidents
- Their participation in safety meetings and audits
- Their performance relative to adherence to our JHA and Safety Program guidelines

Pandemic Preparedness

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide. A worldwide influenza pandemic could have a major effect on the global economy, including travel, trade tourism food, consumptions and eventually investment and financial markets. Planning for pandemic influenza by business and industry is essential to minimize a pandemic's impact.

Seasonal influenza refers to the periodic outbreaks of respiratory illness in the fall and winter. Pandemic influenza refers to a worldwide outbreak of influenza among people when a new strain of the virus emerges that has the ability to infect humans and to spread from person to person. During the early phases of an influenza pandemic, people might not have any natural immunity to the new strain.

Unlike natural disasters or terrorist events an influenza pandemic will be widespread, affecting multiple areas of the United States and the other countries at the same time. A pandemic will also be an extended event, with multiple waves of outbreaks in the same area. Our company will likely experience:

- Absenteeism - due to being sick or tending to other family members
- Changes in sales – customers may not be placing orders
- Interrupted supply from vendors – shipments may be delayed

1. Planning

To reduce the impact of a pandemic on our operations, employees, customers and the general public, it is important to begin continuity planning. The planning coordination for our company is being done by the Safety Director. It is his responsibility to monitor pandemic events, communicate and implement the necessary action to minimize the impact on our operations and to protect employee health and safety. The plan includes consideration of:

- Incorporating federal, state and local health department plans into ours
- Prepare and plan for operations with a reduced number of employees
- Working with our vendors to ensure we can still get materials when needed
- Identify possible exposure and risks to employees
- Minimize exposure of employees to the general public
- Cross training of employees to perform other functions

- Develop work and/or stay at home capabilities to allow certain personnel to work from home or take care of other family members
- Develop staggered work shift capabilities
- Make plans for downsizing services
- Provide items such as soap, tissue, masks, hand sanitizer and cleaning supplies along with our other PPE
- Work with our insurance companies, and state and local health agencies to provide information to employees and customers about medical care
- Provide internal and external communication of information with our employees, customers, and vendors
- Conduct additional training by using ‘drill exercises’ to create what if scenarios to test our preparedness

2. Exposure Control

Influenza is thought to be primarily spread through large droplets that directly contact the nose, mouth or eyes. The droplets are produced when infected people cough, sneeze or talk, sending the relatively large infectious droplets and very small sprays into the nearby air and into contact with other peoples. To a lesser degree human influenza is spread by touching objects contaminated with influenza viruses and then transferring the infected materials from the hands to the nose, mouth or eyes.

Some people are more at risk of exposure than others:

- Very High Risk - people like doctors and nurses
- High Risk - other people who work with doctors, nurses in other medical professions
- Medium Risk – people with a lot of exposure to other people, like teachers, or store clerks
- Lower Exposure – people with less contact to the general public

Techniques to minimize exposure:

- Washing your hands and face and surfaces you come in contact with, especially after you cough or sneeze or blow your nose
- Avoid touching your noses, mouth and eyes and shaking hands with others
- Practice Cough Etiquette by coughing into your arm, a tissue, or away from others
- Maintain a 6’ clearance from other people who may be infected
- Utilize trash containers for infected items
- Utilize additional PPE such as masks, face shields, respirators, and barriers
- Work in well ventilated areas
- Stay home when you are sick
- Get the vaccination shot if it is available
- Limit traveling to other infected areas and avoid crowded areas
- Keep work surfaces, like telephones, and computer equipment clean and disinfected
- Practice a healthy lifestyle by eating and sleeping well, exercising and stop smoking to help your body fight off an infectious disease or virus.

Hexavalent Chromium

Hexavalent Chromium (CrVI) is a toxic form of the element chromium. Hexavalent chromium is rarely found in nature and is generally man-made. It is used in pigments, metal finishing (electropolishing), wood preservatives, and fungicides. It can be mixed as an ingredient in various chemicals as a catalyst because it produces a hard coating. Some of the common names include:

- Chromium Trioxide
- Lead Chromate
- Sodium Dichromate
- Zinc Chromate

Hexavalent Chromium may also be present in fumes generated during the production or welding of chrome alloys. Chromium metal is often alloyed with other metals, or plated on metal and plastic substrates, to improve corrosion resistance and provide protective coatings. The steel industry is a major consumer of chromium metal in the production of stainless steel.

Since the turn of the century there has been a decline in the use of chromates in pigments for paints and coatings, printing inks, ceramic glass and construction materials.

1. Worker Exposure

Workplace exposure to hexavalent chromium may cause the following health effects:

- Lung cancer from fumes
- Asthma
- Irritation or damage to the nose, throat and lungs if inhaled
- Irritation or damage to the eyes and skin from contact

Workers can inhale airborne hexavalent chromium as a dust, fume or mist if working around:

- Producing chromate pigments, dyes and powders
- Near chrome electroplating
- Performing hot work and welding on stainless steel, chrome alloys and chromed coated metals
- Applying and removing chromate containing paints and coatings

Skin exposure can occur when handling solutions, coatings and cements containing hexavalent chromium, and may in some cases cause skin cancer.

2. Exposure Limits and Monitoring

Working in a chemical plant where mixing is creating a dust or mist would likely be an area where workers could exceed the exposure limits. Also welding in a stainless steel tank, where there is not adequate ventilation could result in exposure to high levels of the hexavalent chromium.

OSHA has revised the permissible exposure limit (PEL) to hexavalent chromium. The new rules establish the eight-hour time-weighted average exposure limit at 5 micrograms per cubic meter of air.

They have also established an Action Level as 2.5 micrograms per cubic meter of air, calculated as an 8 hour time weighted average (TWA). Workplace environments where the Action Level is exceeded must implement additional monitoring and workplace safety guidelines.

