Health & Safety Policy

Moro Corporation & Subsidiaries

Scope:

Field and Shop Activities for all Moro Corp. Subsidiaries

Moro.Corp. Address:

994 Old Eagle School

Suite 1000

Wayne, PA 19087

J&J Sheet Metal Works	***Appolo Heating Inc.***	***J.M.Ahle Co.***
J&J Heating & Cooling	***Rado Enterprises***	***Whaling City Iron***
Hudson Valley Heating	***Titchner Iron Works***	***Rondout Electric***

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Moro Corp. Contacts

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1.0 Introduction

Moro Corporation ("Moro Corp.") has created this corporate Health and Safety Policy to be a guide for the creation and implementation of specific Health and Safety Plans for each Moro Corp. Subsidiary. Each Moro Corp. Subsidiary shall have in place a specific Health and Safety Plan which outlines company and trade specific safety practices which shall be followed at all times by all employees of that company while performing job related tasks. In addition Site Specific Safety Plans shall be established, as required for specific field work by controlling employers, in compliance with the guidelines provided by this corporate Health and Safety Policy.

Each Moro Corp. Subsidiary Health and Safety Plan shall, at a minimum meet the guidelines outlined in this policy as well as meet or exceed the OSHA standards in both 29CFR1929 and 29CFR1910. All field activities shall be in compliance with the OSHA Construction Regulations found in 29CFR1929. All shop activities shall be in compliance with the OSHA General Industry Regulations found in 29CFR1910.

This corporate Health and Safety Policy may be utilized in the event that a Moro Corp. Subsidiary Health and Safety Plan does not cover a specific task or is non-existent. This shall be on a temporary basis until the Moro Corp. Subsidiary Health and Safety Plan is amended to include the specific task or is created.

Each Moro Corp. Subsidiary Health and Safety Plan shall be reviewed at least annually, by each respective Moro Corp. Subsidiary and the findings of this review shall be forwarded to the Moro Corp. Safety Director. This review is to confirm that the plan established in the respective Health and Safety Plan is accurate and suited to the specific types of activities performed by the Moro Corp. Subsidiary.

This corporate Health and Safety Policy shall be reviewed at least annually by the Moro Corp. Safety Director and, if necessary shall be updated to suit the changing needs of all Moro Corp. Subsidiaries as well as any changes in state or federal regulations. Any changes made to this corporate Health and Safety Policy shall be disseminated to all Moro Corp. Subsidiary employees by the Moro Corp. Safety Director and each respective Moro Corp. Subsidiary President or Safety Coordinator.

Each Moro Corp. Subsidiary shall appoint a Safety Coordinator who will correspond directly with the Moro Corp. Safety Director on all safety related areas as they pertain to the respective Moro Corp. Subsidiary.

2.0 Moro Corporation's Commitment to Safety

The personal safety and health of each employee of our organization is of primary importance. It is the policy of Moro Corporation that accident prevention shall be considered of primary importance in all phases of operation and administration. It is the intention of Moro Corporation management to provide safe and healthy working conditions and to establish and insist upon safe practices at all times by all employees. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary.

It is our policy that every effort will be used to protect our employees from accidents, injuries and/or occupational disease while on the job. We expect all employees to accept the concern and the responsibility for accident prevention.

- **Communication and Training are Key**

Communication and good sense among employees and managers in the daily practice of our safety initiatives will help ensure safe-working conditions. Remember, when an employee has an accident everyone is hurt. Safety is everyone's primary concern. We believe that the continual education, training and awareness of our employees in safe work practices are a key aspect of being a good employer.

Our businesses provide safety equipment and information on safe work practices to all employees. We expect our employees to use both that safety equipment and that knowledge of risk and risk prevention in all their work. We provide continuous training, whether in the shop or on the jobsite.

- **An Attitude of Safety Awareness**

The prevention of accidents and injury requires a respectful attitude toward the impact injury and illness has on you, your co-workers and your employer. Moro Corporation requires operating company managers and supervisors, and employees to be mindful of this and to work together for each other's safety and health. Perhaps most importantly it requires a diligent awareness of potential work hazards. It requires a willingness to prevent the risk of injury and at times to sacrifice productivity in favor of working safely to avoid the harm of work hazards. Finally, it demands an attitude of mutual respect and cooperation between employees, co-workers and managers to work together to keep each other safe and injury free.

- **Safety Coordinator**

Moro Corporation supports our operating businesses in establishing and maintaining safe work environments and striving to be an injury free work place. Each of our operating locations has a designated Safety Coordinator.

Each Safety Coordinator works to implement and enhance the safety programs at Moro Corp. subsidiary locations and jobsites and to provide that all work activities are accomplished with the most current occupational safety and health practices. Through safety meetings, job-site inspections, and employee evaluation and training, this person seeks to keep the working environments for all employees' safe and risk free.

3.0 Moro Corp. Drug & Alcohol Policy

(Based upon US Dept. of Transportation Guidelines)

In 1988, Congress enacted the Drug Free Workplace Act to require federal contractors to establish and maintain a work environment that is free from the effects of drug use and abuse. Federal Regulations 49 CFR Part 40 (§382) present the general terms of this program and its guidelines. We agree with that goal and believe that Moro Corporation has responsibility to its employees and those who use or come in contact with its products/services, to ensure a safe and productive work environment. To satisfy these responsibilities, it is the policy of Moro Corporation and a condition of employment that an employee be present and able to perform their job free from the effects of alcohol, narcotics, depressants, stimulants, hallucinogens and cannabis or any other controlled substances, which can impair job performance. Assurance of strict confidentiality and respect for employee privacy and dignity will be adhered to.

Our Commitment

Moro Corporation is committed to a "Zero Tolerance" Drug & Alcohol Policy. However, we recognize that drug and alcohol abuse may be a sign of chemical dependency and that substance abuse can be successfully treated with professional help. Moro Corporation provides an Employee Assistance Program (EAP) through *SapList.Com* for employees to deal with substance abuse and other personal problems that can affect work performance. Our commitment is to help employees remain productive members of our team. In certain circumstances, the company may insist upon a mandatory referral to our EAP as a condition of continued employment No employee will be disciplined or discriminated against simply for seeking help.

Employee Responsibility

The employee is responsible for following all of our work and safety rules, and for observing the standards of behavior and employer, co-workers, and customers have the right to expect from you. In addition, if you believe you may have a problem with drugs or alcohol, you are responsible for seeking assistance, whether from or through the company or any other resource, before a drug or alcohol problem adversely affects your work performance or results in a violation of this policy. The time to seek help is BEFORE you are in "trouble", NOT AFTER. If a professional assessment is made that you have a problem with Drugs or Alcohol, your continued employment may be conditioned upon:

- Entering into and completing a treatment program approved by the company.
- Signing and living up to a last chance performance agreement.
- Undergoing a Follow-up Testing Program at companies' discretion.

Scope of Our Policy

This Policy and each of its rules apply whenever a Moro Corp. or Moro Corp. subsidiary employee is on or in company property, surrounding grounds and parking lots, leased or rented space. This includes company time (including breaks and meal periods), in any vehicle used on company business, and in any circumstance (such as on customer premises or at business/sales functions) we believe may adversely affect our operations, safety, reputation or the administration of this policy.

Drug and Alcohol Rules

The following rules are extremely important and an employee who violates any one of them will be subject to disciplinary action, up to and including termination.

1. **Alcohol** - An employee may not possess, use, transfer, offer, or be under the influence of alcohol while at work or on company business. This rule prohibits using any alcohol prior to reporting to work, during breaks or meal periods, or in conjunction with any company activity, except social or business events where a Corporate Officer has authorized the moderate consumption of alcoholic beverages.

   An employee will be removed from a Safety Sensitive Position for at least 24 hours if that employee is found to have a Blood Alcohol level of more than .02 and less than .04. A Breath Test over .04 is a DOT Violation, and a referral will be required to a Substance Abuse Professional before being released back to a safety sensitive position.
2. **Drugs** - An employee may not possess, use, transfer, offer, share, attempt to sell or obtain, manufacture, or be under the influence of any drug or similar substance and also may not have any drugs of similar substances present in the body. Thus, an employee who tests positive for any illegal-drug violates this rule. This rule also pertains to prescription drugs being taken without a valid doctor's authorization/prescription.
3. **Drug Paraphernalia and Alcohol Containers -** An Employee may not possess any drug paraphernalia or alcohol containers.
4. **Prescriptions & Over–The-Counter Medications –** All employees are responsible for checking the potential effects of prescribed drugs and over-the-counter medications with your doctor or pharmacist before starting work, and to immediately let your supervisor know when such use makes it unsafe for you to report to work or do your job. Employee must keep a copy of the prescription with them at all times.
5. **Adulterants -** Any substance that is used for the purpose of manipulating a drug test by adding to the specimen or ingesting.

Pre-Employment Testing

All employees are required to pass a DOT pre-employment urine drug test before being hired.

Random Testing Program

Employees may be selected at random for drug and/or alcohol testing as determined by Moro Corp.

Post-Accident Testing

Post-accident drug and/or alcohol testing will be at supervisor or company request, or as defined in 49 CFR Part 40. *See Chart:*

Type of accident involved	Citation issued to the CMV driver? (Class A or B)	Test Must be Performed
i. Human Fatality	**Yes** **No**	**Yes** **Yes**
ii. Bodily injury with immediate medical treatment away from scene.	**Yes** **No**	**Yes** **No**
iii. Disabling damage to any motor vehicle requiring tow away.	**Yes** **No**	**Yes** **No**

Reasonable Suspicion Testing (Reasonable Cause)

At least one supervisor will be trained in accordance to 49 CFR 382.603 of the Federal Register to make these observations of work performance, behavior, and physical indicators.

- Observable symptoms or unusual behavior.
- The odor or smell of alcohol or drugs on the employee's breath or clothes or in an area (e.g.; vehicle, office, work area, restroom) immediately controlled or occupied by the employee.
- Alcohol, alcohol containers, illegal drugs or drug paraphernalia in the employee's possession or in an area controlled or occupied by the employee (e.g.; vehicle, office, desk, restroom.).
- Unexplained or significant deterioration in job performance.
- Significant, unexplained changes in behavior (e.g., abusive behavior, repeated disregard of safety rules or procedures, insubordination, etc.).
- Evidence that the employee may have tampered with a previous drug test.
- Criminal citations, arrests or convictions involving drugs and alcohol.
- Unexplained, excessive absenteeism or tardiness.
- Employee admissions regarding drug or alcohol use.
- Involvement in any work-related accident or near misses.
- Any type of paraphernalia discovered on your person or company property.

Fit for Duty

Moro Corp. may require a fit for duty exam by a certified Medical Practitioner; this exam can be administered along with a Drug and Alcohol Screen to determine if employee is fit for duty. This could be requested in addition to the DOT Medical Card Certificate.

Duty to Cooperate

An employee who fails to cooperate in the administration of this policy generally will be terminated and is in violation of §49 CFR Part 40. This includes such things as:

- Refusing to consent to testing, to submit a sample, or to sign required forms.
- Refusing to cooperate in any way (for example, refusing to courteously and candidly cooperate in any interview or investigation, including any form of truthfulness, misrepresentation or misleading statements or omissions.);
- Any form of dishonesty in the investigation or testing process.
- Refusing to test again at a time of the Company's choosing whenever any test results in a finding of a dilute sample or reasonable suspicion.
- Failure to accept the referral, to enter into and complete an approved treatment program.

EMPLOYEE ACKNOWLEDGEMENT AND CONSENT TO TESTING

1. I, _____, voluntarily agree to provide a sample of my Urine for Testing and to submit to any related physical or other examination when I have been requested to do so.
2. I authorize the release of the Test Result (and any other relevant medical information) to the Company for its use evaluation and suitability for continued employment. I also release the Company from all liability arising out of or connected with the testing.
3. I understand that if I refuse to submit to the testing, to give a requested sample(s), to authorize release of the results to the company, and/or if the test results indicate that I do not meet the Company's standards, I may be terminated.
4. I understand that any attempt to switch, adulterate or in any way tamper with the requested sample(s) or to other wise manipulate the testing process will result in termination of employment. I also understand that if my test results are dilute on the second testing, I may be terminated.

My signature below certifies that I have read this entire policy and each of the above statements.

My signature below certifies that I have received a copy of the Moro Corp. Drug & Alcohol Policy.

Signature & Date _____

4.0 FLEET SAFETY POLICY

4.1 Purpose

4.1.1 **Moro Corporation** recognizes that our employees are our most valuable asset and the most important contributors to our continued growth and success. Our Company is firmly committed to the safety of our employees. Moro Corporation will do everything possible to prevent workplace accidents and is committed to providing a safe working environment for all employees.

Motor vehicle accidents are the leading cause of work-related fatalities. The environment in which these accidents occur involves numerous complex factors, many uncontrollable. The purpose of Moro Corporation's Fleet Safety program is to provide the means to reduce such factors and to eliminate unnecessary injuries and fatal circumstances. We value our employees not only as employees but also as human beings crucial to the success of their families, the local community and Moro Corporation.

To further this goal, our Company has developed a Fleet Safety Policy effective May 1, 2012. The Program will consist of six components: Recruitment/Driver Selection, Job Requirements, Training, Vehicle Inspection & Preventive Maintenance, Accident Investigation and Company Vehicles for Personal Use. This policy applies to all candidates for employment as well as all current employees.

4.2 Scope

4.2.1 This policy is applicable to all Moro Corp. subsidiaries.

4.3 General Requirements

4.3.1 **Pre-Hire Requirements**

Moro Corporation focuses its initial efforts on driver selection through a variety of resources, beginning with the job application. All prospective employees are required to complete a written application that will include:

- List of past driving experience, employers, and types of vehicles driven.
- Notification to Moro Corporation of any motor vehicle violations for at least the last 3 years.
- List of references.

Applicants also are required to pass a pre-hire drug test once a conditional offer of employment has been made and accepted. Anything less than a clean report is not acceptable by Moro Corporation**.**

Applicants are required to sign a consent form and his/her Motor Vehicle Record (MVR) will be pulled before he/she is hired. MVR's will be kept in the applicant's/employee's file. Each applicant's driving record is required to meet an acceptable standard to qualify and be assigned driving privileges. Each applicant's driving record is required to meet the following criteria:

- Any applicant with a **Type A** driving violation in the last five-years is unacceptable.
- Any applicant with three or more **Type B** violations or two or more at-fault accidents in a three-year period are unacceptable.
- Any applicant with two moving **Type B** driving violations or one driving accident in a three-year period will be put on warning from a company monitoring standpoint. MVR's are required to be ordered more frequently on these applicants, if hired.

MVRs will be requested upon completion of a satisfactory interview and periodically thereafter at a minimum of at least once per year. An excessive number of violations in the past three years will be grounds for an unsatisfactory MVR prohibiting hiring of a prospective employee or possible termination and/or disciplinary actions of an active employee.

Driver selection will be made upon completion of a formal interview, background check, reference verification, review of the individual's motor vehicle record (MVR) and a negative drug screen. Authorizations will be obtained to contact prior employers and personal references.

Type A Violations

- Driving under the influence of alcohol or drugs
- Refusing to take a substance test
- Driving with open container (alcohol)
- Hit and run
- Fleeing or evading police or roadblock
- Racing/speed contest
- Driving on suspended or revoked license
- Vehicular assault
- Reckless Driving

Type B Violations

- Moving violations that include:
  - Speeding
  - Improper lane change
  - Failure to yield
  - Failure to obey traffic signal or sign
  - Careless Driving
- Accidents
- Having a license suspended in past related to moving violations

A new driver may be required to complete a road test with a company experienced driver. The experienced driver will evaluate the new driver's performance and document the road test. These tests will be kept in the new driver's employee file.

Active employees will participate in periodic road tests for training purposes. Tests will be conducted by management and will cover a variety of driving criteria. The road test will require new drivers and prospective and active

employees to safely and competently complete tasks associated in the following categories:

- Pre-trip Inspection
- General Vehicle Operation
- Fifth wheel connection
- Backing and parking
- Turning
- Passing
- Railroad crossing

Results of the road test will be shared with prospective and active employees at management's discretion

4.3.2 **Post-Hire / Job Requirements**

All positions requiring regular driving require a written job description to include main duties, functions and the necessary physical requirements required to perform all associated tasks.

- All prospective employees will be required to undergo a physical evaluation.
- If required, candidates must pass a Dept. of Transportation physical evaluation.
- Results of the physical evaluation will be compared to the necessary physical requirements.
- In some cases, Commercial Drivers Licenses are required per regulatory agencies.

During an employee's introductory/ trial period with Moro Corporation the new employee will ride with a current company experienced driver, who will observe acceptable driving behaviors, routes, and loading/unloading procedures of the new employee (the "new driver").

4.3.3 **Motor Vehicle Record Checks**

Annual record evaluations will be performed on every driver employed by Moro Corporation including the following:

- Company truck drivers
- Company car drivers
- Salespeople or anyone driving their personal car for company business
- Spouses with access to company vehicles

Anyone who may be required to drive a company car or personal car for company business, MVR's will be reviewed in accordance with the aforementioned criteria.

4.3.4 **Training**

New-hire and periodic training is required. All employees are expected and required to actively participate identifying training needs as well as program development. Programs will consist of classroom and on-the-road modules. Training will focus on but will not be limited to defensive driving techniques and behavior modification.

Moro Corporation will monitor driver habits to identify potentially unsafe driving habits that require additional training and/or disciplinary actions. We will use ride-along training combined with statistical data focusing on accident types and frequency to identify areas of improvement.