Monitoring for Hexavalent Chromium is accomplished with a sampling pump and filter. Typically a sampling pump is worn by an employee while he is at work in situations where hexavalent chrome may be present. Sampling can be as short as 15 minutes, but longer sampling times are better. If the sampling is done for one hour, the lab can figure out that an 8 hour shift would be 8 times more. That means it is an 8 hour time weighted average. At the end of the sampling period the filters are sent to the lab for analysis.

Area monitoring can also be done but is not typically as efficient in measuring the employee's exposure.

It is important to be cognizant of your surroundings, the materials you are working with, and the amount of ventilation available.

3. PPE

Respirators can be worn to minimize the exposure. The level of respiratory protection depends on the workplace conditions and contaminant levels. Respirator manufactures, such as 3M suggest the N95 filters for Hexavalent Chromium. The P100 filters are even better for mist or fume protection.

Filtering face-piece respirators, elastomeric half face-piece respirators, and full face-piece respirators may be used up to 10x PEL with appropriate filters when qualitatively fit tested.

Full face-piece respirators may be used up to 50x PEL when they are quantitatively fit tested and equipped with appropriate filters.

Loose fitting face pieces may be used up to 25x PEL

Tight fitting full-face piece, hoods and helmets with supplied air, and powered air purifying respirators may be used up to 1000x PEL.

Respirators and other PPE which may be required are provide to employees at no charge.

4. Regulated Areas

Workplace areas that are or could reasonably be expected to contain levels of hexavalent chromium above the PEL must be regulated to keep unprotected persons out, and away from accidental exposure. These regulated areas must be marked and delineated sufficient to separate them from unregulated areas. Use of barriers, signs, ropes, gates, textured floors, or other methods may be needed. Authorized persons are the ones are required by their job duties to be present in the area and might include maintenance personnel, engineers, or managers. All persons who enter the regulated area must use proper protective equipment, including respirators when appropriate.

5. Control Measures

When the PEL is exceeded, the company must use Engineering and Work Practice Controls to protect workers from hexavalent chromium hazards, to reduce and maintain the exposure to or below the PEL. These are the most effective controls. If the feasible Work Practice and Engineering Controls still do not reduce the exposure to or below the PEL, the employer must use them to get the exposure as low as possible and then use respiratory protection to supplement them. There is an exception to use only respirator protection allowed when the employer can demonstrate that a particular process or task does not result in worker exposures that exceed the PEL for 30 or more days during any 12 consecutive months. But employers may not rotate workers to different jobs as a means of achieving compliance.

Engineering Controls

Examples of Engineering Controls include:

- Substitution of materials that are less toxic
- Isolation of the materials
- Ventilation
- An exhaust system that captures the airborne hexavalent chromium near its source

Work Practice Controls

Examples of Work Practice Controls include:

- Adjusting the way a task is performed
- Positioning yourself upwind of the fumes

Respiratory Protection

The company must provide workers with respirators when the Engineering and Work Practice Controls do not reduce the exposure to or below the PEL. Respirators are required during:

- Work operations such as maintenance and repair without the Engineering or Work Practice Controls in place
- Emergencies
- Short term exposure without the Engineering or Work Practice Controls in place
- During the installation of Engineering or Work Practice Controls
- Operations that still expose workers to levels above the PEL even after all feasible Engineering and Work Practice Controls are in place.

6. Personal Protective Clothing and Equipment

When there is a danger of exposure to hexavalent chromium thru skin or eye contact the company must provide appropriate PPE, and ensure that it is used properly. The employer must select the clothing or equipment needed for each type of hazard, and might include gloves, aprons, coveralls, foot coverings, and goggles. Normal street clothing and uniforms or accessories are considered to be protective enough to meet the requirement.

When PPE is used precautions must be taken to prevent workers and others from exposure to the hexavalent chromium when handling the PPE after it is used, including:

- Removing the PPE from your body
- Removing the PPE from the work site
- Storage or transportation of the PPE
- Laundering and cleaning of the PPE
- Communication with all parties that handle, clean, or dispose of the PPE about the hazards

7. Housekeeping and Hygiene

Proper housekeeping requirements are important because they target sources of exposure the Engineering Controls are generally not designed to address. Surfaces must be kept clean, and spills or releases of materials must be cleaned up promptly. HEPA vacuums or other methods must be used that minimize exposure to skin and eye contact. Removal of hexavalent chromium from clothing and equipment by blowing, shaking, or methods that result in airborne contamination are prohibited.

Change rooms are required when workers must change into or out of PPE for decontamination.

Washing facilities must be provided, be readily accessible, and capable of removing the hexavalent chrome from the skin. The employer must ensure the facilities comply with OSHA standards and are used properly by the workers when needed. This includes making sure that workers who have skin contact wash their hands and faces at the end of the work shift and prior to eating, drinking, smoking, chewing tobacco or gum, applying cosmetics, or using the toilet.

Eating and drinking areas and surfaces must be maintained as free as possible from hexavalent chromium hazards. Employers must ensure dirty PPE is not allowed in the area.

8. Medical Surveillance

The purpose of medical surveillance is to determine if an individual can be exposed to hexavalent chrome at his or her workplace without experiencing adverse health effects; to identify related health effects when they do occur, so that appropriate intervention measures can be taken; and to determine a worker's fitness to use personal protective equipment such as respirators.

Employers must provide medical surveillance to workers who are:

- Exposed or may be exposed to hexavalent chromium at concentrations at or above the Action Level for 30 or more days per year.
- Experiencing signs and symptoms of adverse health effects associated with hexavalent chromium exposures, like blistering lesions, redness or itchiness of exposed skin, shortness of breath, or wheezing that worsens at work, nosebleeds, a whistling sound while breathing or
- Exposed in an emergency situation

9. Training

It is critically important workers recognized the hazards associated with exposure to hexavalent chromium and understand the measures they can take to protect themselves.