Two accidents or moving violations in a one calendar year period will require review with a supervisor to determine what, if any, disciplinary action is needed and to identify possible training opportunities. Employment may be jeopardized if accident frequency is above the required norm with no concentrated efforts being made for improvement.

4.3.5 Transportation Safety Rules and Vehicle Operation Guidelines

Moro Corporation requires all drivers comply with state and national transportation safety rules. Employees are expected to treat company vehicles with an appropriate level of respect and care, demonstrating an attitude of loyalty and pride to the company. The following are basic vehicle operation principles to which employees are required to adhere.

- Use of seat belts is mandatory.
- Absolutely **NO** alcohol or controlled substances allowed in vehicle and while driving
- Drive defensively. Always anticipate what other drivers on the road might do wrong and plan your mode of escape. Never move through traffic aggressively.
- Always look for pedestrians.
- Never attempt to exercise the right-of-way.
- Emergency cell phone use only.
- Respect speed limits and traffic signs. Follow all traffic signals.
- Always lock the vehicle and apply the parking brake when getting out, even if it remains in sight.
- During long trips, take breaks every four hours. Never drive more than 10 hours during a 24-hour period.
- Avoid driving past midnight.
- Avoid driving in dangerous conditions, including drowsiness and inclement weather.
- Remove any trash or personal items before returning the vehicle.

4.3.6 Traffic Violations

Moro Corporation is not responsible for any traffic violations or parking tickets acquired by violation of city ordinance, state or federal laws regarding your driving habits and operation of your motor vehicle. Any ticket issued is the employee's responsibility, even if the ticket is issued while conducting business for Moro Corporation.

4.3.7 Refueling Guidelines:

Vehicles should be refueled when the meter reads ¼ full. Retain receipts proving the purchase of gasoline and record mileage with each gasoline purchase. For your safety when operating a vehicle, follow these guidelines:

- Turn off the vehicle's engine while refueling.
- Never smoke, light matches or use lighters while refueling.

- Do not get into the vehicle during refueling, as this presents a flash fire hazard.
- Do not overfill or top off the vehicle's fuel tank. The fuel dispenser shuts off automatically when the tank is full.
- Never force the hold-open latch on the gasoline pump with any means other than the latch provided.

4.3.8 **Preventive Maintenance**

To maintain the safety and integrity of the vehicle, Moro Corporation will provide the necessary resources to ensure all vehicles are operating properly. All routine motor vehicle maintenance will be done according to the manufacturer's specifications. Critical components that must always be controlled, maintained and promptly repaired are: brakes, tires, suspension, steering, lights, mirrors, windows and windshield wipers.

4.3.9 **Pre-Trip Inspections**

Employees are required to conduct pre-trip vehicle inspections. Any unsatisfactory result requires a Fleet Hazard Identification form to be completed and forwarded to an employee's immediate supervisor. Thereafter, the identification form will be forwarded to the maintenance department to confirm the equipment malfunction, complete repairs, and sign off on the completed identification form.

4.3.10 **Placing a Vehicle Out of Service**

The Fleet Administrator must conduct thorough vehicle inspection any time an employee completes a Fleet Hazard Identification Form. The Fleet Administrator will then forward the findings of the inspection to the Moro Corp. Safety Coordinator.

4.3.11 **Vehicle Inventory**

Each Moro Corp. Subsidiary will appoint a Fleet Administrator who will be responsible for maintaining a database of each vehicle's make, model, department, VIN number and license plate number. The Fleet Administrator will also manage and update a log for each vehicle including its location at any given time and the person who is driving it. The administrator will also take inventory of any minor defects or needed repairs, and schedule needed maintenance work as appropriate.

4.3.12 **Maintenance Inspections**

All drivers of regulated vehicles (greater than 10,000 lbs. (GVW) are required to complete a documented pre/post trip maintenance inspection that will be filed. All drivers of personal passenger vehicles or non-regulated vehicles are required to submit their vehicles for a maintenance inspection at least quarterly. These maintenance inspections will be filed.

4.3.13 **Accident Investigation Procedures**

Moro Corporation realizes some accidents are unpreventable. Drivers should seek medical attention immediately, if necessary. Supervisors and drivers will be trained in post-accident procedures to secure the details of the accident and document the damage. Providing detailed facts of the accident will help our

insurance carrier deter fraudulent third-party insurance schemes.

The primary purpose of investigating an accident is to find out its cause and initiate action to eliminate or control similar vehicle accidents. Another purpose is to determine whether the accident is preventable. A preventable accident is one in which a driver fails to exercise reasonable precautions to prevent the accident from occurring.

All vehicles will be supplied with an accident claims kit, a pen and a disposable camera. Drivers are required to document all details of the accident: traffic flow, speed limits, stop lights/signs, weather conditions, citations issued, etc. Pictures should be taken to document the extent of damage to all vehicles involved. A policy report should be obtained.

Once this information is secured, the driver is to report all accidents immediately to the dispatcher and/or supervisor. Each driver's supervisor is required to investigate all vehicle accidents. If the vehicle is inoperable, arrangements need to be made for towing and delivery of cargo, if necessary. Hazmat operations, containment, and cleanup will be coordinated by dispatcher, supervisor and/or driver.

4.3.14 **Prohibited Behavior**

Use of company vehicles is a privilege. Behaviors that result in suspension or permanent loss of driving privileges include:

- Driving while under the influence of drugs or alcohol.
- Negligent homicide.
- Operating a vehicle with a suspended license.
- Using a motor vehicle for commission of a felony.
- Aggravated assault with a motor vehicle.
- Reckless driving.
- Hit and run.
- Three convictions for moving violations in one calendar year.
- Use of a company vehicle without authorization.
- Three or more major traffic violations.

More than two preventable accidents involving personal injury or property damage in any three-year period.

4.3.15 **Recordkeeping Requirements**

- Drivers of both passenger- and property-carrying CMVs must keep a 24-hour log of how they spend their time each day.
- After it's completed, drivers have 13 days to get the original copy to their supervisor. Individual supervisors may require drivers to turn it in sooner.
- Drivers must keep a copy of each daily log for the next seven consecutive days after they are filled out. The copies must be available for inspection by law enforcement officers.
- Any time a driver works for Moro Corporation and another motor carrier during a 24-hour period, they must make extra copies of their 24-hour log and give one to each motor carrier. The log must include:
  - All duty time for the entire 24-hour period.

- The name of each motor carrier worked for during the 24-hour period.
- The beginning and finishing time, including a.m. or p.m., worked for each motor carrier.

4.3.16 **Drug/Alcohol Testing**

Refer to the Moro Corporation Drug & Alcohol Policy in Section 1 of this HASP.

4.3.17 **Personal Use of <u>Non-Company Owned</u> Vehicle Policy**

This policy applies to personally owned vehicles driven by employees on behalf of Moro Corporation**.**

The following policy has been established to encourage safe operation of vehicles and to clarify insurance issues relating to drivers. Employees driving personal cars for company business must meet the following requirements:

- All drivers must have a valid driver's license.
- Motor vehicle records (MVR) will be checked pre-hire and annually. Driving privileges may be suspended or terminated if your record indicates an unacceptable number of accidents or violations. Should your record fall into our insurance carrier's guidelines of an unacceptable driver, your employment may be terminated.
- Your supervisor must be notified of any change in your license status or driving record.

Driver Criteria

Motor Vehicle Records (MVRs) will be requested at least once per year. Management reserves the right to use its discretion in determining an unsatisfactory MVR. As a guideline, three **(3)** violations in the past three years will be grounds for an unsatisfactory MVR and cause for disciplinary actions and/or termination.

Driving a company vehicle under the influence of alcohol or any other illegal substances is strictly prohibited and is grounds for termination.

Accident Procedures

- Take necessary steps to protect the lives of yourself and others.
- Comply with police instructions.
- Do not assume or admit fault – liability and negligence will be determined after thorough investigation.
- Report the accident to management as soon as possible.

4.3.18 **Personal Use of <u>Company-Owned</u> Vehicle Policy**

Purpose

The purpose of this policy is to establish rules pertaining to personal use of a company-owned vehicle. This policy applies to all Moro Corporation employees with an assigned company vehicle.

Vehicle Use

Moro Corporation recognizes that certain employees, because of their job requirements, will have an assigned company vehicle to be used solely for

company business and commuting to and from work. Personal use of a company vehicle is strictly prohibited without prior written permission from management. In emergency situations, such as serious illness or a medical emergency, the authorized employee may designate an unauthorized operator to use the vehicle strictly on an emergency-only basis.

Driver Criteria
Motor Vehicle Records (MVRs) will be requested at least (once per year). Management reserves the right to use its discretion in determining an unsatisfactory MVR. As a guideline, three **(3)** violations in the past three years will be grounds for an unsatisfactory MVR and cause for disciplinary actions and/or termination.

Accident Procedures
All accidents or moving violations must be reported to the company within 24 hours. The reporting requirement applies if the accident or moving violation took place in either a business or a personal vehicle.

If an employee sustains physical damage to a company vehicle as a result of their negligence, the employee is responsible for reimbursing the company for the comprehensive and collision coverage deductible, not to exceed $(2,000.00).

Preventative Maintenance
To retain the safety and integrity of the company vehicle, the company will conduct routine motor vehicle maintenance according to manufacturer specifications. Employees are required to conduct a visual pre-trip vehicle inspection, which includes tires, windshield wipers, brakes, mirrors and lights, and report any needed repairs to their supervisor immediately.

4.3.19 Hand-Held Mobile Phone/Cell Phone & Electronic Device Policy

This policy establishes how Moro Corporation, will comply with the Department of Transportation and the Federal Motor Carrier Safety Administration's restriction of cell phone use for drivers of Commercial Motor Vehicles (CMV's), established in 49 CFR Part 177. In addition to this Federal ban, Moro Corp requires **all** drivers to follow this policy. To protect employees driving on company business as well as others on the road, Moro Corporation has developed this Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy, effective January 1, 2012.
Moro Corp strictly prohibits the use of hand-held mobile phones and electronic devices, including all functions of the devices, while driving. All employees are expected to understand this policy, apply it, and follow all procedures.

SCOPE AND APPLICABILITY
The Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy applies to **all employees** of Moro Corporation who fit any or all of the following criteria:

- All employees involved in the operation of a ***Commercial Motor Vehicle*** for Moro Corporation.
- Driving on business in any vehicle, personal or otherwise.
- Driving a company car, whether on company business or not.

- Placing work-related calls, whether driving on company business or not.
- Using a company-issued cell phone or other electronic device while driving.

DEFINITIONS

Hand-Held Mobile Telephone (also known as a cell phone, mobile phone, smart phone, handheld cell or handset) - Any mobile communication device that falls under or uses any commercial mobile radio service, as defined in the Federal Communications Commission (FCC) 47 CFR 20.3. Wireless communication devices such as satellite telephones and broadband radio service are also included in this definition. This policy includes a mobile electronic device that engages in telecommunications including voice calls, text messaging/short message service (SMS) and/or e-mail. Cell phones also may include features like complete Internet access, games, multimedia messaging service (MMS), instant messaging (IM) service, digital audio (MP3) players, cameras, radios and global positioning systems (GPS). Any device that engages in these functions is included in this policy.

Two-way radios, walkie-talkies, Citizens Band radios and compliant mobile phones (i.e. hands-free headsets) are not considered hand-held mobile telephones.

Electronic Device – in this policy, electronic device means any portable apparatus that involves user interaction. This includes, but is not limited to, laptops, GPS systems, MP3 players, cameras, pagers and personal digital assistants (PDAs).

Headset (also known as **hands-free**) – an extension of the cell phone either connected to the handset via cord or wirelessly through Bluetooth technology that allows the user to engage in voice communication without holding onto the cell phone itself.

Driving - Driving refers to operating a motor vehicle on the highway, including while temporarily stationary because of traffic, a traffic control device or other momentary delay. Driving does not include operating a commercial motor vehicle when the driver has moved the vehicle to the side of, or off, a highway and has halted in a location where the vehicle can safely remain stationary.

PROCEDURES
The following procedures apply to all Moro Corporation employees falling under the conditions outlined above in SCOPE AND APPLICABILITY (defined below).

COMMERCIAL TRUCK DRIVERS - (*ALL DRIVERS MUST FOLLOW THESE FEDERAL REGULATIONS)*
For all employees who are involved in the operation of Commercial Motor Vehicles (CMV) for Moro Corporation - federal legislation prohibits drivers operating CMV's from using Hand-Held Mobile phones/Cell Phones/Electronic devices, and provides sanctions including fines and possible license suspension for drivers convicted of any of these violations while operating CMVs.

General Procedures for All Drivers (CDL & Non-CDL)

- Use of cell phones while driving is strictly prohibited – this includes all functions of the cell phone including, but not limited to, phone calls, text messaging/SMS, e-mail, MMS, Internet use, camera use, etc.
- Use of electronic devices – including laptops, PDAs, cameras and pagers – while driving is strictly prohibited unless specifically outlined below
- Voicemail must handle all calls while driving, and calls may only be returned when stopped or pulled off the road
- Passengers making or taking calls for the driver is permissible provided the interaction does not affect the driver's performance
- Regular callers must be informed that you will not be available while driving and should be notified of the best times to call based on driving schedule
- Employees who receive calls from co-workers who are driving are obligated to ask that the co-worker call back at a more appropriate time
- *CDL drivers who violate the restriction will face civil penalties of up to **$2,750** for each offense and disqualification from operating a commercial motor vehicle for multiple offenses. Additionally, states will suspend a driver's CDL after two or more serious traffic violations.*

Headset/Hands-Free Use

The use of headsets or hands-free devices **while driving is permissible IF:**

- The device is pre-approved by Moro Corporation prior to its use
- Use of the device does not cause distraction (e.g., fiddling with the device or taking eyes off road to get it to function properly)
- Any dialing or use of the handset is handled while stopped or pulled to the side of the road, unless the dialing of said device requires the use of no more than one button
- Conversations do not interfere with the driver's ability to drive safely
- Road conditions are generally good and do not threaten your safety

Exception in Cases of Emergency

The only exception to the Hand-Held mobile phone/cell phone/electronic device policy is calls placed to communicate with law enforcement or other emergency services, including 911. If placing or accepting an emergency call, keep it short and use a hands-free option if available. Pull over if practicable.

State Laws

Moro Corporation is not responsible for any traffic violations (including but not limited to violations due to the use of mobile phones and/or electronic devices) or parking tickets acquired by violation of city ordinance, state or federal laws regarding your driving habits and operation of your motor vehicle. Any ticket issued is the employee's responsibility, even if the ticket is issued while conducting business for Moro Corporation. Note that hand-held mobile phones/cell phones/electronic devices vary greatly by state, and it is the employee's responsibility to be familiar with and abide by such laws. This is especially important for employees who are drivers of Commercial Motor Vehicles or who travel on company business. Some states have laws banning all drivers from talking on handsets but permit the use of headsets.

New York State Bans

New York State restricts **ALL** drivers from the use of hand-held mobile phones/cell phones and portable electronic devices.

New York State Vehicle and Traffic Laws are as follows:

NYS - Article 33 - §1225-c. Use of mobile telephones.

1. For purposes of this section, the following terms shall mean: (a) "Mobile telephone" shall mean the device used by subscribers and other users of wireless telephone service to access such service. (b) "Wireless telephone service" shall mean two-way real time voice telecommunications service that is interconnected to a public switched telephone network and is provided by a commercial mobile radio service, as such term is defined by 47 C.F.R. S 20.3. (c) "Using" shall mean holding a mobile telephone to, or in the immediate proximity of, the user's ear. (d) "Hand-held mobile telephone" shall mean a mobile telephone with which a user engages in a call using at least one hand. (e) "Hands-free mobile telephone" shall mean a mobile telephone that has an internal feature or function, or that is equipped with an attachment or addition, whether or not permanently part of such mobile telephone, by which a user engages in a call without the use of either hand, whether or not the use of either hand is necessary to activate, deactivate or initiate a function of such telephone. (f) "Engage in a call" shall mean talking into or listening on a hand-held mobile telephone, but shall not include holding a mobile telephone to activate, deactivate or initiate a function of such telephone. (g) "Immediate proximity" shall mean that distance as permits the operator of a mobile telephone to hear telecommunications transmitted over such mobile telephone, but shall not require physical contact with such operator's ear.

2. (a) Except as otherwise provided in this section, no person shall operate a motor vehicle upon a public highway while using a mobile telephone to engage in a call while such vehicle is in motion. (b) An operator of a motor vehicle who holds a mobile telephone to, or in the immediate proximity of his or her ear while such vehicle is in motion is presumed to be engaging in a call within the meaning of this section. The presumption established by this subdivision is rebuttable by evidence tending to show that the operator was not engaged in a call. (c) The provisions of this section shall not be construed as authorizing the seizure or forfeiture of a mobile telephone, unless otherwise provided by law.

3. Subdivision two of this section shall not apply to (a) the use of a mobile telephone for the sole purpose of communicating with any of the following regarding an emergency situation: an emergency response operator; a hospital, physician's office or health clinic; an ambulance company or corps; a fire department, district or company; or a police department, (b) any of the following persons while in the performance of their official duties: a police officer or peace officer; a member of a fire department, district or company; or the operator of an authorized emergency vehicle as defined in section one hundred one of this chapter, or (c) the use of a hands-free mobile telephone.

NYS -Article 33 - §1225-d. Use of portable electronic devices.

1. Except as otherwise provided in this section, no person shall operate a motor vehicle while using any portable electronic device while such vehicle is in motion.

2. For the purposes of this section, the following terms shall have the following meanings:

   (a) "Portable electronic device" shall mean any hand-held mobile telephone, as defined by subdivision one of section twelve hundred twenty-five-c of this article, personal digital assistant (PDA), handheld device with mobile data access, laptop computer, pager, broadband personal communication device, two-way messaging device, electronic game, or portable computing device.
   (b) "Using" shall mean holding a portable electronic device while viewing, taking or transmitting images, playing games, or composing, sending, reading, viewing, accessing, browsing, transmitting, saving or retrieving e-mail, text messages, or other electronic data.

   Subdivision one of this section shall not apply to (a) the use of a portable electronic device for the sole purpose of communicating with any of the following regarding an emergency situation: an emergency response operator; a hospital; a physician's office or health clinic; an ambulance company or corps; a fire department, district or company; or a police department, (b) any of the following persons while in the performance of their official duties: a police officer or peace officer; a member of a fire department, district or company; or the operator of an authorized emergency vehicle as defined in section one hundred one of this chapter.

Policy Violations
ALL employees of Moro Corporation must comply with the company Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy on top of abiding by any state or local regulations addressing the matter. Employees who violate this policy will be subject to disciplinary action up to and including termination.

4.3.20 Employee Acknowledgment

The No. 1 on-the-job fatality is transportation incidents, and at Moro Corporation, it is our job to enforce procedures that mitigate this risk. It is for your safety, as well as the safety of everyone else on the road, that the company has put this Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy in place.

All employees are expected to understand when this policy applies and follow all procedures. The company encourages all employees to take a proactive approach to road safety, so Moro Corporation expects employees to report any problems or known violations of this policy to their supervisor.

Each employee is expected to have read and understand the entire Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy, which includes:

- Purpose

- Scope and Applicability
- Definitions
- Procedures
  - State Laws
  - General Procedures
  - Headset/Hands-Free Use
  - Emergency Calls
  - GPS Systems
  - MP3 and Other Audio Devices

If you have any uncertainty or questions regarding the content of these policies, you are required to consult your supervisor. This should be done prior to signing and agreeing to the Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy.

I have read and understand the Hand-Held Mobile Phone/Cell Phone/Electronic Device Policy, and I understand the requirements and expectations of me as an employee. I agree to adhere to all provisions and procedures outlined in the policy, and I understand that failure to do so will result in discipline up to and including termination.

_____ _____

Employee Name (print) **Date**

_____

Employee Signature

4.3.21 **Fleet Hazard Notification Form**

Date: _____

Location: _____

Department: _____

Hazard or unsafe procedure identified:

_____
_____
_____
_____
_____

Vehicle #:

_____
_____

Recommendations to provide a safer work environment/required maintenance:

_____
_____
_____
_____
_____

Corrective Action Taken: (To be completed by Supervisor)

_____
_____
_____
_____
_____

Date corrective action completed: _____

Completed By: _____
(To be completed by Supervisor/Mechanic)

Supervisor Signature: _____

Employee Signature: _____

4.4 Responsibilities

4.4.1 Each Moro Corp. Subsidiary shall appoint a Fleet Safety Policy Representative. This Representative will oversee the Fleet Safety Policy and act as a liaison between the Moro Corp. Subsidiary and the Moro Corp. Safety Director.

4.4.2 The Moro Corp. Safety Director shall oversee the Fleet Safety Policy from a corporate position. The Moro Corp. Safety Director shall review the Fleet Safety Policy at least annually and make any necessary changes. The latest version of the Fleet Safety Policy shall then be distributed by the Moro Corp. Safety Director to each Moro Corp. Subsidiary for review by entire workforce.

4.5 Attachments

4.5.1 None.

5.0 Emergency Action Plan Policy

5.1 Purpose

5.1.1 This plan establishes steps to be taken in the case of a medical, fire or other emergency where an emergency evacuation may or may not be required.

5.2 Scope

5.2.1 This policy covers all Moro Corp. Subsidiaries and their employees and Sub-Contractors, both in-house (Shop) locations and in the field.

5.3 General Requirements

5.3.1 The primary means of notification shall be via '911' to reach the local Police, Fire or EMS Responders. The caller shall give all relevant information to the 911 operator and remain on the phone until given direction otherwise by the 911 Operator.

5.3.2 The highest level Supervisor located at the site where the emergency occurred shall then be called or notified by either phone or radio and apprised of the emergency.

5.3.3 The Moro Corp. Safety Director shall be called after 911 and the Site Supervisor.

5.3.4 If a site evacuation is required from a field location (worksite), then the highest level Site Supervisor for the Moro Corp. Subsidiary shall be responsible for notifying all employees at the location and taking a headcount. If there is an Emergency Evacuation Plan in place by a controlling entity (i.e. Construction Management Company or General Contractor), then that plan shall be followed by all Moro Corp. Subsidiary Employees.

5.3.5 If a site evacuation is required at the shop location of the Moro Corp. Subsidiary, then the Emergency Evacuation Plan in place at that location shall be followed. All employees shall evacuate the premises via the pre-established evacuation routes and proceed to the nearest 'Rally Point', where the 'Head Counter' shall take the headcount of all employees. The headcount shall then be given to the supervisor and all appropriate Emergency Services Group (Fire Dept., Police, etc.).

5.3.6 All employees shall remain at the Rally Point or a safe location until given the 'All Clear' by the responding Emergency Services Group, unless there is greater risk of injury by remaining at the Rally Point.

5.4 Responsibilities

5.4.1 Employee: Notify supervisor immediately of any emergency situations, activate emergency alarm (i.e. Fire Alarm pull station) if the situation is immediately dangerous to life or health.

5.4.2 Supervisor: Activate emergency alarm if upon investigation there is cause to do so. Take headcount of all employees at evacuation location to ensure no employee is still in danger. Notify emergency services if any employee is un-accounted for.

5.4.3 Moro Corp. Subsidiary: Have in place at the shop location an approved (by Moro Corp.), Emergency Evacuation Plan which is reviewed and practiced at least annually. All employees who work at the shop location shall be trained to this plan and that training shall be documented.

5.5 Attachments

5.5.1 None.

6.0 Confined Space Program

6.1 Purpose

6.1.1 This policy establishes the procedures to protect employees that enter confined spaces.

6.2 Scope

6.2.1 This policy prescribes minimum standards for preventing employee exposure to confined space hazards within such spaces as silos, tanks, vats, vessels, boilers, compartments, ducts, sewers, pipelines, vaults, bins, tubs, and pits.

6.3 General Requirements

Confined Space Definitions

6.3.1 All spaces which are not designed to maintain human occupancy are to be considered 'Confined Spaces' unless deemed otherwise by a Moro Corp. Qualified Employee.

6.3.2 Confined or enclosed spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines and open top spaces more than 4' in depth such as pits, tubs, vaults and vessels.

6.3.3 A 'Confined Space' is a space that:

a) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
b) Has limited or restricted means for entry or exit (i.e. tanks, vessels, storage bins, hoppers, underground vaults or pits.); and
c) Is not designed for continuous human occupancy.

6.3.4 A 'Permit Required Confined Space' is a space that is large enough and so configured that an employee can enter and perform work, has limited or restricted means of entry or exit, is not designed for continuous human occupancy AND has one or more of the following characteristics:

a) Contains or has a known potential to contain a hazardous atmosphere;
b) Contains a material with the potential of engulfment of an entrant;
c) Has an internal configuration such that an entrant could be trapped or asphyxiated by an inwardly converging wall/floor.

Underground Lines / Manholes

6.3.5 Entry into Manholes for access to underground power transmission lines shall not be considered a Permit Required Confined Space Entry provided that all the following precautions are taken and that the Manhole has not been deemed a Permit Required Confined Space by the Construction Manager or presiding authority.

6.3.6 Appropriate warning signs shall be promptly placed when covers of manholes, handholes, or vaults are removed. What is an appropriate warning sign is dependent upon the nature and location of the hazards involved.

6.3.7 Before an employee enters a street opening, such as a manhole or an unvented vault, it shall be promptly protected with a barrier, temporary cover, or other suitable guard.

6.3.8 No entry shall be permitted unless forced ventilation is provided or the atmosphere is found to be safe by testing for oxygen deficiency and the presence of explosive gases or fumes.

6.3.9 Where unsafe conditions are detected, by testing or other means, the work area shall be ventilated and otherwise made safe before entry.

6.3.10 Provisions shall be made for an adequate continuous supply of air.

6.3.11 While work is being performed in manholes, an employee shall be available in the immediate vicinity to render emergency assistance as may be required. This shall not preclude the employee in the immediate vicinity from occasionally entering a manhole to provide assistance, other than emergency. This requirement does not preclude a qualified employee, working alone, from entering for brief periods of time, a manhole where energized cables or equipment are in service, for the purpose of inspection, housekeeping, taking readings, or similar work if such work can be performed safely.

6.3.12 When open flames must be used in manholes, extra precautions shall be taken to provide adequate ventilation.

6.3.13 Before using open flames in a manhole or excavation in an area where combustible gases or liquids may be present, such as near a gasoline service station, the atmosphere of the manhole or excavation shall be tested and found safe or cleared of the combustible gases or liquids.

Electrical Safety in Manholes

6.3.14 When multiple cables exist in an excavation or manhole, the cable to be worked on shall be identified by electrical means unless its identity is obvious by reason of distinctive appearance.

6.3.15 Before cutting into a cable or opening a splice, the cable shall be identified and verified to be the proper cable.

6.3.16 When working on buried cable or on cable in manholes, metallic sheath continuity shall be maintained by bonding across the opening or by equivalent means.

Non-Entry Rescue Means

6.3.17 Retrieval systems or methods shall be used whenever entry is made, unless the retrieval equipment would increase overall risk of entry or would not be of value.

6.3.18 Each entrant shall use a chest or full body harness, with retrieval line attached at the center of their back near shoulder level or above the head.

6.3.19 Wristlets may be used in lieu of chest or full body harness if employer can show use of chest or body harness is unfeasible or creates a greater hazard and that use of wristlets is the safest and most effective alternative.

6.3.20 Other end of retrieval line shall be attached to a mechanical device of fixed point outside permit space for immediate use.

6.3.21 Mechanical device shall be used to retrieve personnel from vertical type permit space more than 5' deep.

6.4 Responsibilities

Duties of Authorized Entrants

6.4.1 Knows the hazards that may be faced during entry, including mode, signs or symptoms and consequences of exposure.

6.4.2 Properly use all required equipment.

6.4.3 Communicate with attendant as necessary to enable attendant to monitor status and alert entrants of the need to evacuate.

6.4.4 Alert attendant whenever any warning sign of symptom of exposure to a dangerous situation or a prohibited condition is detected.

6.4.5 Exit from permit space as quickly as possible whenever;

a) Order to evacuate is given by attendant or entry supervisor;
b) Entrant recognizes any warning symptom of exposure to a dangerous situation;
c) Entrant detects a prohibited condition;
d) Evacuation alarm is activated.

Duties of Attendants

6.4.6 Knows hazards that may be faced during entry.

6.4.7 Knows possible behavioral effects of hazards.

6.4.8. Continuously maintains accurate count of entrants.

6.4.9 Remains outside permit space during entry operations until relieved by another attendant.

6.4.10 Communicates with entrants as necessary to monitor status and alert if need to evacuate space.

6.4.11 Monitors activities inside and outside space to determine if safe for entrants to remain in space and orders evacuation if necessary.

6.4.12 Summons rescue and emergency services when emergency exit from permit space is necessary.

6.4.13. Performs non-entry rescues.

6.4.14. Performs no duties that might interfere with primary duty to monitor and protect authorized entrants.

6.4.15 Takes following actions when unauthorized persons approach or enter a permit space while entry is underway:

a) Warns the unauthorized persons to stay away;
b) Advises them to exit immediately if they have entered;
c) Informs authorized entrants and entry supervisor if unauthorized persons enter space.

Duties of Entry Supervisor

6.4.16 Knows hazards that may be faced during entry.

6.4.17 Verifies that acceptable conditions for entry exist.

6.4.18 Terminates entry when operations are completed or a prohibited condition arises.

6.4.19 Verifies that rescue services are available.

6.4.20 Remove unauthorized persons who enter or attempt to enter permit space during operations.

6.4.21 Determines whenever responsible and at appropriate intervals that acceptable entry conditions are maintained.

Rescue Services

6.4.22 Onsite Rescue Services:

a) Must be properly trained in entry procedures, rescue procedures and PPE requirements.
b) Permit space rescues must be practiced at lease annually from similarly configured spaces.
c) Must be trained in basic first aid and CPR and have at least one member currently certified.

6.4.23 Offsite Rescue Services (i.e. Fire Dept.):

a) Inform rescue service of hazards they may confront.
b) Provide rescue service with access to all permit spaces so they can

develop appropriate rescue plans and practice rescue operation.

c) Contact Information for the Offsite Rescue Services must be available to all employees involved in the Confined Space job.

6.5 Attachments

6.5.1 Confined Space Training Guide.

6.5.2 Confined Space Entry Permit.

7.0 Hazard Analysis Policy

7.1 Purpose

7.1.1 This policy establishes the process to perform and document hazard analyses for all work to be performed both in the field and in-house (Shop) locations.

7.2 Scope

7.2.1 This policy covers all shop and field work to be performed by all Moro Corp. and Moro Corp. Subsidiary Employees.

7.3 General Requirements

7.3.1 Each field work crew, regardless of size, who are performing related tasks, shall conduct a **Job Hazard Analysis (JHA)**.

7.3.2 The frequency of the JHA shall be at least daily. An additional JHA shall be performed if the work conditions change or the task changes.

7.3.3 The JHA shall be performed by the supervisor of the work crew prior to work commencing.

7.3.4 All employees covered by the JHA shall sign the JHA.

7.3.5 All JHA's shall be submitted to the Moro Corp. Subsidiary home office on a pre-determined schedule for review and archiving. Copies can be made if the Construction Manager or General Contractor requires a copy. Completed JHA's shall be periodically reviewed by the appropriate person at each Moro Corp. Subsidiary.

7.3.6 If proper means to control a hazard cannot be found and documented on the JHA then work shall not proceed until supervision is notified and the proper means to control the hazard is enacted.

7.3.7 For work activities in the Moro Corp. Subsidiary Shop locations that are considered non-ordinary or are specifically hazardous or dangerous in nature, a Hazard Analysis shall be conducted by a competent person. The details of this hazard analysis shall be communicated to all affected employees.

7.4 Responsibilities

7.4.1 Employee: Review the JHA for accuracy and provide personal input to the JHA where possible.

7.4.2 Supervisor: Conduct proper investigation prior to writing the JHA to ensure all associated hazards, both visible and unseen, are covered.

7.4.3 Moro Corp. Subsidiary: Establish training format for all employees covering all aspects of the Hazard Analysis process.

7.5 Attachments

7.5.1 Moro Corp. JHA Rev1.0.

8.0 Respiratory Protection Policy

8.1 Purpose

8.1.1 This policy establishes the process to provide our employees with the proper personal protective equipment for respiratory protection, as well as the training and knowledge to effectively comply with the OSHA respiratory program changes in 29 CFR 1910.134.

8.2 Scope

8.2.1 This policy covers all shop and field work to be performed by all Moro Corp. and Moro Corp. Subsidiary Employees who may require the use of an air-purifying respirator during the course of their job related activities.

8.3 General Requirements

8.3.1 Each affected employee shall have had a medical evaluation completed to determine if they are physically able to use a respirator. The cost of the physical exam will be the responsibility of the Moro Corp. Subsidiary.

8.3.2 Each employee that uses a respirator must be fit tested by a competent, qualified person. Fit testing will be done by authorized third party for both positive and negative pressure devises. Employees will be tested with the same make, model and style respirator that will be used on the job. Fit testing will be conducted prior to use of the respirator.

8.3.3 Fit testing for each effected employee shall be performed annually.

8.3.4 The medical evaluation shall be performed one time. If a different respirator is necessary, if an employee shows signs, symptoms or conditions that are related to the use of a respirator, management request or change in workplace conditions, then an additional medical examination shall follow.

8.3.5 Medical records will be maintained for each employee that passes all necessary medical and physical testing. These records shall be maintained by the respective Moro Corp. subsidiary as well as copies of all records forwarded to the Moro Corp. Safety Director.

8.3.6 The Moro Corp. subsidiary shall provide, at no cost to the employee, the correct respirator and all related cartridges and equipment.

8.3.7 Any respirator used on the job must meet each jobsite specific requirements. Cartridges must be correct for type of exposure present at the job site.

8.3.8 All respirators will be cleaned and disinfected a minimum of once per month.

8.3.9 Beards are prohibited with the use of a respirator.

8.3.10 Respirators will be inspected during each cleaning.

8.3.11 Respirators will be stored in a convenient, dry, sanitary location.

8.3.12 Each employee shall only use their own respirator.

8.4 Responsibilities

8.4.1 Employee: Each employee is responsible for the cleaning, inspection and proper storage of their respirator and related equipment.

8.4.2 Employer: Each respective Moro Corp. subsidiary shall maintain all employee medical records related to the medical clearance and fit testing for each employee. Copies of these records shall be forwarded to the Moro Corp. Safety Director

8.5 Attachments

8.5.1 None.

9.0 Electrical Safety Policy

9.1 Purpose

9.1.1 This program establishes the procedures to protect employees that work with or near sources of live electricity.

9.2 Scope

9.2.1 This program covers all shop and field work to be performed by all Moro Corp. and Moro Corp. Subsidiary Employees.

9.3 General Requirements

- Only qualified employees may work near live electrical sources.
- Where feasible, all sources of live electricity greater than 50 volts must be de-energized and locked out / tagged out prior to work commencing.
- All work on or near any live (energized) electrical circuits 50 volts or greater shall comply with the regulations set forth in NFPA70e. The applicable distances for working near any live circuits or sources are provided in NFPA70e.