The company must utilize the Hazard Communication program to inform workers, subcontractors or other persons through the use of:

- Signs and labels
- Safety Data Sheets (MSDS)
- Informing workers when hexavalent chromium might be present in their work area
- Information about the hazards
- Measures they can take to protect themselves from these hazards
- Appropriate work practices, emergency procedures and protective equipment to be used

The worker must demonstrate knowledge of:

- The requirements of the hexavalent chromium standard
- The medical surveillance program, including recognition of the signs and symptoms of adverse health effects that may result from exposure.

10. Recordkeeping

Accurate records can demonstrate employer compliance with the standard and can assist in diagnosing and identifying workplace related illnesses. Employers are therefore required to maintain records of worker exposures including air monitoring data, historical monitoring data, objective data, and medical surveillance records.



INJURY & ILLNESS PREVENTION PROGRAM REQUIREMENTS

The following represents an overview of the Cal/OSHA requirements for an Injury & Illness Prevention Program as presented in this Manual, in compliance with:

**TITLE 8
INDUSTRIAL RELATIONS
GENERAL INDUSTRY SAFETY ORDERS**

SECTION 3203

**INJURY & ILLNESS
PREVENTION PROGRAM**

California Legislation requires all employers to establish and maintain an effective Injury & Illness Program. The program must be in writing and must include specific elements as codified in the General Industry Safety Order and California Labor Code. The requirements of an effective Injury & Illness Prevention Program are:

- Identification of the person(s) responsible for implementation
- A system for identifying and evaluating workplace hazards, including scheduled periodic inspections to identify unsafe conditions and unsafe work practices.
- Methods and procedures for correcting unsafe and unhealthy conditions and work practices in a timely manner.
- A training program designed to instruct employees in general safety and health work practices and to provide specific instruction with respect to hazards specific to each employee's job assignment.
- A system for effectively communicating with all employees regarding safety and health issues, including provisions designed to encourage employees to inform management of hazards at the worksite without fear of reprisal.
- A system for ensuring that employees fully comply with safe and healthful work practices, which may include disciplinary action to assure compliance.
- A system or procedure to investigate occupational injuries and or illnesses.
- Management will train all employees upon hiring, and throughout the duration of their employment, when new programs, processes or job descriptions change, when new substances, processes, procedures, or equipment is introduced which represents a new or previously recognized hazard, and whenever a new unrecognized hazard is identified.



INJURY & ILLNESS PREVENTION PROGRAM

I. POLICY STATEMENT

Gold Coast Ironworks has developed and implemented this written Injury & Illness Prevention Program. The work performed by Gold Coast Ironworks is varied, in both nature and location. Under all circumstances, it is the intent of Gold Coast Ironworks (GCI) to comply with the requirements of the California Code of Regulations, Title 8, and to provide a safe and healthful environment for our employees. Accordingly, GCI has implemented this Safety Program in compliance with Senate Bill 198, encoded as labor Code 6401.7 (SB198) and California Code of Regulations (CCR), Title 8, Sections 320-2. The safety of our employee's is our paramount concern, and we urge all employees and supervisors to familiarize themselves with the Safety Program set forth in this manual. Only by working together can we achieve our goal of making the work environment safe. Gold Coast Ironworks expects and requires all employees to follow the requirements set forth in this Injury & Illness Prevention Program.

A. BASIC OBJECTIVE

1. Provide a Safety Program consistent with good construction practices.
2. Reduce the number of injuries and illnesses to an absolute minimum.
3. Create an attitude of safety consciousness in general management, field supervision and all employees.
4. Provide for assignment of specific responsibilities for effective implementation and continuation of our Safety Program.
5. Provide a basis for continuing Safety education and training.

B. IMPLEMENTATION

In order to accomplish our Basic Objectives our Injury & Illness Prevention Program includes:

1. Pre-planning for injury and illness prevention in all of Gold Coast Ironworks' operations through analysis of tasks performed. Management experience and expertise are used to anticipate and mitigate or eliminate injury and illness producing situations. Additionally, as part of the pre-planning process, responsibilities of individuals must be identified before the job begins and an accident can occur.
2. Provide mechanical and physical safeguards.
3. Conducting a program of safety inspections to discover and correct any potential unsafe working conditions or practices.
4. Training all employees in good safety practices, as well as their individual responsibilities, incident investigation and reporting requirements.
5. Providing and enforcing the use of necessary personal protective equipment.
6. Developing and enforcing safety rules and requiring that all employees adhere to these rules as a condition of employment.
7. Communication with affected employees by means of Safety Meetings, re-training, postings and hand outs.
8. Investigating every Gold Coast Ironworks accident promptly to find its cause and take any corrective action needed to prevent recurrence.

II. PERSONS WITH RESPONSIBILITY AND AUTHORITY FOR IMPLEMENTATION

The person with overall technical responsibility and authority for implementing Gold Coast Ironworks' Injury & Illness Prevention Program is:

Richard McFerron, President.

Of course all employees, supervisors and managers are responsible for assisting and supporting in this collective effort. If anyone is aware of an unsafe or hazardous condition, they must bring it to the attention of a supervisor or other management person immediately. Only through a team effort of all employees can we maintain a safe work environment.

RESPONSIBILITIES

A. MANAGEMENT

The ultimate responsibility for implementing and administering the Safety Program for Gold Coast Ironworks employees rests with the Management Team. From the President to the supervisors their specific areas of responsibility are as follows:

1. Actively participate in the development, establishment and implementation of an effective Safety Program.
2. Assign appropriate persons to administer and enforce the program.
3. Periodic review and evaluation of accident reports.
4. Periodic field inspections to note on-going changing safety conditions.
5. Periodic participation in safety meetings.
6. Set policy for the hiring and training of new employees.
7. Give continuing strong support to all safety policies, procedures and incentives to ensure that employees work in a safe and healthful manner.