9.3.1 **Working on De-energized Equipment**
Electrically Safe Condition

All workers shall assume all electric circuits are energized unless each involved worker ensures they are not. Every circuit and conductor must be tested every time work is done on them. Proper PPE must be worn until the equipment is proven to be de-energized.

- Voltage rated gloves and leather protectors must be worn.
- Electrically insulated shoes should be worn.
- Approved insulating mats.
- Safety glasses must be worn.
- The required Arc Flash PPE must also be worn.
- Identify all sources of power to the equipment. Check applicable up-to-date drawings, diagrams, and identification tags.
- Remove the load current, and then open the disconnecting devices for each power source.
- Where possible, visually verify that blades of disconnecting devices are fully open or that draw-out type circuit breakers are fully withdrawn.
- Apply lockout/tagout devices in accordance with a formal, written policy.
- Test each phase conductor or circuit part with an adequately rated voltage detector to verify that the equipment is de-energized. Test each phase conductor or circuit part both phase-to-phase and phase-to-ground. Check the voltage detector before and after each test to be sure it is working.

- Properly ground all possible sources of induced voltage and stored electric energy (such as, capacitors) before touching. If conductors or circuit parts that are being de-energized could contact other exposed conductors or circuit parts, apply ground-connecting devices rated for the available fault current.

  ***The process of de-energizing is "live" work and can result in an arc flash due to equipment failure!**

9.3.2 Working on or Near Energized Equipment

Working on live circuits means actually touching energized parts. Working near live circuits means working close enough to energized parts to pose a risk even though work is on de-energized parts. Common tasks where there may be a need to work on or near live circuits include:

- Taking voltage measurements
- Opening and closing disconnects and breakers
- Racking breakers on and off the bus
- Removing panels and dead fronts
- Opening electric equipment doors for inspection

9.3.2.1 Energized Electrical Work Permit For 50 Volts and Higher

- If live parts are not placed in an electrically safe condition, work to be performed shall be considered energized electrical work and shall be performed by written, completed Energized Work Permit only.

- Work related to testing, troubleshooting, and voltage measuring may be completed without a permit provided appropriate safe work practices and PPE are used.

- The permit must be originated by the qualified electrical worker.

- Energized Work Permits shall be submitted to the appropriate supervisor for each project or facility.

- The permit must be posted in an appropriate location where the energized work is taking place for the duration of the task.

9.3.2.2 Approach Distances to Exposed Live Parts

The National Fire Protection Association (NFPA) defines 3 approach distances for shock hazards and one for arc flash.

- **Limited approach boundary** is the distance from an exposed live part within which a shock hazard exists.

- **Restricted approach boundary** is the closest distance to exposed live parts a qualified person can approach with without proper PPE and tools. Inside this boundary, accidental movement can put a part of the body or conductive tools in contact with live parts or inside the prohibited approach boundary. To cross the restricted approach boundary, the qualified person must:
  1. Have an energized work permit that is approved by the supervisor or manager responsible or the safety plan;
  2. Use PPE suitable for working near exposed lived parts and rated for the voltage and energy level involved;
  3. Be certain that no part of the body enters the prohibited space;
  4. Minimize the risk from unintended movement, by keeping as much of the body as possible out of the restricted space; body parts in the restricted space should be protected.

- **Prohibited approach boundary** is the minimum approach distance to exposed live parts to prevent flashover or arcing. Approaching any closer is comparable to making direct contact with a live part. To cross the prohibited approach boundary, the qualified person must:
  1. Have specified training to work on exposed live parts.
  2. Have a permit with proper written work procedures and justifying the need to work that close.
  3. Do a risk analysis.
  4. Have (2) and (3) approved by the appropriate supervisor.
  5. Use PPE appropriate for working near exposed live parts and rated for the voltage and energy level involved.

- **Flash Protection Boundary** is the approach limit at a distance from exposed live parts within which a person could receive a second degree burn if an electrical arc flash were to occur.
  1. Use PPE appropriate for working near exposed live parts and rated for the voltage and energy level involved.
  2. For systems of 600 volts and less, the flash protection boundary is 4 feet, based on an available bolted fault current of 50 kA and a clearing time of 6 cycles for the circuit breaker to act, or any combination of fault currents and clearing times not exceeding 300 kA cycles.
  3. When working on de-energized parts and inside the flash protection boundary for nearby live exposed parts:
     a) If the parts cannot be de-energized, use barriers such as insulted blankets to protect against accidental contact or wear proper PPE.

9.3.2.3 **Other Precautions**

When working on de-energized parts, but still inside the flash protection boundary for nearby live exposed parts:

- If the parts cannot be de-energized, barriers such as insulated blankets must be used to protect against accidental contact or PPE must be worn.

- Employees shall not reach blindly into areas that might contain exposed live parts.

- Employees shall not enter spaces containing live parts unless illumination is provided that allows the work to be performed safely.

- Conductive articles of jewelry and clothing (such as watchbands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, metal headgear, or metal frame glasses) shall not be worn where they present an electrical contact hazard with exposed live parts.

- Conductive materials, tools, and equipment that are in contact with any part of an employee's body shall be handled in a manner that prevents accidental contact with live parts. Such materials and equipment include, but are not limited to long conductive objects such as ducts, pipes, tubes, conductive hose and rope, metal-lined rules and scales, steel tapes, pulling lines, metal scaffold parts, structural members, and chains.

- When an employee works in a confined space or enclosed spaces (such as a manhole or vault) that contains exposed live parts, the employee shall use protective shields, barriers or insulating materials as necessary to avoid contact with these parts. Doors, hinged panels, and the like shall be secured to prevent them from swinging into employees. Refer to the confined space entry program.

9.3.3 **Implementation Procedures**

- Immediately place danger labels on equipment required to be labeled by NEC 110.16.

- An Energized Work Permit shall be completed and all affected workers shall review and sign the permit prior to work commencing.

- Until an arc flash hazard analysis can be made, a qualified Electrical Worker using NFPA Table 130.7(C)(9)(a), Hazard/Risk Category Selections, shall for each situation:
  - Determine the hazard/risk category.
  - Determine the use of V-rated gloves.
    - V-rated gloves are gloves rated and tested for the maximum line-to-line voltage upon work will be done.

- The arc flash hazard analysis shall only be completed by a qualified person.

9.3.4 **Arc Flash Hazard Analysis**

An arc flash hazard analysis includes the following:

- Collect data on the facility's power distribution system.
  - Arrangement of components on a one-line drawing with nameplate specifications of every device.
  - Lengths and cross-section area of all cables.

- Contact the electric utility for information including the minimum and maximum fault currents that can be expected at the entrance to the facility.

- Conduct a short circuit analysis followed by a coordination study is performed.

- Feed the resultant data into the NFPA 70E-2000 or IEEE Standard 1584-2002 equations.
  - These equations produce the necessary flash protection boundary distances and incident energy to determine the minimum PPE requirement.
  - The **flash protection boundary** is the distance at which PPE is needed to prevent incurable burns (2nd degree or worse) if an arc flash occurs. (It is still possible to suffer 1st or 2nd degree burns.)

- For systems of 600 volts and less, the flash protection boundary is 4 feet, based on an available bolted fault current of 50 kA (kilo amps) and a clearing time of 6 cycles (0.1 seconds) for the circuit breaker to act, or any combination of fault currents and clearing times not exceeding 300 kA cycles (5000 ampere seconds).
  - For other fault currents and clearing times, *see* NFPA 70E.

9.3.5 **Personal Protective Equipment**

9.3.5.1 **General Requirements**

- Employees working in areas where there are potential electrical hazards must be provided with and use personal protective equipment (PPE) that is appropriate for the specific work to be performed. The electrical tools and protective equipment must be specifically approved, rated, and tested for the levels of voltage of which an employee may be exposed.

- Each facility shall provide electrical protective equipment (Arc Flash Gear)) required by this program. Such equipment shall include 11 calorie, and 40 calorie rated Arc Flash apparel (until a full arc flash hazard analysis is made), eye protection, head protection, hand protection, insulated footwear, and face shields where necessary.

Protective Clothing Characteristics

Category	Cal/cm^2	Clothing
0	1.2	Untreated Cotton
1	5	Flame retardant (FR) shirt and FR pants
2	8	Cotton underwear, FR shirt and FR pants
3	25	Cotton underwear, FR shirt, FR pants and FR coveralls
4	40	Cotton underwear, FR shirt, FR pants and double layer switching coat and pants

- Employees shall wear nonconductive head protection whenever there is a danger of head injury from electric shock or burns due to contact with live parts or from flying objects resulting from an electrical explosion.

- Employees shall wear protective equipment for the eyes whenever there is a danger of injury from electric arcs, flashes, or from flying objects resulting from an electrical explosion.

- Employees shall wear rubber insulating gloves where there is a danger of hand or arm contact with live parts or possible exposure to arc flash burn.

- Where insulated footwear is used as protection against step and touch potential, dielectric overshoes shall be required. Insulated soles shall not be used as primary electrical protection.

- Face shields without arc rating shall not be used for electrical work. Safety glasses or goggles must always be worn underneath face shields.

- Additional illumination may be needed when using tinted face shields as protection during electrical work.

- Electrical Protective Equipment must be selected to meet the criteria established by the American Society of Testing and Materials (ASTM) and by the America National Standards Institute (ANSI).

- Insulating equipment made of materials other than rubber shall provide electrical and mechanical protection at least equal to that of rubber equipment.

- PPE must be maintained in a safe, reliable condition and be inspected for damage before each day's use and immediately following any incident that can reasonably be suspected of having caused damage.

- Employees must use insulated tools and handling equipment that are rated for the voltages to be encountered when working near exposed energized conductors or circuit. Tools and handling equipment should be replaced if the insulating capability is decreased due to damage. Protective gloves must be used when employees are working with exposed electrical parts above fifty (50) volts.

- Fuse handling equipment (insulated for circuit voltage) must be used to remove or install fuses when the fuse terminals are energized. Ropes and hand lines used near exposed energized parts must be non-conductive.

- Protective shields, barriers or insulating materials must be used to protect each employee from shock, burns, or other electrical injuries while that person is working near exposed energized parts that might be accidentally contacted or where dangerous electric heating or arcing might occur.

9.3.5.2 **Flame-Resistant Apparel & Under-layers**

- FR apparel shall be visually inspected before each use. FR apparel that is contaminated or damaged shall not be used. Protective items that become contaminated with grease, oil flammable liquids, or combustible liquids shall not be used.

- The garment manufacturer's instructions for care and maintenance of FR apparel shall be followed.

- When the apparel is worn to protect an employee, it shall cover all ignitable clothing and allow for movement and visibility.

- FR apparel must cover potentially exposed areas as completely as possible. FR shirt sleeves must be fastened and FR shirts/jackets must be closed at the neck.

- Non-melting, flammable garments (i.e. cotton, wool, rayon, silk, or blends of these materials) may be used as under-layers beneath FR apparel.

- Meltable fibers such as acetate, nylon, polyester, polypropylene, and spandex shall not be permitted in fabric under-layers next to skin. (An incidental amount of elastic used on non-melting fabric underwear or socks shall be permitted).

- FR garments worn as outer layers over FR apparel (i.e. jackets or rainwear) must also be made from FR material.

- Flash suits must permit easy and rapid removal by the user.

9.3.5.3 **Rubber Insulating Equipment**

- Rubber insulating equipment includes protective devices such as gloves, sleeves, blankets, and matting.
- Insulating equipment must be inspected for damage before each day's use and immediately following any incident that could have caused damage.
- An air test must be performed on rubber insulating gloves before each use.
- Insulating equipment found to have defects that might affect its insulating properties must be removed from service until testing indicates that it is acceptable for continued use.
- Where the insulating capability of protective equipment is subject to damage during use, the insulating material shall be protected by an outer covering of leather or other appropriate materials.
- Rubber insulating equipment must be tested according to the schedule supplied by the manufacturer.
- Rubber insulating equipment must be stored in an area protected from light, temperature extremes, excessive humidity, ozone, and other substances and conditions that my cause damage.
- No repairs to rubber insulating equipment shall be attempted without the approval of the manufacturer or supplier.

9.3.5.4 **Insulated Tools and Materials**

- Only insulated tools and equipment shall be used within the Limited Approach Boundary of exposed energized parts.
- Insulated tools shall be rated for the voltages on which they are used.
- Insulated tools shall be designed and constructed for the environment to which they are exposed and the manner in which they are used.
- Fuse or fuse holder handling equipment, insulated for the circuit voltage, shall be used to remove or install a fuse if the fuse terminals are energized.
- Ropes and hand-lines used near exposed energized parts shall be nonconductive.
- Portable ladders used for electrical work shall have nonconductive side rails.

9.3.5.5 **Access Limiting Equipment**

- Barricades shall be used in conjunction with safety signs to prevent or limit access to work areas containing live parts. Conductive barricades shall not

be used where they might cause an electrical hazard. Barricades shall be placed no closer than the Limited Approach Boundary.

- If signs and barricades do not provide sufficient protection, an attendant will be assigned to warn and protect pedestrians. The primary duty of the attendant shall be to keep an unqualified person out of the work area where an electrical hazard exists. The attendant shall remain in the area as long as there is a potential exposure to electrical hazards

9.3.6 Working Space About Electric Equipment

- Sufficient access and working space shall be provided and maintained about all electric equipment to permit ready and safe operating and maintenance of such equipment. Enclosures that house electric apparatus and are controlled by lock and key shall be considered accessible to qualified persons.

- Working space for equipment operating at 600 volts, nominal, or less to ground and likely to require examination, adjustment, services or maintenance while energized shall comply with the dimensions of 70E 400.15(A)(1), 400.15(A)(2), and 400.15(A)(3) or as required or permitted elsewhere in the 70E Standard.

- The depth of the working space in the direction of live parts shall be not less than that indicated in Table 400.15(A)(1) unless the requirements of 400.15(A)(1)(a), 400.15(A)(1)(b), or 400.15(A)(1)(c) are met. Distances shall be measured from the exposed live parts if such are exposed or from the enclosure or opening if the live parts are enclosed.

Table 400.15(A)(1) Working Spaces

Nominal Voltage to Ground	Minimum Clear Distance		
	Condition 1	Condition 2	Condition 3
0-150	900mm (3 ft.)	900 mm (3 ft.)	900mm (3 ft.)
151-600	900mm (3 ft.)	1m (3-1/2 ft.)	1.2 m (4 ft.)

Condition 1: Exposed live parts on one side and no live or grounded parts on the other side of the working space, or exposed live parts on both sides effectively guarded by suitable wood or other insulating materials. Insulated wire or insulated bus bars operating at not over 300 volts to ground shall not be considered live parts.

Condition 2: Exposed live parts on one side and grounded parts on the other side. Concrete, brick, or tile walls shall be considered as grounded surfaces.

Condition 3: Exposed live parts on both sides of the work space (not guarded as provided in condition 1) with the operator between.

- **Dead-front Assemblies**. Working space shall not be required in the back or sides of assemblies, such as dead-front switchboards or motor control centers, where all connections and all renewable or adjustable parts, such as fuses or switches, are accessible from locations other than the back or sides. Where rear access is required to work on non-electrical parts on the back of enclosed equipment, a minimum horizontal working space of 762mm (30 in) shall be provided.

- **Low Voltage**. Smaller working spaces can be permitted where all un-insulated parts operate at not greater than 30 volts rms, 42 volts peak, or 60 volts dc.

- **Existing Buildings.** In existing buildings were electric equipment is being replaced, Condition 2 working clearance shall be permitted between dead-front switch boards, panel boards, or motor control centers located across the aisle from each other where conditions of maintenance and supervision ensure that written procedures have been adopted to prohibit equipment on both sides of the aisle from being open at the same time. Qualified electrical workers who are authorized will service the installation.

- **Width of Working Space**. The width of the working space in front of the electrical equipment shall be the width of the equipment or 750 mm (30 in), whichever is greater. In all cases, the work space shall permit at least a 90 degree opening of equipment doors or hinged panels.

- **Height of Working Space**. The workspace shall be clear and extend from the grade, floor, or platform to the height required by 70E 400.15(E). Within the height requirements of this section, other equipment that is associated with the electrical installation and is located above or below the electrical equipment shall be permitted to extend not more than 150 mm (6 in) beyond the front of the electrical equipment.

- **Clear Spaces**. Working space required by the 70E standard shall not be used for storage. When normally enclosed live parts operating at 50 volts or more are exposed for inspection or service, the working space, if in a passageway or general open spaced shall be suitably guarded.

9.3.6.1 **Access and Entrance to Working Space**

- **Minimum Required**. At least one entrance of sufficient area shall be provided to give access to the working space about electric equipment.

- **Large Equipment**. For equipment rated 1200 amperes or more and over 1.8 m (6ft) wide that contains overcurrent devices, switching devices, or control devices, there shall be one entrance to the required working space not less than 610 mm (24in) wide and 2.0 m (6-1/2ft) high at each end of the working space. Where the entrance has a personnel door, the door shall open in the direction of egress and be equipped with panic bars, pressure plates, or other devices that are normally latched but open under simple pressures. A single entrance to the required working space shall be permitted where either of the conditions in 400.14(c)(2)(a) or 400.14(c)(2)(b) is met.

- **Unobstructed Exit**. Where the location permits a continuous and unobstructed way of exit travel, a single entrance to the working space shall be permitted.