B. DIRECTOR OF SAFETY AND HEALTH

This person has been identified by the Management Team to have the authority and responsibility for:

1. Assisting the Management Team in establishing and maintaining an effective Injury & Illness Prevention Program by:
 - Developing techniques, ideas and topics for presentation of the Safety Program to all employees at all levels.
 - Acting as liaison between field management, supervisors, the work force, regulatory agencies, and insurance carrier(s).
 - Insuring that accidents are reported and investigated promptly and that corrective action is taken.
 - Providing office and field personnel with current information at monthly safety meetings.
2. Providing guidance to supervisors in enforcement of the Safety Program, including being available for consultation.
3. Informing Management of accidents, accident trends, specific problems, and the status of achieving targeted safety goals.

4. Review accident investigations to verify that the root causes of the accident are properly determined and any recommendations for corrective actions are implemented. In addition a file of all accidents will be maintained in order to analyze accident frequencies and trends.
5. Promoting a continuing interest in safety activities through incentive programs, posters, meetings suggestion boxes, handouts, etc.
6. Insuring that safety inspections are performed on a regular basis and that necessary corrective actions are taken in a timely manner.
7. Providing a program for disciplinary action for violations of safety work practices, safety policy and practices.
8. Assisting Gold Coast Ironworks' Designated Project Safety Person/Representative for all OSHA inspections. Representing Gold Coast Ironworks during any OSHA Citation Hearings. The designated Gold Coast Ironworks Project Superintendent shall accompany the Safety Director in any and all abatement proceedings, at OSHA's offices.

All employees carry the burden of implementing, maintaining and enforcing the Safety Program. The front line supervisor is the Key to the success of any safety program. They have the ability to impact the cause of accidents directly at their level of occurrence.

The Superintendents and Supervisors, working in conjunction with the Safety Director, can assist in establishing safe, productive, and efficient work practices. In addition, they have a moral and legal responsibility to insure employee compliance with established safety and work standards.

The Superintendents and Supervisors are in the best position to verify that their employees have received proper training. In most cases they will have a better understanding of their employees strengths and weaknesses. This enables them to place their employees in the task for which they are best suited.

When Superintendents and Supervisors manage their areas with the emphasis on safety, the potential for accidents is greatly reduced.

C. SUPERINTENDENTS AND SUPERVISORS

The responsibilities of the Superintendents and Supervisors include:

1. Accounting for the safety of the employees under their direct supervision.
2. Promoting safe and productive work methods.
3. Insuring that employees comply with established safety policies and procedures.

4. Providing proper safety instruction to employees prior to job assignments.
5. Monitoring of equipment and the work place to assure a safe and efficient environment.
6. Enforcing the use of required personal protective equipment.
7. Assisting in Investigation of Accidents to determine causes and to ensure that corrective action is taken in a timely manner.
8. Training and safety orientation of employees. Specifically related to:
 - Understanding requirements of the job, knowledge and physical.
 - Proper clothing requirements.
 - Proper personal protective equipment.
 - First Aid and doctor's treatment.
 - Encourage safety suggestions from employees. Ask them to report any unsafe practices, conditions, or equipment that may exist.
9. As part of Gold Coast Ironworks' continuing safety education program, they are to conduct Tailgate or Tool Box Safety Meetings. It is directed that each Superintendent or Supervisor hold a regular safety meeting and attend other subcontractor safety meetings, every week, or more often, if job site circumstances warrant.

Also they are to conduct monthly "all employee" safety meetings on site, of all signatory subcontractor employees, with the assistance of the Safety Director. The overall purpose of these meetings is to foster a positive team approach towards safety and health.

10. Inspect the work place each day to see that safe conditions and safe working practices and methods are being used.

D. WORKERS RESPONSIBILITIES

Although the law places primary responsibility for occupational safety and health on the employer, certain responsibilities have been designated by safety regulations to be the responsibility of the employees. These responsibilities include:

12. Obeying ALL occupational safety and health standards, rules, regulations, and orders issued according to the laws.
13. Not removing, displacing, damaging, destroying, tampering with, or carrying off safety devices, safeguards, notices, or warnings.
14. Not interfering with the use of safeguards by others.
15. Using any equipment (i.e. hardhats, safety belts with gull body harness, eye protection, breathing respirator, required clothing, hand or foot protection) method or process adopted for employee protection.

16. To observe and follow Gold Coast Ironworks' "Code of Safe Work Practices".
17. To set a good example for fellow workers.
18. To cooperate with Supervisors in preventing accidents.
19. To make safety suggestions to Supervisors.
20. To take good care of company equipment and report an unsafe or defective equipment to a Supervisor.
21. To help keep the project and work areas clean at all times.
22. To report all injuries, and/or known serious incidents, including close calls, to Supervisors at once.

E. SUBCONTRACTORS OF GOLD COAST IRONWORKS

When we have subcontractors on our projects we must secure and fully expect their complete cooperation in our Safety Program. All Gold Coast Ironworks subcontractors are responsible for:

1. Having an established written Injury & Illness Prevention Program and enforcing all rules and regulations.
2. Complying with all Cal/OSHA safety standards and regulations.
3. Observing all safety rules established by Gold Coast Ironworks.
4. Providing safety and personal protective equipment for their employees.
5. Taking immediate corrective action when notified of Safety Violations.
6. Furnishing to Gold Coast Ironworks project management upon demand, with copies of all reports of injury to their employees, including copies of any other safety related documentation Gold Coast Ironworks deems necessary.

III. SYSTEM FOR IDENTIFYING, EVALUATING AND PREVENTING SAFETY AND HEALTH HAZARDS

1. Gold Coast Ironworks' Safety Director reviews the General Industry Safety Orders, Construction Safety Orders, and all other Safety Orders that are applicable to our operation.
2. Gold Coast Ironworks reviews the industry and general information, including Material Safety Data Sheets for chemicals used, on potential occupational safety and health hazards.
3. Gold Coast Ironworks investigates and records all Gold Coast Ironworks employee accidents, injuries, illnesses, and unusual events that occur at its work locations.
4. Gold Coast Ironworks makes periodic and scheduled inspections of the general work areas and specific workstations, and records the results. These include:
 - Gold Coast Ironworks' Safety Director makes project visits to all projects where Gold Coast Ironworks has safety responsibility on a quarterly basis.
 - The Field Operations Manager makes regular monthly, or more often, site inspections of all Gold Coast Ironworks projects to conduct a safety audit.
 - Project Superintendents and Supervisors make regular weekly site inspections of all project work areas.
5. Gold Coast Ironworks evaluates information provided by employees on safety and health matters. To this end, the Company encourages employees to report concerns regarding unsafe and hazardous conditions and has provided a written reporting system for this purpose.

IV. SAFETY INSPECTIONS AND INVESTIGATIONS

Gold Coast Ironworks trains their employees and supervisors in their role and responsibilities associated with safety inspections and investigations. Additionally the Company provides the necessary tools and equipment to perform the inspections and investigations, including flags, tape measures, pens, paper, cameras, and any other tools needed to complete the task.

A. GENERAL INSPECTIONS

As set forth, Gold Coast Ironworks makes periodic and scheduled inspections of the general work areas and specific workstations. General inspections are the responsibility of the Project Superintendent or his designee. Reports of these inspections will be maintained on forms provided. No other employer is to be permitted to use any Gold Coast Ironworks safety inspections form.

B. PROJECT SUPERINTENDENT SAFETY INSPECTIONS

Project Superintendents shall insure that thorough documented inspections are conducted at a minimum of a weekly basis. All non-compliance with Gold Coast Ironworks' Code of Safe Work Practices is to be corrected in a timely manner based on the severity of the hazard as described:

- **Imminent Danger.** If there is an immediate danger of serious harm, the result of the inspection must be an immediate correction of the problem, or removing the piece of equipment or work from service. This must be done in an obvious manner, including physical tag-out and lockout with full knowledge of area employees, supervisors and managers.
- **Less Serious Hazards.** Although the standard is more flexible regarding less serious hazards, any problem that can be corrected immediately, should be. All other will be corrected as soon as possible.

Employees who violate the Code of Safe Practices shall be disciplined and a record of the warning notice or other disciplinary action taken shall be maintained on the project.

C. EMPLOYEE INSPECTION AND REPORTS

Employees are responsible for inspecting their work areas, machinery, and equipment for unsafe or hazardous conditions. Employees should immediately correct all unsafe conditions and report them to their supervisors immediately. If the Supervisor fails to act upon a safety complaint, the employee should bring the matter to the attention of the Safety Director or another Management Representative. Employees reporting an unsafe condition may also use any written means to communicate their concern to management. Employees may also make anonymous reports. No employee shall be disciplined or otherwise discriminated against for reporting or correcting an observed unsafe condition or practice.

D. SPECIAL INSPECTIONS

In the event of an accident, illness, or injury during work, or at a Gold Coast Ironworks project location, the Project Superintendent or Safety Director shall complete investigation of the accident and inspect the area or equipment involved. A report of investigation and/or inspection shall be made part of the documentation provided.

If new equipment or a new process is introduced into the work place, it shall be investigated and inspected and a report shall be conducted.

V. ACCIDENT REPORTING REQUIREMENT GUIDELINES

A written report is to be made promptly for any accident no matter how insignificant it may be at the time. When working at a job site away from our shop facility, any accident must also be immediately reported to the owner/client. If an accident occurs in the field, a copy of the “Supervisors Report of Injury” must be sent to the Safety Director and the owner/client within 24 hours. Also, if a serious accident occurs in the field, it should be reported immediately by telephone, to the office. The company is required to notify CalOSHA whenever there is a serious accident within 8 hours.

All serious accidents, whether an employee injury to a Gold Coast Ironworks employee, an employee injury to a subcontractor employee, the general public, or an accident which may or may not result in a liability, property damage or vehicle loss, must be reported immediately to the Safety Director.

All close call incidents, which could have been serious in nature, but do not result in a financial loss or damage, must also be reported to the Safety Director immediately. These serious incidents will be investigated thoroughly, to hopefully prevent any potential that the incident could result in a loss at a future date.

The project superintendent is responsible for immediately identifying and collecting evidence at the scene related to the type of equipment in use, the personnel involved, materials, environmental factors such as weather, lighting, noise, ventilation or other factors associated with the accident. Such evidence must be preserved by use of cameras, flags, witness statements, locking down the job site, or by other necessary means. The project superintendent is also responsible for preparation of a written report which can be reviewed by interested parties, detailing the events, the persons involved, the facts or evidence collected, summary of the accident, findings and recommendation. The report should include any photographs, drawings, witness statements, or other evidence collected.

A. TIME FRAME FOR FILING REPORTS

1. The Workers Compensation Reform Act of 1989 requires employers to furnish within 1 working day, the Employee’s Claim for Workers’ Compensation Benefits Form. The form must be given to the injured employee (or their dependent), by the Project Supervisor, or other management personnel. A complete copy of this form must be sent to the Safety Director’s office.
2. At no time is project management to require the injured employee to complete the “Employees Claim for Workers Compensation Benefits”.

3. The project is responsible for obtaining all necessary information to complete the Employee's Report of Occupational Injury or Illness Form. California law requires an employer to file this report within 5 days of every industrial injury. Stringent monetary fines are imposed for failure to comply.