9.3.6.2 **Illumination**

- Illumination shall be provided for all working spaces about service equipment, switchboards, panel boards, or motor control centers installed indoors. Additional lighting outlets shall not be required where the work space is illuminated by an adjacent light source. In electrical equipment rooms, the illumination shall not be controlled by automatic means only.

9.3.6.3 **Headroom**

- The minimum headroom of working spaces about service equipment, switchboards, panel boards, or motor control centers shall be 2.0 m (6-1.2 ft.). Where the electrical equipment exceeds 2.0 m (61/2 ft.) in height, the minimum headroom shall not be less than the height of the equipment.

9.3.6.4 **Dedicated Equipment Space**

- All switchboards, panel boards, distribution boards, and motor control centers shall be located in dedicated spaces and protected from damage. *Exception: Control equipment that by its very nature or because of other rules of the standard must be adjacent to or within sight of the operating machinery shall be permitted in those locations.*

9.3.7 **Table 130(2). Approach boundaries to live parts for shock prevention (All dimensions are distance from live part to employee)**

Nominal System Voltage Range, Phase to Phase	Limited Approach Boundary		Restricted Approach Boundary (Allowing for Accidental Movement)	Prohibited Approach Boundary
	Exposed Movable Conductor	Exposed Fixed-Circuit Part		
0 to 50 volts	Not specified	Not specified	Not specified	Not specified
51 to 300 volts	10 ft. 0 in.	3 ft. 6 in.	Avoid contact	Avoid contact
301 to 750 volts	10 ft. 0 in.	3 ft. 6 in.	1 ft. 0 in.	0 ft. 1 in.
751 to 15 kV	10 ft. 0 in.	5 ft. 0 in.	2 ft. 2 in.	0 ft. 7 in.
15.1 kV to 36 kV	10 ft. 0 in.	6 ft. 0 in	2 ft. 7 in.	0 ft. 10 in.
36.1 kV to 46 kV	10 ft. 0 in.	8 ft. 0 in	2 ft. 9 in.	1 ft. 5 in.

46.1 kV to 72.5 kV	10 ft. 0 in.	8 ft. 0 in.	3 ft. 2 in.	2 ft. 1 in.
72.6 kV to 121 kV	10 ft. 8 in.	8 ft. 0 in.	3 ft. 3 in.	2 ft. 8 in.
138 kV to 145 kV	11 ft. 0 in	10 ft. 0 in.	3 ft. 7 in	3 ft. 1 in.
161 kV to 169 kV	11 ft. 8 in.	11 ft. 8 in.	4 ft. 0 in.	3 ft. 6 in.
230 kV to 242 kV	13 ft. 0 in.	13 ft. 0 in.	5 ft. 3 in.	4 ft. 9 in.
345 kV to 262 kV	15 ft. 4 in	15 ft. 4 in.	8 ft. 6 in.	8 ft. 0 in.

Source: From a portion of table 2-1.3.4, Approach Boundaries to Live Parts for Shock Protection (NFPA 70E *Standard for Electrical Safety Requirements for Employee Workplaces, 2004 edition*).

9.4 Responsibilities

9.4.1 Employer: Shall ensure only qualified, trained employees are permitted within the approach boundaries. Shall ensure all employees are properly trained for the work activities they will be performing.

9.4.2 Employee: Shall notify supervision upon encountering any job function for which they have not been adequately trained, prior to performing the activity.

9.5 Attachments

9.5.1 Energized Work Permit rev.1.

10.0 Lock Out/Tag Out Policy

10.1 Purpose

10.1.1 This policy establishes the procedures to protect employees and others from aberrant energy while work related tasks are being performed.

10.2 Scope

10.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiaries that perform any type of work activities where the below outlined aberrant energy has the potential to cause harm or injury to any person while the work activity is being performed.

10.3 General Requirements

10.3.1 The types of energy which fall under this policy are electrical, mechanical, hydraulic, pneumatic and gravity. These types of energy are considered aberrant when not harnessed via proper lockout.

10.3.2 LO/TO shall be used whenever work is to be performed on a piece of equipment or location where aberrant energy has the potential to be released and cause harm or injury to the employee performing the work or anyone else.

10.3.3 Locks shall be used to secure the positive mechanical switch or device which is preventing the energy from becoming aberrant. Locks shall be standard in type and appropriate for the device it is affixed to. Locks shall be durable and able to withstand weather and prolonged use. Locks shall be supplied by the Moro Corp. Subsidiary, at no time can a personal lock or device be substituted for a company lock.

10.3.4 Tags shall be used to identify the responsible party that has locked out the energy. The tag shall be affixed in such a way that it is easily identifiable at the source of the energy. Tags shall be legibly printed with the name of the employee and any pertinent information relating to the job. Tags shall be of durable material able to withstand weather and not degrade over time.

10.3.5 The key to the lock in place shall remain with the employee performing the work at all times. The only additional key allowed is to be kept in the possession of the supervisor of the employee who is performing the work. There must be a practical reason for the supervisor to have a key to the lock and it must be approved prior to work commencing.

10.3.6 Only the employee who placed the affixed the lock shall remove the lock. In certain instances it is acceptable to have the employees' supervisor remove the lock if the employee is not available once the job is complete or in case of emergency. These instances must be identified and discussed prior to work commencing when practical.

10.3.7 Only employees trained in the specific Moro Corp. Subsidiary LO/TO plan may perform LO/TO activities.

10.3.8 A log book shall be maintained which documents all LO/TO activities performed on a specific job or location such as at the shop. This log book must be updated immediately following the LO/TO activities.

10.4 Responsibilities

10.4.1 Employer: Provide all associated LO/TO Equipment to employees. Institute a specific LO/TO Plan for the types of work anticipated to be performed. Train all affected employees to the specific plan instituted. This training shall be performed annually as well as immediately after hire for new employees. This training shall be documented.

10.4.2 Moro Corp. Subsidiary Employees: Perform all LO/TO activities in strict accordance with the specific plan you have been trained in.

10.5 Attachments

10.5.1 None.

11.0 Working at Heights – Fall Protection Policy

11.1 Purpose

11.1.1 This policy establishes the procedures to protect employees that are exposed to heights while performing their assigned tasks.

11.2 Scope

11.2.1 This policy covers all Moro Corp. employees who are exposed to working at heights in the course of their assigned duties.

11.3 General Requirements

Fall Protection

11.3.1 The standard Moro Corp. policy is 100% tie-off 100% of the time when an employee is exposed to an unprotected fall hazard of 6' or greater in height.

11.3.2 Where possible, all leading edges or fall hazards shall be protected by guardrails, walls or other means to prevent an employee from falling.

11.3.3 All employees, when exposed to a fall of 6 foot or greater, shall wear a full body harness with appropriate lanyard(s). The full body harness lanyards and connection points shall be as provided under Federal, State and or Local safety related laws or regulations. The lanyard(s) shall be securely attached to the employees harness and appropriate connection point 100% while the exposure exists.

11.3.4 Each employee shall be trained in the proper use and fitting of all fall protection equipment (i.e. harnesses, lanyards, tie-off devices).

11.3.5 The Moro Corp. Subsidiary shall verify compliance of the training program for each employee who might be exposed to fall hazards by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer.

11.3.6 All fall protection equipment shall be inspected by the user prior to each use.

11.3.7 The lanyard shall be securely attached to the employee and an approved attachment point 100% of the time and shall allow a maximum free fall distance of six feet. Where mobility is needed a double-lanyard shall be used so the employee can move about without being unprotected at any point.

11.3.8 A full body harness shall also be worn an properly attached with a lanyard to an appropriate tie-off point when working out of extending and articulating boom platforms, scissor lifts and / or suspended scaffolds.

Ladders

11.3.9 All ladders shall be inspected prior to each use by the employee.

11.3.10 A frame / step ladders shall be only used in the open position per manufacturer's recommendations.

11.3.11 There shall be no standing on the top two steps of a step ladder.

11.3.12 Ladders, both straight and extension, shall be secured at the top by a proper means of tie off. The bottom must be placed on a firm footing. Any chance the bottom could kick out, then the bottom shall be toe-kicked, or staked, depending on the ground conditions.

11.3.13 All ladders and step ladders shall have safety shoes.

11.3.14 Only fiberglass ladders are permitted. At no point may a 'Job-Built' ladder be used.

11.3.15 Ladders used to gain access to an elevated platform or another floor shall extend a minimum of three feet above the floor level, and not to extend past five feet.

Scaffolding

11.3.16 Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling or alteration. Such activities shall be performed only by experienced and trained employees selected for such work by the competent person.

11.3.17 Ladders and make shift boxes shall not be used on scaffolds to gain additional height.

11.3.18 Each employee working on a scaffold 6' or higher than the level below them, shall be protected from falling to the lower level.

11.3.19 Guardrail systems shall be installed along all open sides and ends of platforms. Guardrail systems shall be installed before the scaffold is released for use by employees other than erection/dismantling crews.

11.3.20 Where proper guardrails are not present on the scaffold, each employee shall wear full body harnesses and be properly secured to an appropriate anchor point by a lanyard.

11.4 Responsibilities

11.4.1 Employee: Visually inspect all PFAS equipment prior to every use.
11.4.2 Employer: Perform annual, documented inspections of all PFAS equipment. Harnesses and lanyards shall be replaced after 5 years of service.
11.4.3 Employee: Visually inspect all ladders prior to every use.

11.4.4 Employer: Perform quarterly, documented inspections of all ladders.

11.5 Attachments

11.5.1 None.

12.0 Personal Protective Equipment Policy

12.1 Purpose

12.1.1 This policy establishes the procedures to protect all Moro Corp. and Moro Corp. Subsidiary employees from injury through the use of PPE. This is especially critical in the case of a hazard that is not able to be controlled by other means.

12.2 Scope

12.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees at all times while performing work or in near proximity to work being performed.

12.3 General Requirements

12.3.1 Required personal protective equipment (PPE) shall be provided by the Moro Corp. Subsidiary, at no cost to employees.

12.3.2 Each Moro Corp. employee is responsible for the care, cleaning and maintenance of all PPE provided to them.

12.3.3 Each Moro Corp. Subsidiary employee shall be trained on the proper selection, use, care, maintenance, and the limitations of PPE by the Moro Corp. Subsidiary.

12.3.4 Long pants are required at all times while at work. Shirts may have short sleeves, however no tank tops or cut off shirts are permitted.

12.3.5 Safety shoes are required at all times when performing work or in near proximity to work being performed. Safety Shoes shall include toe protection, either composite or metal (where permissible) of either a c40 or c75 rating, have a distinct sole with adequate tread and be of durable construction. Safety shoes shall be securely laced at all times, broken or defective laces shall be replaced immediately. When an electrical shock hazard can be reasonably expected to be present, all affected employees' safety shoes shall also be the type which protect from electrical hazards. This designation is generally denoted on the safety shoe with the letters 'EH' on the label.

12.3.6 Safety glasses shall be worn at all times when on an active construction site, regardless of work being performed or not. Safety glasses shall be worn at all times when an employee is at risk of impact to the eyes from objects or contamination from debris regardless of the nature of the worksite. Safety glasses must meet the ANSI Z87.1 rating and be clearly stamped denoting such from the manufacturer. Safety glasses must have attached side shields or be curved in nature so as to protect the eyes from side impact or debris. Dark or mirrored safety glasses shall not be worn indoors; only clear, yellow or indoor/outdoor

12.3.7 Gloves of the appropriate type shall be worn at all times when a cut hazard exists due to handling exposed, sharp edges of material. Additionally gloves may be

worn as cold weather protection as long as the wearing of them does not increase any safety hazards.

12.3.8 Hardhats shall be worn at all times by all employees on all construction sites, active or in-active.

12.3.9 Fluorescent safety vests with a reflective stripe shall be worn at all times by all employees, actively working or not, when the worker is exposed to pedestrian vehicle traffic or is in close proximity to any construction heavy equipment, such as an excavator or bucket loader. Fluorescent Safety Vests which meet the ANSI Type 3 standard shall be worn at all times by all employees involved in any 'Road Work' job.

12.3.10 Hearing protection shall be worn by all employees when worksite noise levels are above 85dBA. See section 24.0 of this policy for the Moro Corp. Hearing Conservation Policy.

12.3.11 Sunscreen & insect repellant shall be used when working in an environment where insect bites or stings can be reasonably expected to occur, based on the time of year.

12.3.12 For welding and hot work related PPE requirements, see section 13.0 of this policy for the Hot Work Policy.

12.3.13 For respiratory protection guidelines (Respirator use), see section 8.0 of this policy for the Moro Corp. Respiratory Protection Policy.

12.3.14 For FR rated clothing (Fire Resistant Clothing), see section 9.0 of this policy for the Electrical Safety Policy.

12.4 Responsibilities

12.4.1 Employee: Shall wear required PPE at all times, where appropriate based on the hazards present.

12.4.2 Moro Corp. Subsidiary: Shall supply, at no cost to the employee, all PPE required to safely perform all job related duties.

12.5 Attachments

12.5.1 PPE Matrix Template

13.0 Hot Work Policy

13.1 Purpose

13.1.1 This policy establishes the procedures to protect employees who perform welding, burning, cutting, brazing or torch work.

13.2 Scope

13.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees who perform any type of hot work as part of their job tasks. Hot work includes welding, brazing, torch use and any open flame tool.

13.3 General Requirements

13.3.1 A specific Hazard Analysis (JHA) shall be performed prior to the hot work commencing. All employees involved in the hot work or working near the hot work shall be included in the Hazard Analysis.

13.3.2 As required by the controlling employer (General Contractor or Construction Management Co.), a Hot Work Permit shall be completed, prior to work commencing and in accordance with all specifications provided by the controlling employer.

13.3.3 Where a Hot Work Permit is not required by a controlling employer, the Moro Corp. Subsidiary Hot Work Permit shall be completed prior to work commencing and posted at the work location where the hot work is to be performed.

13.3.4 A competent person shall be designated as Fire Watch for the entire duration of the hot work and remain on Fire Watch for a period of no less than 30 minutes upon completion of the hot work.

13.3.5 Where required by city or state regulation, the Fire Watch as well as the person performing the hot work may be required to possess a Certificate of Fitness to perform the duties involved at that specific location.

13.3.6 A safe area exclusion zone shall be established, where feasible, of at least 35 feet. All combustible or flammable material within the safe area shall be either removed or covered with a protective blanket prior to work commencing. Floors shall be swept clear of possible combustible material within the designated safe area prior to work commencing.

13.3.7 At least one 10lb fire extinguisher of the proper type shall be available and located at the location of the hot work. The fire extinguisher must be readily available to the fire watch as well as the employee performing the hot work. All employees involved shall be trained in the proper use of fire extinguishers prior to work commencing.

13.3.8 In locations where a working fire alarm is present, all employees involved shall be familiar with the locations of the nearest pull stations.

13.3.9 All tools, equipment and PPE used in the performance on all hot work shall be inspected prior to and following use. All tools, equipment and PPE shall be in proper working order. Any tools or equipment in need of repair or replacement shall be immediately removed from service and tagged out, indicating the reason. All welding leads shall be free of defects, abrasion or repair.

13.3.10 An approved welding curtain or other shielding device shall be in place prior to work commencing whenever there is the chance that an employee or other person may make visual contact with the welding operation.

13.3.11 Upon completion of the hot work, all tools and material used in the performance of the job shall be cleaned up and secured in the proper location.

13.3.12 All cylinders shall be secured upright by chain or clamp at all times. Cylinders may be temporarily secured to a cart when in use, they must be returned to the permanent storage location upon completion of hot work.

13.4 Responsibilities

13.4.1 Employee: Ensure all necessary precautions are in place prior to commencing work.

13.4.2 Fire Watch: Maintain watch for entirety of hot work and at least 30 minutes after the hot work has been completed.

13.5 Attachments

13.5.1 Moro Corp. Hot Work Permit.

14.0 HazCom Policy

14.1 Purpose

14.1.1 The purpose of this Written Hazard Communication program is to ensure that:

- Hazardous substances present in the work place are properly identified and labeled.
- Employees have access to information on the hazards of these substances.
- Employees are provided with information on how to prevent injuries or illnesses due to exposure to these substances.

14.2 Scope

14.2.1 This policy applies to the use of any hazardous substance which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency

14.3 General Requirements

14.3.1 All hazardous substances present in the work place must be properly identified and labeled.

14.3.2 **Labeling:**

14.3.2.1 The Moro Corp. Subsidiary designated employee is responsible for evaluating labels on incoming containers. Each label must contain the following information:

1. Identity of the substance.
2. Appropriate hazard warning.
3. Name and address of the manufacturer.

14.3.2.2 If the label is not appropriate, the Moro Corp. Subsidiary designated employee shall notify the manufacturer (or supplier) that the label is not adequate.

1. The Moro Corp. Subsidiary designated employee is responsible for preparing an appropriate label if one is not supplied by the manufacturer within 30 days.
2. A container will not be released for use until an appropriate label is affixed to the container.

14.3.2.3 Labels will be removed if they are incorrect. When a container is empty, it may be used for other materials provided it is properly cleaned and re-labeled.

14.3.2.4 Defacing labels or using them improperly is prohibited.

14.3.2.5 Unlabeled portable containers, such as pails and buckets, should be used by one employee and emptied at the end of each shift. If the secondary containers are used by more than one employee and/or its contents are not emptied at the end of the shift, the department supervisor is responsible for labeling the container with either a copy of the original label or with a generic label which has a space available for appropriate hazard warnings.

14.3.3 **Material Safety Data Sheets:**

14.3.3.1 MSDS's will be available to the employees on all hazardous substances to which there is potential for actual exposure. A product will not be released for use until a completed MSDS is on file.