After an accident or incident has been reported to the Safety Director, it will then be followed up with the Superintendent to further investigate the cause and to take any necessary corrective measures to prevent recurrence.

Witnesses are to be interviewed and statements collected by the Superintendent and/or Safety Director to collect evidence in an unbiased setting. If necessary a Third Party may be used to collect evidence or to conduct follow up interviews.

The Safety Director and or Superintendent will then use all the known facts surrounding the accident or incident as an example when discussing safety in training meetings, to implement changes in methods, and to prevent reoccurrence of similar events.

VI. SYSTEM FOR ENCOURAGING EMPLOYEES TO REPORT HAZARDS

Gold Coast Ironworks encourages and indeed requires all employees to inform any management personnel of any unsafe or hazardous conditions and or practices.

1. No employee shall be disciplined or discriminated against for reporting an unsafe condition or practice to management or for correcting an unsafe condition.
2. Employees should report all unsafe conditions to their Supervisor or other management personnel. If an employee observes an employee or supervisor violating Gold Coast Ironworks' Code of Safe Working Practices, they are encouraged to report that observation to upper management or the Safety Director.

VII. SYSTEM FOR ENSURING EMPLOYEES COMPLY WITH THE CODE OF SAFE WORK PRACTICES

A. CODE OF SAFE WORKING PRACTICES

Gold Coast Ironworks has developed a Code of Safe Work Practices, which sets forth general and specific rules and procedures for all employees. A copy of the Code of Safe Work Practices is given to each new employee and is posted on the Safety Bulletin Boards in the shop and at job sites.

B. SAFETY ORIENTATION

New Gold Coast Ironworks employees engaged in labor on our projects, are trained in the Code of Safe Work Practices and other safety procedures by their immediate supervisor and/or the Safety Director. Documentation of receipt of, and training in, the Code of Safe Work Practices is to be completed by each employee on the form provided.

C. RE-TRAINING

The Code of Safe Work Practices and other safety procedures are reviewed during periodic safety meetings for employees and supervisors. Documentation of safety meetings is to be completed by the supervisor or manager conducting the meeting. Re-training is accomplished through attendance of weekly Tailgate Safety Meetings held on site, which are designed to:

1. Provide an opportunity for employees to bring forward concerns and ideas about safety issues.
2. Act as an occupational safety and health training program having as its objective to instill safe and healthful work practices.
3. Provide specific instruction with respect to hazards specific to each employee's job assignment.
4. Warn employees that they must comply with safe and healthy work practices as instructed, or face disciplinary action.
5. Reassure employees that they are encouraged to inform their employer or his designate of hazards at the work site without fear of reprisal.
6. Instill a constant sense of safety consciousness between the supervisor and their employee group.

The Safety Director holds periodic special training for all supervisors in order to give them the framework for safety consciousness, as well as to acquaint them with new substances, processes, procedures or equipment that may be introduced into the work place or jobsite, especially when the employer becomes aware of, or receives notification of a new or previously unrecognized hazard. Supervisors will then be responsible for providing their employees with the same training.

D. DISCIPLINE

Gold Coast Ironworks requires that all employees and supervisors strictly adhere to the safety rules set forth in the Code of Safe Work Practices. If anyone, employee or manager violates a safety rule they will be disciplined in accordance with the severity of the infraction. This discipline imposed will be solely at the discretion of senior management (limited on by contractual or other legal restrictions), and may range from a verbal warning, to a disciplinary suspension without pay, up to and including discharge.

The Supervisor or Manager imposing the discipline will be responsible for documenting this action on appropriate forms provided. The Safety Director distributes copies.

When a violation occurs and a Warning Letter is issued, the Safety Director and Supervisor must meet with the employee to discuss the violation, any disciplinary action, and the corrective action required.

E. RECORD KEEPING

The Safety Director shall maintain appropriate records of steps taken to implement this Safety Program. These records shall be available for inspection at all times.

Training and re-training of employees shall be documented with the name of the instructor, type of training, date and the name of the employee(s).

Gold Coast Ironworks will follow the 5 important steps required by the Cal/OSHA record keeping system.

1. Obtain a report of every Gold Coast Ironworks injury and illness requiring medical treatment.
2. Record each injury or illness on Cal/OSHA Form #300, according to the instruction provided.
3. Project Management will prepare a supplementary record of occupational injuries and illnesses on recordable cases on OSHA Form No. 301 or Workers' Compensation/ Employer's First Report of Injury (Form 5020) providing the same information.
4. The Safety Director will prepare an annual summary of accidents on Cal/OSHA Form No. 300. The Safety Director will post this form on the employee bulletin board no later than February 1st of each year, and keep it posted until March 1st of that year.
5. All records shall be maintained for five years.

The Safety Director shall periodically review these safety records to evaluate the safety program and formulate improved safety procedures.



WARNING LETTER

PROJECT MANAGER: _____ DATE: _____

SUPERINTENDENT: _____ PROJECT: _____

This warning letter is to inform you that _____ was seen performing the following unsafe act: _____

Gold Coast Ironworks has a safety program with the goal of providing an accident free workplace. In order to meet this goal, it is essential that the people working on our jobsites perform their jobs in a safe and professional manner.

We require that workers observed performing an act that endangers themselves, other workers, or the public, or violates Gold Coast Ironworks' Safety Policy receive a warning in the form of this letter.

- 1. 1st violation will be a verbal warning with written notice placed in the employees personnel file.
2. 2nd violation will be a written warning and if within 2 months of the first warning letter, renders the employee ineligible to work for the remainder of that day and the following workday.
3. 3rd violation will render the employee ineligible to work, for Gold Coast Ironworks for two weeks.
4. 4th violation will result in termination of employment.

Immediate termination may result when the nature of the violation exposes the employee, other workers, or the public to a potentially serious risk of injury or property damage.

This letter is the _____ warning that this worker has received.

Signed: _____

EMPLOYEE CONSENT:

I _____ have received the above warning letter in its entirety. Further, I acknowledge that I have been trained in Gold Coast Ironworks' Safety Program, that I have personal responsibility to work at all times in a safe and professional manner in accordance with that policy and that failure to work within these policies may result in disciplinary action up to and including termination.

Signed: _____ Date: _____



PROJECT SAFETY MEETINGS

Employee Training is an on-going process. It begins when the employee is first hired and continues through out the employee's tenure with Gold Coast Ironworks.

An important part of Gold Coast Ironworks' training program is the weekly (at least every 10 working days as required by safety regulations) safety (tool box or tailgate) meetings. The Code of Safe Work Practices and other safety procedures are reviewed during these meetings for employees and supervisors. Documentation of safety meetings is to be completed by the supervisor or manager conducting the meeting, on forms provided.

PURPOSE OF THE MEETINGS

1. Provide an opportunity for employee's to bring forward concerns and ideas about safety issues.
2. Act as an occupational safety and health training program, having as its objective, to instill safe and healthful work practices.
3. Provide specific instruction with respect to hazards relating to each employee's job assignment.
4. To warn employees that they must comply with safe and healthful work practices as instructed, or face disciplinary action.
5. To reassure employees that they are encouraged to inform their employer or his/her designate of observed hazards that may arise at the work site, without fear of any reprisal.
6. To instill a constant sense of safety consciousness, to take personal responsibility for their own safety and life, while working on this site.

REQUIRED ATTENDANCE AT SAFETY MEETINGS

By law, every employee is required to attend a weekly safety meeting, documenting his or her attendance. Should one employer not have a weekly safety meeting, due to a minimal number of employees, those employees are encouraged to attend another employer's safety meeting, documenting his/her attendance as well. This includes all Gold Coast Ironworks project staff. Gold Coast Ironworks staff, attending weekly subcontractor meetings, where safety is discussed, is deemed appropriate for training purposes.

SAMPLE TOPICS

The following sample topics suggest the kinds of things you can discuss in a tailgate safety meeting.

- Scaffolding
- Electric Power Tools
- Compressed Gas Cylinders
- Falling Objects
- Flammable and Combustible Liquids
- Concrete Placement
- Ladder Safety
- Power Cords and Cables, Tripping Hazards
- Fall Protection
- Back Injuries and how they can be prevented

SAMPLE: Why are Guards left off machines.

Guards are placed on machines to prevent workers from contacting moving parts. They are required by CALOSHA regulation.

Many California workers are killed or injured each year because the guards are removed and not replaced.

Why are guards left off? Ask the group to give reasons. Some common reasons are:

- I didn't have time to replace the guard
- I wanted to make sure the machine was working OK. Then I just never got around to replacing the guard.
- I put on a new drive and the old guard didn't fit.
- I couldn't work with the guard on. It slowed me down too much.
- Listen! I've run these machines for years without guards and I've never been hurt.

Each of these excuses has been given countless time. **After the accident** has happened and someone has been killed or injured, the guard is replaced and strict rules are enforced to make sure that the machine is never operated again without the guard. Of course, it's too late for the victim. The purpose of the meeting on this topic is to ensure that the rules are enforced before an accident can happen.

SAMPLE: Defective Hand Tools

- Use examples of defective hand tools found on the job: mushroom heads, split handles, loose handles, full or broken teeth, spread wrenches, etc. Point out these and other defects.
- How many workers in the meeting have had an accident or know of an accident caused by defective tools.
- Set up a program for reporting, removing from use, repairing, or replacing defective hand tools at your operation.

HOW TO RUN A GOOD MEETING

1. Hold the meeting on the job at a location where everyone can see and hear.
2. Hold the meeting at the beginning of the shift, or right after lunch.
3. Choose the topic carefully. Topics should be about health and safety problems that really exist on your job. Research the problem before the meeting. There is plenty of easy to read material around on almost every hazard you can think of. If you need assistance on a specific topic contact the Safety Director. For machinery, consult the manufacturer's operations manual, for the handling of a toxic substance, consult the Material Safety Data Sheet.
4. Don't choose too broad a topic. You can't cover "Hand Tools Safety" in a 15 minute meeting. Instead, try a topic like "Defective Hand Tools".
5. Encourage as much worker participation as possible, but keep your meeting short.

Whenever tailgate safety meetings have been properly conducted, they have proved their worth by alerting workers to work place hazards and by preventing accidents, illness, and on the job deaths.

TAILGATE SAFETY MEETING

DATE: _____

CONDUCTED BY: _____

TOPIC: _____

ATTENDEES:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

SAFETY TRAINING RECORD

SAFETY TOPIC: _____

ATTENDEES:

DATE:

PRINT NAME

SIGNATURE



VIII. INJURY & ILLNESS PREVENTION PROGRAM CONCLUSION

This Injury & Illness Prevention Program is hereby adopted by Gold Coast Ironworks. We urge all employee's supervisors and managers to follow this program and to work together to make our work place as safe as possible.

Rich McFerron

Richard McFerron – President



EARLY RETURN-TO-WORK PROGRAM

I. POLICY STATEMENT

It is the policy of Gold Coast Ironworks to maintain and support an Early Return-to-Work Program. This program is designed to minimize the disruption and uncertainty that can accompany an on-the-job injury for both the company and our employees.

It is our goal to maintain a safe workplace for our employees. When an injury does occur, our Early Return-to-Work Program helps make the process of returning to work as smooth and efficient as possible. This process includes the employee, doctor and supervisor to ensure your health and recovery is always given top priority.