1. If the MSDS is not available, the Moro Corp. Subsidiary designated employee will notify the manufacturer that MSDS is needed.

2. The Moro Corp. Subsidiary designated employee will send a second request to the manufacturer if the MSDS is not received within 30 days.

14.3.3.2 The Moro Corp. Subsidiary designated employee is responsible for the review of all incoming MSDS's. If the MSDS is not complete, it will be returned to the manufacturer with a request for the missing information.

1. The Moro Corp. Subsidiary designated employee will send a second request for the missing information if a complete MSDS is not received within 30 days.

14.3.3.3 All MSDS's shall be kept in the MSDS binder. The MSDS Binder shall be stored in a conspicuous location and available to all employees at all times.

14.3.4 **Employee Training**

14.3.4.1 Prior to starting work with hazardous substances, each Moro Corp. Subsidiary employee will attend a Hazard Communication Training Session where they will receive information on the following topics:

1. Policies and procedures related to the Hazard Communication Standard.

2. Location of the written Hazard Communication Program.

3. How to read and interpret an MSDS.

4. Location of MSDS's.

5. Physical and health hazards of hazardous substances in their work area.

6. Methods and observation techniques to determine the presence or release of hazardous chemicals.

7. Work practices that may result in exposure.

8. How to prevent or reduce exposure to hazardous substances.

9. Personal protective equipment.

10. Procedures to follow if exposure occurs.

11. Emergency response procedures for hazardous chemical spills.

14.3.4.2 Upon completion of the training program, each employee will sign a form documenting that he/she has received the training.

14.3.4.3 When a new substance is added to the inventory list, the Moro Corp. Subsidiary designated employee is responsible for reviewing the MSDS for potential health effects. If the product presents a new health hazard (causes health effects unlike those covered in the training session), the Moro Corp. Subsidiary designated employee is responsible for notifying all affected employees about the new health effects which result from exposure to the new substance.

14.3.5 **Emergency Response Procedures for Hazardous Chemical Spills:**

14.3.5.1 When a hazardous chemical spill occurs, follow these procedures:

1. Move all employees away from spill to a safe environment.

2. Call 911 or the designated emergency response number in your area to notify the necessary response team for the hazardous chemical spill.

3. Retrieve the Hazard Communication Information Binder, if possible.

4. Locate the MSDS for the hazardous chemical which spilled.

5. If requested, provide the MSDS to the Emergency Response Team.

Note: Do not try to contain the spill. The Emergency or Hazardous Material Response Team is trained to deal with hazardous chemical spills.

14.3.6 **Program Evaluation:**

14.3.6.1 The Moro Corp. Safety Director will conduct an evaluation of each Moro Corp. Subsidiary Hazard Communication program annually. The individual Moro Corp. Subsidiary Designee responsible for the items identified for improvement will be notified in writing.

14.4 Responsibilities

14.4.1 Employee: Report all spills to supervision immediately, regardless of size of spill.

14.4.2 Employer: Ensure that all new employees or transferred employees have received Haz Com training prior to commencing work activities.

14.5 Attachments

14.5.1 None.

15.0 Safety Training Policy

15.1 Purpose

15.1.1 This policy establishes the procedures to ensure all Moro Corp. and Moro Corp. Subsidiary employees are adequately trained for the safe performance of their job duties. Additionally this policy outlines the process by which all employees receive the required annual safety training as specified by the Moro Corp. Safety Director each year.

15.2 Scope

15.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees, both field based and shop or home office based.

15.3 General Requirements

15.3.1 All Moro Corp. and Moro Corp. Subsidiaries shall have all new hire employees attend a New Hire Safety Orientation prior to performing any work related job activities.

15.3.2 All new hire employees shall receive a copy of their respective Moro Corp. Subsidiary Employee Handbook upon hire.

15.3.3 All Moro Corp. and Moro Corp. Subsidiaries shall perform all required annual safety training for their respective employees. The safety training topics which are deemed 'Required Annual Training' will be communicated to all Moro Corp. Subsidiaries by the Moro Corp. Safety Director every January.

15.3.4 All Moro Corp. Subsidiaries shall establish a Monthly Safety Training Program. Topics shall be disseminated in advance by the Moro Corp. Safety Director. The Moro Corp. Safety Director will periodically attend the Monthly Safety Training sessions for review. Examples of Monthly Safety Training topics include:

- Fall Protection
- Ladder Safety
- Hazcom (Hazard Communication)
- Bloodborne Pathogens
- Ergonomics
- Hand & Power Tool Safety
- Safe / Defensive Driving
- Electrical Safety
- PPE

15.3.5 Toolbox Talks are considered an integral part of all field job activities. They are regular, informal discussions of work related safety topics which take place at the location of the job being performed. They are also an integral part of the overall Safety Training Program. Occasionally Toolbox Talks shall be on specific topics

designated and outlined by the company; this enables field-based employees to remain compliant with required safety training. All field activities shall include Toolbox Talks which shall be documented with sign-in sheets which will include the title of the topic discussed.

15.3.6 All safety training sessions shall have a Sign-in sheet. All employees in attendance shall sign the sign-in sheet with their signature acting as proof of attendance. All completed sign-in sheets shall be filed and kept at the home office of the respective Moro Corp. Subsidiary for a minimum of 5 years. Copies of completed sign-in sheets shall be furnished to the Moro Corp. Safety Director for review upon request.

15.3.7 Tests and quizzes may be used to assess the retention by employees of material covered during safety training sessions. When tests or quizzes are used, they shall be collected upon completion and filed with the sign-in sheet.

15.3.8 Instructor assessment may be used in place of tests or quizzes to determine material retention by employees.

15.3.9 Each Moro Corp. Subsidiary shall appoint a specific Safety Coordinator. The Coordinator shall review the material prior to the training session and be thoroughly familiar with the material. Generally this person will be a supervisor however any employee may serve as the designated Safety Trainer. The Safety Trainer may be designated for any length of time, generally it is a best-practice to designate an employee who possesses some expert knowledge relating to the specific line of work and has a desire to present safety related material to other employees.

15.3.10 All Moro Corp. Subsidiary employees, regardless of their specific role of job function shall attend the Monthly Safety Training sessions.

15.4 Responsibilities

15.4.1 Employer: Allow sufficient time for the designated Safety Trainer to review material and prepare any documentation needed for the Monthly Safety Training. Also the employer shall provide adequate space for the Monthly Safety Training session to take place.

15.4.2 Employee: Attend all arranged Monthly Safety Training as well as all field Toolbox Talks. Full attention must be given to all safety training. All sign in sheets must be signed following all safety training sessions.

15.4.3 Designated Safety Coordinator: Review all Monthly Safety Training topic material prior to training session. Attempt to anticipate any employee questions which may arise during the training session. Contact the Moro Corp. Safety Director with any questions or concerns related to the training material.

15.5 Attachments

15.5.1 None.

16.0 Accident Investigation & Reporting Policy

16.1 Purpose

This policy establishes the procedure by which all Moro Corp. Subsidiaries shall investigate all work related accidents, and properly report those results.

16.2 Scope

This policy covers all work related accidents and injuries to any employee or property of Moro Corp. or any Moro Corp. Subsidiary. Work related accidents can involve employees as well as company property or material.

16.3 General Requirements

16.3.1 Each Moro Corp. Subsidiary shall designate a Safety Coordinator. One role of the Safety Coordinator shall be to investigate or oversee the investigation of all work related accidents or injuries.

16.3.2 Each Moro Corp. Subsidiary's designated Safety Coordinator shall contact the Moro Corp. Safety Director immediately following any reported work related accident or injury. The Safety Coordinator shall forward the results of the accident investigation along with all pertinent documentation to the Moro Corp. Safety Director in addition to any other department involved in the incident (such as H.R.), upon completion of the accident investigation.

If a worker is initially treated with first aid, yet later seeks medical treatment, the Safety Coordinator shall advise the medical provider.

16.3.3 The process for attending to, investigating and reporting all work related accidents or injuries shall be as follows:

1. The employee reports a work related accident / incident to their company, who would then have the designated Site Safety Representative contact the Moro Corp. Safety Director via email or direct phone call.

2. Have the most qualified person available administer first aid if possible, to the best of their training.

3. Arrange for transportation for the injured employee to seek medical treatment if required (Do not allow the injured to drive themselves). Calling 911 is often the best option.

4. Ensure that the medical provider is given the correct Workman's Compensation Insurance providers name, address, and contact phone number.

5. Eliminate the hazard if possible or guard the accident scene if worker is critically injured.

6. Investigate the cause of the accident and report findings in the Moro Corp. Accident/Incident Report Form. Ensure all areas of the form are completed with detailed information.

7. Report all accidents/incidents as follows:
   - Lost Time Injuries
   - Medical Aid
   - First Aid
   - Incidents and Near Misses

16.3.4 All incidents involving damage to Moro Corp. Subsidiary company property shall be investigated and reported to the Moro Corp. Safety Director, regardless of whether a personal injury was involved. An example of this is a motor vehicle accident where there was no injury to any employees involved, however there is damage to the Moro Corp. Subsidiary company vehicle.

16.4 Responsibilities

16.4.1 Employer: Ensure all accidents and incidents are properly investigated and all resulting corrective actions are implemented immediately.

16.4.2 Employee: Report all accidents and incidents to supervision immediately. Provide all pertinent information to the investigator upon interview.

16.4.3 Designated Safety Coordinator: Report all accidents and incidents to the Moro Corp. Safety Director immediately. Provide copies of all documentation pertaining to the accident investigation to the Moro Corp. Safety Director upon completion.

16.5 Attachments

16.5.1 Moro Corp. Accident Investigation Form.

17.0 Bloodborne Pathogens

17.1 Purpose

17.1.1 This guide will be used to limit occupational exposure to blood and other potentially infectious materials (OPIM) since any exposure could result in the transmission of blood borne pathogens which could lead to disease or death.

OSHA's current position (April 1994) is that the Construction Industry is not specifically covered by the Blood borne Pathogens Standard. However, OSHA may issue citations under the General Duty Clause – Section 5(a)(1), if a known exposure to blood borne pathogens exist, an exposure incident occurs and appropriate precautions or procedures for handling the exposure incident have not been developed and implemented.

17.2 Scope

17.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees who would be reasonably anticipated, as a result of performing their job duties, to face contact with blood or OPIM. Such acts as assisting a co-worker with a nosebleed would be considered occupational exposure.

17.3 General Requirements

17.3.1 Universal precautions shall be used to avoid contact with blood or OPIM.

17.3.2 Appropriate hand washing facilities and procedures shall be maintained. The standard allows the use of antiseptic cleansers along with disposable cloths, paper towels, or antiseptic towelettes when soap and water is not available. However, the employee should wash with soap and water as soon as feasible.

17.3.3 Appropriate personal protective equipment such as gloves, gowns, masks, mouthpieces, and resuscitation bags must be provided, maintained, cleaned, and replaced as necessary at no cost to the employee.

17.3.4 Infection control procedures shall be established in association with collection, handling, storage, and disposal of infectious waste.

17.3.5 Hepatitis B Vaccinations must be made available 10 working days before the initial assignment to every employee who has occupational exposure, at no cost, at a reasonable time and place, and supervised by a licensed physician/health care professional.

Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee.

First aid responders whose primary job responsibility is not rendering first aid, but who are designated by the employer to provide first aid assistances when

needed, are exempt from the requirement of being offered the pre-exposure hepatitis B vaccination.

Procedures to follow must be made available to all employees who have had an exposure incident. Any laboratory tests must be conducted by an accredited lab at no cost to the employee. Follow-up must include a confidential medical evaluation documenting circumstances of the exposure, identifying and testing the source individual if feasible, testing the exposed employees blood if he/she consents, post-exposure prophylaxis, and facilitation of post-exposure administration of the hepatitis B vaccination.

17.3.6 Disposal of waste requires warning labels including the orange or orange-red biohazard symbol be affixed to containers which are used to store or transport blood or OPIM. Red bags or containers may be used instead of labeling.

17.3.7 Medical records for each employee with occupational exposure must be kept for the employees' length of employment plus 30 years.

17.3.8 Training records must be maintained for three years and must include dates, content or summary of training, trainer's name and qualifications, names and job titles of all employees attending.

17.4 Responsibilities

17.4.1 Moro Corp. Subsidiary: Annual training shall be provided to all applicable employees.

17.4.2 Moro Corp. Subsidiary: Records shall be maintained by the employer as well as copies made available to Moro Corp. Safety.

17.4.3 Employee: Notify supervisor as soon as possible of any instance of possible Bloodborne Pathogen Exposure.

17.5 Attachments

17.5.1 None.

18.0 Material Handling & Rigging Policy

18.1 Purpose

This policy establishes the procedures to protect employees that handle and perform rigging operations of material.

18.2 Scope

This policy covers all Moro Corp. and Moro Corp. Subsidiary employees who handle or perform rigging operations of material in the course of performing their job activities.

18.3 General Requirements

18.3.1 Planning the Activity:

- Prior to starting any major rigging activity, a detailed plan must be developed that identifies any potential hazards and the preventative measures appropriate to eliminate the hazard.
- All written activity plans must include a complete listing of rigging needed to hoist materials and equipment. The competent person/lift director must be identified by the superintendent/site supervisor at the work location and shall be identified by name in the activity plan. The competent person/lift director must provide input into rigging/hoisting activities and approve activity plans involving rigging.
- All employees must be kept clear of loads about to be lifted and of suspended loads. Do not lift loads over personnel!
- Listed below are some items to consider when developing the activity plan.
  A. Proper rigging and inspection (see section 7.2).
  B. Identify competent person/lift director.
  C. Weight evaluation.
     - Crane/hoist capacity - load/list charts.
     - Combined weight of object and rigging.
  D. Proper crane setup (level, solid ground, etc.).
  E. How are hoisting devices to be installed (manually, chain falls, etc.)
  F. Engineering (is this a Critical Lift?)
  G. What other work is ongoing below or near the lift (consider barricades, team member alarm system, etc.)
  H. Are work locations near public or other areas where special precautions must be planned?

18.3.2 Competent Person/Lift Director:

- Identification of competent person/lift director - It shall be the responsibility of each project manager / site supervisor to ensure every work location/project activity has identified a competent person/lift director. This competent rigging person(s) must be identified by name for each activity involving the hoisting of materials and equipment where a load must be mechanically hitched or rigged and lifted. Written activity plans shall include naming the competent

person/lift director, a signature of the competent person/lift director and require an inspection to be conducted prior to all lifts. The competent person/lift director will have the authority to take prompt corrective measures to eliminate any unsafe condition.

- Competent Rigging Person – All activities involving the hoisting of materials and equipment where a load must be mechanically hitched or rigged and lifted will be done by a competent rigger. Persons who are not competent riggers can only rig under the direct supervision of a competent rigger.

18.3.3 Rigging Inspection and Use:

- All rigging equipment, (slings, shackles, chain falls / come-a-longs, plate grabs, sheet hooks, etc.), must be inspected before each use by a competent rigging person.
- All rigging equipment must be stored off the ground when not in use.
- Any lifting device used that does not have the manufacturer's certification must be certified by a registered professional engineer. Example: job built sorting/sheet hooks, lifting beams, welded pad eyes, etc.
- Use of (pelican) sorting hooks to rig loads is prohibited except when sorting sheets and like materials in a lay down yard area and when unloading or loading single pieces from truck to ground / ground to truck.
- Synthetic slings can be used with sorting hooks provided the sling doesn't come into contact with the load during the lift i.e. Double shackles with hooks.
- Shackles attached to scale pans, concrete buckets or other apparatus where they remain in place, shall require bolt type shackles or shall have the screw pins wired to prevent loosening.
- Every rigging activity must be supervised by a Competent Rigging Person.
- All heavy or complex rigging activities must be planned prior to the lift. Activity plans shall be developed and reviewed with crew.
- Any rigging incident or near miss must be reported, investigated and appropriate corrective actions taken. Report all incidents to supervision immediately.

18.3.4 Wire Rope Slings:

- Inspect slings prior to each use.
- Remove slings from service if any of the following are observed:
  - Manufacturer's name or trade mark, the rated capacities for each type of hitch must be legible.
  - Ten randomly distributed broken wires in one rope lay, or five broken wires in one strand in one rope lay.
  - Wear or scraping of one-third the original diameter of outside individual wires.
  - Kinking, crushing, bird caging or any other damage resulting in distortion of the wire rope structure.
  - Evidence of heat damage (remove from service if exposed to temperatures greater than 500°F. Fiber core wire rope slings shall be removed from service if exposed to temperatures greater than 200°F).
  - End attachments that are cracked, deformed or worn.
  - Hooks that have been opened more than 15 percent of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook.

- Corrosion of the rope or end attachments.