When an on-the-job injury occurs, you can expect prompt medical attention. If the injury results in a prolonged absence from work, you may be a candidate for our Early Return-to-Work Program. This program offers a medically approved light-duty transitional assignment in anticipation of a return to full duty, or vocational rehabilitation, if necessary.

The success of this program is the responsibility of everyone in the company from top management to every employee. Only by working together can we provide a safe and secure work environment.

Everyone should be alert for potential accidents and strive to eliminate them. If you are aware of an unsafe act or condition, it should be reported immediately to your supervisor to be addressed. This action may prevent an injury from occurring. If an injury does occur, the injury must be reported immediately to a supervisor.

II. PURPOSE

The purpose of the Early Return-to-Work Program is to temporarily modify an injured employee's existing duty position and/or work schedule, or to modify a duty position to

accommodate the temporary physical restrictions identified by the treating physician or other medical provider.

III. ROLES AND RESPONSIBILITIES

A. EMPLOYER RESPONSIBILITIES

1. Provide a safe work environment;
2. Develop written Return-To-Work policies and procedures;
3. Educate all employees about the Return-To-Work program;
4. Train employees on proper reporting of incidents and incident investigation;
5. Promptly report job related injuries to the insurance carrier;
6. Provide information to employees about the workers' compensation system and benefits;
7. Regularly communicate with the injured worker during the time away from work and monitor progress upon the injured worker's return;
8. Make every effort to develop and provide meaningful Return-To-Work opportunities;
9. Communicate with the treating doctor and insurance carrier to encourage recovery and return to work;
10. Develop functional job descriptions and identify physical requirements that clearly identify physical activities required to do the work.

B. EMPLOYEE RESPONSIBILITIES

1. Know and follow safety policies and procedures;
2. Report any injury immediately;
3. If medical attention is necessary, inform your treating doctor that return to work opportunities are available to accommodate your physical abilities;
4. Provide your doctor with a Return-to-Work Information Packet as provided by your supervisor;
5. Notify your supervisor immediately if your work status changes;
6. When your doctor releases you to return to work, report on the next regular shift; and
7. Follow your doctor's orders and restrictions at home and at work.

C. INSURANCE CARRIER RESPONSIBILITIES

1. Ensure proper administration of all workers' compensation claims;
2. Maintain communication with the injured employee, health care providers, and the employer;
3. Encourage and actively assist injured workers in the successful return to work;
4. Carriers are required to furnish, at the employers' request, return to work services beginning on the 8th day of lost time. (Requirement enacted as part of HB 2600, 2001 Legislature.)

D. HEALTH CARE PROVIDER RESPONSIBILITIES

1. Provide appropriate, effective medical treatment that facilitates recovery and expedites return to productive work; and
2. Complete and file the TWCC-73, Work Status Report as required, clearly indicating the employee's work status and physical abilities;
3. Set reasonable return to work and recovery goals from the beginning of treatment;
4. Work with employer to encourage appropriate return to work opportunities.

IV. PROCEDURE

- A. As soon as possible after an injury* occurs the worker should report the injury to his/her safety director. This should be accomplished within 24-hours. Any necessary paperwork will be provided and, if necessary, assistance given for completing it. All appropriate information will be submitted to the insurance carrier, including all return-to-work information.
- B. The worker will be provided with a copy of "Worker Responsibilities When Injured on the Job" when an injury is reported.
- C. While off work with an injury contact with the Safety Director should be maintained as follows:
 1. The worker is to report his/her Return-To-Work status after each doctor's appointment. Unless otherwise arranged between the worker and safety director, this shall be done in person by providing a copy of a work release, a physical capacity form or a job analysis signed by the attending physician.
 2. The worker should contact the Safety Director by telephone or in person each day. This contact is intended to keep the worker

informed of pertinent company information and the company informed of the worker's current condition/needs for return-to-work.

- D.** If the worker leaves work to see a physician he/she is to relay information to the physician regarding the availability of transitional work. The communication of this information may be done in writing or verbally.

In any event, when the attending physician is known, information regarding available transitional, either in the form of a specific job analysis/task list or a request for physical capacity information, will be provided. A job analysis for the worker's regular job also will be provided if one is available.

- E.** The worker will be assigned to a job or task(s) according to the restrictions/approval of the attending physician and the business needs of Gold Coast Ironworks at the time of the release. This assignment may be in a different department or on a different shift than worked at the time of injury. It may be a portion of the regular job if the restrictions require a reduction in hours or the elimination /reassignment of work activity/activities essential to the performance of the job.

- F.** Transitional jobs are temporary in nature and are intended to ease the employee back to regular duty. The transitional work will be monitored by the Safety Director on an on-going basis. Should the attending physician change the worker's restrictions, the transitional assignment may be adjusted accordingly. In any case, workers will not be expected to exceed the restrictions given.

- G.** If the transitional assignment lasts for more than 14 days, it will be reviewed at that time and at 14-day intervals thereafter. It may be extended or ended at the discretion of the Safety Director.

- H.** Any problems with the transitional assignment will be discussed with the worker and any changes needed will be defined.

- I.** When the attending physician gives a release to transitional work, a job offer letter may be given in person or mailed CERTIFIED mail, with a response requested. It shall include a description of the job duties, the start date and hours, the duration of the job (if known), where and to whom to report, the wage to be paid and a copy of the work release and/or signed job analysis.

- J.** The transitional job will end when whichever of the following occurs first:

1. The worker is released for full duty regular employment;
2. The worker returns to a job that is not part of the Return-to-Work Program;

3. The transitional job is no longer available or has not been extended under the terms of this program; or

4. The workers' compensation claim is closed.

K. Should the worker be given permanent restrictions by his/her attending physician, each case will be reviewed individually outside this Return-to-Work Program and in accordance with all state and federal guidelines.