18.3.5 Synthetic Web Slings:

- Synthetic slings shall not be loaded in excess of their rated capacity. Consideration shall be given to the angle from the horizontal (sling to load angle) which affects rated capacities.
- Select proper sling having suitable characteristics for the type of load, hitch, and environment.
- Synthetic slings used in basket hitches shall have the load balanced to prevent slippage.
- Polyester round slings with cut covers exposing the load bearing yarns shall be removed from service.
- With a multi-sling bridal, each leg must have the capacity to carry ½ the load.
- To maintain an acceptable D/d ratio at the shackle pin use a shackle one size larger than the sling (i.e. with a 6400 # capacity web sling use a ¾" shackle with a capacity of 9500#).
- Width of attachment hardware (crane hook) cannot be more than 1/3 the length of the sling eye.
- Synthetic slings can be used in temperatures from -40F to +194F degrees.
- Wet synthetic slings shall not be used.
- Frozen synthetics shall not be used.
- Nylon and polyester are degraded in acid and alkalis environments, check with manufacturer if working in these areas.
- If a double wrap basket or double wrap choker hitch is used – ensure the 2nd wrap does not cross over the first on the bottom of the load. This condition prevents the hitch from equalizing and sharing the load.
- Hoist all loads slowly and smoothly to avoid shock loading.
- With multi leg lifts, keep sling angles (horizontal angles) at 60 degrees or greater.
- Do not use Synthetic slings in Basket hitches for load turning.
- Use Rigging Hardware with suitable contact width.
- Synthetic slings are NOT Field repairable, only manufacturer may repair.
- Capacities in choker hitch are rated at 120 degrees. For choker angles 90 to 120 = 87%, 60 to 89 degrees = 74%; 30 to 59 degrees = 62%; 0 to 29 degrees = 49%. Multiply capacity by appropriate %.
- 'Removal from Service' Criteria:
  - Tag is missing or not readable
  - Acid or alkali burns
  - Melting, charring, weld spatters (any heat damage) on any part of sling
  - Holes, tears, cuts, or embedded particles
  - Fittings that may be pitted, corroded, cracked, stretched, bent, twisted, gouged or broken
  - Knots in any part of sling
  - Excessive abrasive wear
  - Exposed core fibers (round slings)
- Sling Protection:
  - Riggers must prevent slings from cutting, leaving the actual materials in the riggers hands.

18.3.6 Welded Alloy Steel Chains:

- Frequent (daily – visual) and periodic (documented) inspections must be performed on all chains used for lifting. This includes chain falls, hoists, as well as multi-leg bridles.
- Ensure identification marking (tag) is affixed and shows size, grade, rated capacity, reach and sling manufacturer's name.
- Inspect chain hook retaining nuts, collars and pins, welds or riveting used to secure the retaining member.
- Hooks, rings, oblong links, pear shaped links, welded or mechanical coupling links or other attachments shall have a rated capacity at least equal to that of the alloy steel chain with which they are used or the sling shall not be used in excess of the rated capacity of the weakest component.
- Makeshift links or fasteners formed from bolts, cords or other such attachments shall not be used.
- Ensure that before using each new, repaired or reconditioned chain sling, including all welded components in the sling assembly, is proof tested by the sling manufacturer or equivalent entity.
- Remove chains from service if any of the following occur:
  - Slings are heated above 1000°F.
  - The chain size at any point of any link is less than that required by regulation (Reference 29 CFR 1926.251).
  - Chain links that are twisted, broken, cracked or otherwise damaged.

18.3.7 Periodic Inspections:

- A thorough inspection shall be performed at least once every 12 months.
- The assembly shall be removed from service: when excessive wear of chain, chain stretch and whenever excessive wear is found at any point of any link.
- Attention should be directed to the frequency of sling use, the severity of service conditions and the nature of the lifts being made.
- Equipment inspected will be tagged and the inspection documented on a log.
- When inspecting chains which are components of chain falls, come-a-longs or hoists, it is necessary to follow manufacturer's instructions for maintenance and inspection, plus:
  - Check braking mechanism for evidence of slippage under load.
  - Hooks damaged from chemicals, deformations, cracks or having more than 15 percent in excess of normal throat opening, or more than 10 degree twist from the plane of the unbent hook shall be removed from service. Hooks shall be free to rotate 360°.
  - All load bearing components of a hoist should be inspected for damage.

18.3.8 Spreader chain slings:

- Spreader Chain Slings will be limited, controlled and used for appropriate work activities.
- Safety hooks will be required with sure lock hooks or hooks with a heavy duty safety latch.
- The use of single-leg assemblies is prohibited.
- No field repairs or modifications will be allowed except for the replacement of a safety latch or hook.

18.3.9 Taglines:

- Taglines shall be used to control hoisted loads and materials whenever:
  - Controlling loads in windy conditions.
  - To keep long materials from swinging into the crane booms.
  - To keep loads/materials from swinging into power lines.
  - Maneuvering loads through or around tight spaces.
  - Anytime when working around traffic and pedestrians.
  - When performing steel erection.
  - When hoisting close to or onto scaffolds.
  - When hoisting suspended personnel platforms, if appropriate.
  - When a rotation of the load would be hazardous.
- Types of material used as Taglines:
  - Nonconductive line such as dry polypropylene rope only (when used around power lines).
  - Do not use electrical extension cords, wire, air hoses or lanyards used for fall protection.
  - No loops, hooks or knots on the ends of taglines (they can to catch on items).
- Length of Taglines:
  - Short enough so as not to get tangled on items being lifted over.
  - Long enough to handle bulky/long loads from the ground (100% control).
  - Long enough to control a load when landing.
- Securing to loads:
  - Use knots that can be easily untied.
  - Can use snap hooks on end of tagline to secure to load.
  - Tie to bolt holes in steel, to rigging on loads, or wrap around the loads.
- Handling Taglines:
  - Do not wrap the tagline around your hands, arms or body (You may find yourself going up with the load).
  - Additional taglines may be necessary to safely control the load.
    (Example: Have a tagline on each end of a girder where one employee would be pulling in one direction and the second employee would guide the load in a different direction).
- Storing Taglines
  - Coiled up in rigging storage area.
  - Inside compartments of cranes, boom trucks and other lifting equipment.
  - Send taglines with rigging.
  - Store & inspect taglines as part of your rigging.

18.4 Responsibilities

18.4.1 Competent person: Shall be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to team members, and shall have the authorization to take prompt corrective measure to eliminate those hazards. The competent person in charge of the lift is the lift director.

18.4.2 Signal Person: Shall be designated to signal the crane operator, to keep an eye on obstructions and to assist the operator in making the hoist.

18.5 Attachments

18.5.1 None.

19.0 Tool & Equipment Use Policy

19.1 Purpose

19.1.1 This policy establishes the procedure for the safe use of any power or hand operated tools or equipment.

19.2 Scope

19.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary Employees, both in the field and at their shop locations who use any power or hand operated tools or equipment.

19.3 General Requirements

19.3.1 Guidelines for Safe Tool Use

- **Select the Right Tool for the Job:** Examples of unsafe practices are: Striking hardened faces of hand tools together (such as using a carpenter's hammer to strike another hammer, hatchet, or metal chisel), using a file for a pry, a wrench for a hammer, using a 'cheater', and pliers instead of the proper wrench.
- **Keep Tools in Good Working Condition:** Wrenches with cracked work jaws, screw drivers with broken points or broken handles, hammers with loose heads, dull saws, and extension cords or electric tools with broken plugs, improper or removed grounding prongs, or split insulation are examples of tools in poor conditions. Tools that have deteriorated in this manner must be taken out of service.
- **Use Tools the Right Way:** Screw drivers applied to objects held in the hand, knives pulled toward the body, and failure to ground electrical equipment are common causes of accidents.
- **Place/Keep/Store Tools in a Safe & Secure Place:** Many accidents have been caused by tools falling from overhead and by knives, chisels, and other sharp tools carried in pockets or left in tool boxes with cutting edges exposed. Tools should be kept away from work bench edges.

19.3.2 Carrying Tools

- Employees shall not carry tools, which in any way could interfere with using both hands freely on a ladder or while climbing on a structure. A strong bag, bucket, or similar container is to be used to hoist tools from the ground to the job. Tools are to be returned in the same manner. Employees should never bring tools down by hand, carry in pant/shirt pockets, or dropped tools to the ground.
- Loose tools and tools laid inappropriately cause a substantial portion of hand tool injuries. Tools should not be left above where employees are moving or walking. This presents a falling object hazard.
- Chisels, screwdrivers, and pointed tools shall never be carried in an employee's pocket. They are to be carried in a tool box/cart, a carrying belt (sharp/pointed end down) like those used by electricians and steel

employees, a pocket tool pouch, or in the hand with points and cutting edges pointed away from the body.

- Employees carrying tools on their shoulders should pay close attention to clearances when turning around. Tools should also be handled so that they will not strike other employees or pedestrians.

19.3.3 Portable Electric Tools and Extension Cords

- Extension cords may only be used to provide temporary power.
- Portable cord-and-plug connected equipment and extension cords must be visually inspected before use on any shift for external defects such as loose parts, deformed and missing pins, or damage to outer jacket or insulation, and for possible internal damage such as pinched or crushed outer jacket. Any defective cord or cord-and-plug-connected equipment must be removed from service and no person may use it until it is repaired and tested to ensure it is safe for use.
- Extension cords must be of the three-wire type. Extension cords and flexible cords must be designed for hard or extra hard usage (for example, types S, ST, and SO). The rating or approval must be visible.
- Job-made extension cords are forbidden per the electrical code.
- Personnel performing work on renovation or construction sites using extension cords or where work is performed in damp or wet locations must be provided, and must use, a ground-fault circuit interrupter (GFCI).
- Portable equipment must be handled in a manner that will not cause damage. Flexible electric cords connected to equipment may not be used for raising or lowering the equipment.
- Extension cords must be protected from damage. Sharp corners and projects must be avoided. Flexible cords may not be run through windows or doors unless protected from damage, and then only on a temporary basis. Flexible cords may not be run above ceilings or inside or through walls, ceilings or floors, and may not be fastened with staples or otherwise hung in such a fashion as to damage the outer jacket or insulation.
- Cords must be covered by a cord protector or tape when they extend into a walkway or other path of travel to avoid creating a trip hazard.
- Extension cords used with grounding-type equipment must contain an equipment-grounding conductor (i.e., the cord must accept a three-prong, or grounded, plug).
- Attachment plugs and receptacles may not be connected or altered in any way that would interrupt the continuity of the equipment grounding conductor. Additionally, these devices may not be altered to allow the grounding pole to be inserted into current connector slots. Clipping the grounding prong from an electrical plug is prohibited.
- Flexible cords may only be plugged into grounded receptacles. The continuity of the ground in a two-prong outlet must be verified before use. It is recommended that the receptacle be replaced with a three-prong outlet. Adapters that interrupt the continuity of the equipment grounding connection may not be used.
- All portable electric equipment and flexible cords used in highly conductive work locations, such as those with water or other conductive liquids, or in places where employees are likely to contact water or conductive liquids, must be approved for those locations.

- Employee's hands must be dry when plugging and unplugging flexible cords and cord-and-plug connected equipment if energized equipment is involved.
- If the connection could provide a conducting path to employees hands (for example, if a cord connector is wet from being immersed in water), the energized plug and receptacle connections must be handled only with insulating protective equipment.

19.3.4 Temporary Lighting

- Lamps for general illumination must be protected from breakage, and metal shell sockets must be grounded.
- Temporary lights must not be suspended by their cords unless they have been designed for this purpose.
- Portable lighting used in wet or conductive locations, such as tanks or boilers, must be operated at no more than 12 volts or must be protected by GFCI's.

19.3.5 Hand Tools

19.3.5.1 Metal-Cutting Hand Tools

Chisels

- Factors determining the selection of cold chisels are the materials to be cut, the size and shape of the tool, and the depth of the cut to be made.
- The chisel should be made heavy enough so that it will not buckle or spring when struck.
- A chisel no larger than the material should be selected so that the blade is used rather than the point or corner. Also, a hammer heavy enough to do the job should be used.
- Employees are required to wear safety goggles when using a chisel and should set up a shield or screen to prevent injury to other employees from flying chips. If a shield does not give protection to all exposed employees, then all employees in the work area are required to wear glasses with side protection.

Tap and Die Work

- Tap and die work should be firmly mounted in a vise.
- Only a T-handle wrench or adjustable tap wrench should be used.
- When threads are being cut with a hand die, hands and arms should be kept clear of the sharp threads coming through the die, and metal cuttings should be cleared away with a brush.

Hack Saws

- Hacksaws should be adjusted in the frame to prevent buckling and breaking, but should not be tight enough to break off the pins that support the blade.
- Install blade with teeth pointing forward.
- Pressure should be applied on the forward stroke not on the back stroke.
- If the blade is twisted or too much pressure is applied, the blade may break and cause injury to the hands or arms of the user.

Files

- Selection of the right kind of file for the job will prevent injuries and lengthen the life of the file.
- The file should never be cleaned by being struck against a vise or other metal object due to file chips becoming possible flying debris.
- A file-cleaning card or brush should be used.
- A file is not to be hammered or used as a pry. Use of a file in this manner frequently results in the file chipping or breaking causing injury to the user.
- A file should not be made into a center punch, chisel, or any other type of tool because the hardened steel may fracture in use.
- A file is never to be used without a smooth, crack-free handle; if the file were to get hung up, the tang may puncture the palm of the hand, the wrist, or other part of the body.
- Under some conditions, a clamp-on raised offset handle may be useful to give extra clearance for the hands.
- Files are not to be used on lathe stock turning at high speed (faster than three turns per file stroke) because the end of the file may strike the chuck, dog, or face plate and throw the file (or metal chip) back at the operator hard enough to inflict serious injury.

Tin/Sheet Metal Snips

- Tin snips should be heavy enough to cut the material so easily that the employee needs only one hand on the snips and can use the other to hold the material.
- The material is to be well supported before the last cut is made so that cut edges do not press against the hands.
- Jaws of snips are to be kept tight and well lubricated.
- Employees are required to wear safety goggles when trimming corners or slivers of metal because small particles often fly with considerable force.
- Employees are also required to wear gloves when making cuts.

Cutters

- Cutters used on wire, reinforcing rods, or bolts should have ample capacity for the stock; otherwise, the jaws may be sprung or spread.
- Chips may fly from the cutting edge and injure the user.
- Frequently lubricate cutters.
- To keep cutting edges from becoming nicked or chipped, cutters are not to be used as nail pullers or pry bars.
- Cutter jaws should have the hardness specified by the manufacturer for the particular kind of material to be cut.
- By adjustment of the bumper stop behind the jaws, cutting edges are to be set to have a clearance of 0.003 inch when closed.

Cutting Hand Tools

Knives, Scrapers & Box Cutters

- Are to be used only by experienced employees.
- These tools are to be kept sharp and in good condition.

- The principal hazard in the use of knives is that hands may slip from the handle onto the blade or that the knife may strike the body or the free hand.
- Employees who must carry knives with them on the job shall keep them in sheaths or holders.
- Never carry a sheathed knife on the front part of a belt, but carry it over the right or left hip, toward the back. This will prevent severing a leg artery or vein in case of a fall.
- Knives should be stored safely and must never be left lying on benches or in other places such as being hidden under a product, under scrap paper or wiping rags, or among other tools in work boxes or drawers where they may cause hand injuries. Safe placing and storing of knives is one of the most important keys to knife safety.
- Supervisors must make certain that employees who handle knives have ample room in which to work so they are not in danger of being bumped by other employees.
- Knives are to be kept separate from other tools to protect the cutting edge of the knife as well as to protect the employee.
- Horseplay such as throwing knives, "fencing", trying to cut objects into smaller and smaller pieces, and similar practices are prohibited around any knife operations.
- Supervisors shall assure that nothing is cut that requires excessive pressure on the knife.
- Knives shall not be used as a substitute for can openers, screwdrivers, or ice picks.

19.3.5.2 Torsion Tools

Open-End or Box Wrenches

- Open-end or box wrenches shall be inspected to make sure that they fit properly and that the jaws are not sprung or cracked.
- When defective, the wrench is required to be taken out of service until repaired.

Adjustable Wrenches

- Adjustable wrenches are used for many purposes, but are not intended to take the place of standard open-end, box or socket wrenches.
- They are used mainly for nuts and bolts that do not fit a standard wrench.
- Pressure is always applied to the fixed jaw.

Pipe Wrenches

- Pipe wrenches, both straight and chain tong, shall have sharp jaws and be kept clean to prevent slipping.
- The adjusting nut of the wrench is to be inspected frequently, and taken out of service if cracked. A cracked nut may break under strain, causing complete failure of the wrench and possible injury to the user.
- A piece of pipe (also called a ‘cheater’) slipped over the handle shall not be used to give added leverage because this can strain a pipe wrench to the breaking point.

- The handle of every wrench is designed to be long enough for the maximum allowable safe pressure.
- A pipe wrench should never be used on nuts or bolts, the corners of which will break the teeth of the wrench, making it unsafe to use on pipe and fittings, and it also damages the nuts/bolts.
- A pipe wrench shall not be used on valves, struck with a hammer, nor used as a hammer.

Pliers

- Side-cutting pliers sometimes cause injuries when short ends of wires are cut.
- A guard over the cutting edge and the use of safety glasses will help prevent eye injuries.
- The handles of electricians' pliers are to be insulated. In addition, employees shall wear the proper electrical rated gloves if they are to work on energized lines.
- Pliers shall not be used as a substitute for a wrench.

Special Cutters for Banding Wire/Strap

- Special cutters include those for cutting banding wire and strap. Claw hammers and pry bars shall not be used to snap metal banding material.

Screwdrivers

- The practice of using screwdrivers for punches, wedges, pinch bars, or pry-bars shall not be allowed.
- Cross-slot (Phillips head) screwdrivers are safer than the square bit type, because they have fewer tendencies to slip. The tip must be kept clean and sharp, however, to permit a good grip on the head of the screw.
- The part to be worked upon must never be held in the hands; it should be laid on a bench or flat surface or held in a vise.
- No screwdriver used for electrical work shall have the blade or rivet extending through the handle. Both blade and handle shall be insulated except at the tip.

19.3.5.3 Shock Tools

Hammers

- A hammer is to have a securely wedged handle suited to the type of head used. The handle shall be smooth, without cracks or splinters, free of oil, shaped to fit the hand, and of the specified size and length. Employees shall be warned against using a steel hammer on hardened steel surfaces. Instead, a soft-head hammer or one with a plastic, wood, or rawhide head should be used. Safety goggles or safety glasses shall be worn to protect against flying chips, nails, or scale.

Riveting Hammers

- Riveting hammers, often used by sheet metal employees, must have the same kind of use and care as ball pen hammers and should be watched closely for cracked or chipped faces.

Carpenters or Claw Hammers

- The faces shall be kept well-dressed at all times to reduce the hazard of flying nails while they are being started into a piece of wood.
- A checker-faced head is sometimes used to reduce this hazard, do not alter the face of the striking head.

Spark-Resistant Hand Tools

- Around flammable substances, sparks produced by iron and steel hand tools can be a dangerous ignition source. Where this hazard exists, spark-resistant tools made from brass, plastic, aluminum, or wood will provide for safety.

19.3.5.4 Pneumatic and Hydraulic Tools

- Pneumatic tools are powered by compressed air and include chippers, drills, nail/staple/screw ‘guns’, hammers, and sanders.
- There are several dangers encountered in the use of pneumatic tools. The main one is the danger of getting hit by one of the tool's attachments or by some kind of fastener the employee is using with the tool.
- Eye protection is required and face protection (i.e.: Face Shield) is recommended for employees working with pneumatic tools.
- Working with noisy tools such as jackhammers requires proper, effective use of hearing protection.
- When using pneumatic tools, employees must check to see that they are fastened securely to the hose to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.
- A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel.
- Screens must be set up to protect nearby employees from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.
- Compressed air guns shall not be pointed toward anyone. Users should never "dead-end" it against themselves or anyone else.
- The operating trigger on portable hand-operated utilization equipment shall be so located as to minimize the possibility of its accidental operation and shall be arranged to close the air inlet valve automatically when the pressure of the operator's hand is removed.
- All pneumatically driven nailers, staplers, and other similar equipment provided with automatic fastener feed, which operate at more than 100 psi pressure at the tool shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.
- Compressed air shall not be used for cleaning purposes except with an air blow gun limited to 30 psi static pressure at the outlet nozzle and then only with effective chip guard and personal protective equipment.
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fitting shall not be exceeded.
- The use of hoses for hoisting or lowering tools shall not be permitted.
- All hoses exceeding 1/2-inch inside diameter shall have a safety device at the

source of supply or branch line to reduce pressure in case of hose failure.

- Airless spray guns of the type which atomize paints and fluids at high pressures (1,000 pounds or more per square inch) shall be equipped with automatic or visible manual safety devices which will prevent pulling of the trigger to prevent release of the paint or fluid until the safety device is manually released.
  In lieu of the above, a diffuser net which will prevent high pressure, high velocity release, while the nozzle tip is removed, plus a nozzle tip guard which will prevent the tip from coming in contact with the operator, or other equivalent protection shall be provided.

19.3.5.5 **Powder Actuated Tools**

- Powder Actuated Tools shall only be operated by employees who have received specific training in the use of that tool and has the certificate or card denoting such. The certificate or card must be issued from the training organization which performed the training.
- Warning signs shall be posted in the immediate work area indicating that a powder actuated tool is in use. These signs shall be placed approximately 50 feet away from the point of use of the tool.
- Used powder charge strips shall be disposed of in a container of water immediately upon use. The strips may be disposed of once they have been immersed in water for 24 hours.
- The opposing side of the wall or material shall be inspected and verified that no other employees or people are nearby.
- Hearing protection, eye protection and a face shield shall be worn by the employee operating the tool.

19.4 Responsibilities

19.4.1 Employer: Ensure all employees are properly and adequately trained in the use and hazard recognition of all tools which may be used in the performance of their jobs. Additionally; ensure all repairs to damaged tools are complete prior to the tool being released back to employees for use.

19.4.2 Employee: Employees must not use any tools or equipment which they are unfamiliar or not trained on. Employees must remove from service and tools or equipment immediately if the tool or equipment is found to be damaged or unsafe. Employees must report to supervision any tools which have been removed from service.

19.5 Attachments

19.5.1 None.

20.0 Excavation & Trenching Policy

20.1 Purpose

20.1.1 This policy establishes the procedures to protect all Moro Corp. employees during the performance of any excavating or trenching activities.

20.2 Scope

20.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiaries when involved in any excavating or trenching activities.

20.3 General Requirements

20.3.1 All excavation or trenching activities require a Competent Person be present while any work is being performed.

20.3.2 Excavations at or below 4' in depth shall be tested for the presence of hazardous gases using a calibrated 4 or 5 gas meter.

20.3.3 A ladder or other safe means of entry/exit shall be provided in excavations greater than 4' in depth and must not be further than 25' from workers in the excavation.

20.3.4 Classify the type of soils and rock deposits. The soil classification must be made by one visual and at least one manual analysis.

20.3.5 All excavations 4' or greater in depth shall be properly and adequately protected from cave-in or collapse by installing an approved trench box, shoring or sloping. Sloping shall be of at least 1.5 to 1 ratio. Benching shall only be instituted in type A or B soil.

20.3.6 Remove or secure any surface obstacles, such as trees, rocks, and sidewalks.

20.3.7 The excavation and adjacent areas shall be inspected at least once a day for possible cave- in's or failures of protective systems or equipment.

20.3.8 All excavated materials (spoils) shall be stockpiled no less than 2' from the excavation.

20.3.9 An incident response plan shall be in place prior to commencement of excavation, shoring and trenching operations. Additionally, equipment and materials identified in the incident response plan shall be available and in a safe operational state.

20.3.10 A process to inspect the site for the identification of underground services shall be in place before works begin, where deemed applicable. Plans detailing the location of underground services and field markings of such services shall be developed and used in the field

20.3.11 Any excavations which are believed to be closer than 5 feet to underground utilities, whether active or out of service, shall be hand located prior to the use of mechanical excavation.

20.3.12 Ensure water does not accumulate in an excavation or trench such that it causes a hazard to workers. After the accumulation of water in a trench has occurred, and prior to work continuing inside or adjacent to the trench, the trench shall be inspected by the competent person to determine if it is safe to work adjacent to the trench and/or is safe for entry.

20.3.13 All open, unmanned excavations or trenches shall be properly and adequately barricaded and signed at all times. The barricade must reasonably prevent anyone from accidently falling into the open area. Fence posts and orange construction fencing is considered an adequate barricade.

20.4 Responsibilities

20.4.1 Competent Person: The Competent Person shall ensure all shoring or sloping and air monitoring has been properly conducted, where necessary, prior to any Moro Corp. Subsidiary Employee entering any excavation or trench.

20.5 Attachments

20.5.1 None.

21.0 Documentation Archiving and Posting Policy

21.1 Purpose

21.1.1 This policy establishes the procedures for proper archiving and posting of applicable documentation.

21.2 Scope

21.2.1 This policy covers Moro Corp. and all Moro Corp. Subsidiaries.

21.3 General Requirements

Document Archiving

21.3.1 All records and documents pertaining to employee injury, illness or accidents shall be archived at the specific Moro Corp. Subsidiary, for a minimum of 5 years from the date of origination. This includes all medical records and workers compensation correspondence. After 5 years all documentation shall be forwarded to the Moro Corp. Safety Director for permanent archiving.

21.3.2 All OSHA inspection and violation correspondence shall be archived for a minimum of 5 years at the respective Moro Corp. Subsidiary. This includes the OSHA 300 log and summary.

21.3.3 All Moro Corp. accident/incident investigations, safety inspection, corrective actions and associated reports shall be archived for a minimum of 2 years at the respective Moro Corp. Subsidiary.

21.3.4 All employee medical surveillance records shall be archived indefinitely at the respective Moro Corp. Subsidiary.

21.3.5 All employee safety related disciplinary action records shall be archived for the entire length of employment of the employee, at the respective Moro Corp. Subsidiary.

Document Posting

21.3.6 All OSHA violations shall be posted at the location of the violation until the violation is corrected or for a minimum of three days if the correction is immediate.

21.3.7 The OSHA 300 Summary shall be posted annually from February 1st to April 30th of the following year covered by the Summary. The location of the posting shall be in a centrally located, conspicuous area which is accessible and known by all employees.

21.4 Responsibilities

21.4.1 Employer: Shall archive and post the respective documents as stated in this policy.

21.4.2 Designated Safety Representative: Shall update the current OSHA 300 Log when necessary as is outlined in the OSHA 300 Log Template and Instructions.

21.4.3 Employee: Review the posted OSHA 300 Log during the annual posting period.

21.5 Attachments

21.5.1 OSHA 300 Log Template and Instructions.

22.0 First Aid Kit Policy

22.1 Purpose

22.1.1 This policy establishes the procedure to ensure adequate first aid supplies are made available to all Moro Corp. and Moro Corp. Subsidiary employees.

22.2 Scope

22.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary work locations, both in the field and at their respective shops and home offices.

22.3 General Requirements

22.3.1 All work locations, both field and shop, shall be evaluated for injuries which can be reasonably anticipated to occur during the normal course of work activities.

22.3.2 All Moro Corp. Subsidiary company vehicles shall have a basic first aid kit located in the vehicle. The first aid kit shall be comprised of basic first aid items. Any additional items deemed necessary due to the nature of the work of the employee operating the company vehicle, shall be added to the kit at the company's expense.

22.3.3 All Moro Corp. Subsidiary shop locations shall have a basic first aid kit installed in the shop area and available to all employees. There shall be an additional kit installed for every 50 employees employed at that shop location.

22.3.4 All first aid kits shall be inspected quarterly and any items missing or low in quantity shall be purchased and re-stocked in the kit by the company.

22.3.5 Specialty first aid items such as insulin or prescription medication shall be the responsibility of the employee and not stored in the company first aid kits.

22.3.6 All first aid kits shall be available to all employees at all times. At no time may any first aid kit be locked, nor shall any employee be refused any items within the first aid kits within reason.

22.3.7 Theft of items from first aid kits or repeated abuse of first aid kits shall be reported to the Moro Corp. Safety Director for investigation.

22.4 Responsibilities

22.4.1 Employer: Conduct quarterly first aid kit inspections and re-stock kits as necessary.

22.4.2 Employee: Report all injuries to supervision in a timely manor.

22.5 Attachments

22.5.1 None.

23.0 Return to Work & Restricted Duty Policy

23.1 Purpose

23.1.1 This policy establishes the procedure to ensure a timely return to work for employees who were injured due to a work related cause.

23.1.2 This policy also establishes the procedure for those employees unable to return to full duty. A Restricted Duty' or 'Light Duty' position, when feasible, shall be made available so as to return the injured employee to the workplace in some capacity.

23.2 Scope

23.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees.

23.3 General Requirements

23.3.1 The accident investigation, if applicable, shall meet the requirements set forth in section 16.0 of this policy – the Accident Investigation and Reporting Policy.

23.3.2 All information, correspondence and documents containing employee medical information shall be kept confidential, with only the specific, required departments (Safety, Human Resources or respective Moro Corp. Subsidiary Management) to have access to this material.

23.3.3 Each respective Moro Corp. Subsidiary shall have the Designated Safety Representative, or appointed alternate coordinate all information correspondence between the injured employee, physician, Moro Corp. Safety Director, Moro Corp. Human Resources and insurance company. Additionally this person shall maintain contact with the injured employee while the injured employee is unable to return to work due to the injury. At a minimum a weekly phone call shall be arranged for status updates from the injured employee.

23.3.4 Employee's Physical Condition

- If professional medical treatment is sought, the employee shall inform the attending physician that the respective Moro Corp. Subsidiary has a return-to-work program with light duty/modified assignments available.
- The employee shall obtain a completed Job Description form (if available) from supervision. This shall be provided to the treating physician and should be returned to Personnel following the initial medical treatment.

23.3.5 Employee able to return to work

- If the attending physician releases the employee to return to work, as evidenced by completion of a Release to Return-to-Work form, the form shall be submitted to supervision within 24 hours for assignment of light duty/modified work. The employee must report for work at the designated time.

- The employee cannot return to work without a release from the attending physician.
- If the employee returns to a transitional/temporary job, the employee must make sure that he or she does not go beyond either the duties of the job or the physician's restrictions. If the employee's restrictions change at any time, he or she must notify his or her supervisor at once and give the supervisor a copy of the new medical release.

23.3.6 Employee unable to return to work:

- If the employee is unable to report for any kind of work, the employee shall call in at least weekly to report medical status to supervision.
- While off work, it is the responsibility of the employee to supply supervision with a current telephone number (listed or unlisted) and an address where the employee can be reached.
- The employee shall notify supervision within 24 hours of all changes in medical condition.

23.3.7 A 'Restricted Duty' or 'Light Duty' position, when feasible, shall be made available so as to return the injured employee to the workplace in some capacity. The position shall meet all restrictions imposed on job activities to be performed by the injured employee, by his or her physician.

23.3.8 Depending on company specific position descriptions, the Restricted Duty position may not always be at the same rate of pay as the normal position held by the injured employee.

23.3.9 Each respective Moro Corp. Subsidiary shall establish written Physical Demands Assessments for each individual position held by all employees at that Moro Corp. Subsidiary. The Physical Demands Assessment for any injured employee shall be furnished to the injured employees' physician so as to enable the physician to accurately project when the injured employee will be able to return to work.

The Moro Corp. Physical Demands Assessment template may be used by the Moro Corp. Subsidiary to perform the Physical Demands Assessments.

23.4 Responsibilities

23.4.1 Employer: Shall establish written Physical Demands Assessments for all positions.

23.4.2 Designated Safety Representative: Shall maintain regular contact with any injured employee for the duration of his time away from work.

23.5 Attachments

23.5.1 Moro Corp. Physical Demands Assessment Template.

24.0 Hearing Conservation Policy

24.1 Purpose

24.1.1 This policy establishes the procedure to protect the hearing of all Moro Corp. and Moro Corp. Subsidiary employees while performing job related tasks.

24.2 Scope

24.2.1 This policy covers all Moro Corp. and Moro Corp. Subsidiary employees who may encounter elevated noise levels while performing job related tasks.

24.3 General Requirements

24.3.1 Employees working in areas with noise levels equal to or greater than 85 dBA shall wear ANSI approved hearing protection at all times, regardless of exposure time.

24.3.2 Personnel working in noise levels equal to or greater than 110 dBA shall wear both ANSI approved earplugs and ANSI approved earmuffs, regardless of exposure time.

24.3.3 Employees shall not work in any environment were the noise level is equal to or greater than 140 dBA. When noise levels reach 140 dBA, the activities producing the noise or machinery / equipment causing the noise shall stop immediately. The supervisor shall investigate the source of the noise and implement engineering or administrative controls to eliminate or reduce noise levels prior to work commencing. If reducing the noise level to an acceptable level is not possible by this means then the Moro Corp. Safety Directly shall be contacted for further action.

24.3.4 Any activity or environment which yields dBA levels close to the cut-off limits may be investigated. This may be conducted by the use of calibrated dB meters with the results analyzed by the Moro Corp. Safety Director or a certified Industrial Hygienist.

24.3.5 Hearing protection including ear plugs and ear muffs shall be provided by the Moro Corp. Subsidiary to all affected employees.

24.4 Responsibilities

24.4.1 Employee: Wear proper hearing protection as needed or instructed by supervision. Report to supervision any work environments which may be over the 85 dBA threshold.

24.4.2 Employer: Provide appropriate hearing protection to all employees as needed. Investigate any instances of work environments which may require hearing protection or additional hearing protection.

24.5 Attachments

24.5.1 None.

APPENDIX

Section 6.0

Confined Space Training Guide

And

Confined Space Entry Permit

Confined Space Entry Training

- Hazard awareness
  - Hazardous Atmosphere (Toxic or Flammable)
  - Water intrusion
  - Injury while in a confined space
- Anticipated Confined Spaces
  - Manholes
  - Trenches
  - Tanks
  - Vaults
- Air testing
  - 4-gas meter
- Rescue equipment
  - Extraction devices (Tripod & Harnesses)
  - Communications (Radios)
  - Emergency notifications (Fire Dept.)
- Ventilation
  - Mechanical ventilation means (Blower) shall be available and used wherever deemed necessary and feasible by Supervisor.
- Signage & Barricades
  - Warning signs shall be posted outside entrance of confined space and shall remain until job is completed.
  - A barricade shall be erected where deemed necessary and feasible to limit access to entrance of confined space. If in place, the barricade shall remain intact until the job is completed.
- Entrant, Attendant & Supervisor Responsibilities
  - Entrant – Communicate with attendant, watch for signs or symptoms, properly use all required equipment.
  - Attendant – Communicate with entrant, do not leave area or enter the Confined Space, ensure no one interferes with equipment, call emergency contact when necessary, perform non-entry emergency rescue/retrieval if necessary.
  - Supervisor – Verify all conditions prior to entry, terminate entry upon completion of work or condition change, periodically conduct or review results of air monitoring.
- Permit Required vs. Non-Permit Required Confined Spaces
  - Permit Required – All confined spaces are to be considered Permit Required until investigation proves otherwise. Permit must be obtained through standard site protocol and signed by all Rondout employees involved. Permit must remain at entry location for duration of job.
  - Non-Permit Required -
- Rondout Electric Inc. HASP Guidelines for Permit Required Confined Space Work
  - Follows OSHA established standards (29CFR1910.146), for permit required confined space entry.

Rondout Electric Employee Record of Training

Training Curriculum: _____ Date: _____

Printed Name	Signature	Date

MoroCorp Permit-Required Confined Space Entry Permit

A. Space Description

1. Type of confined space _____
2. ID #_____
3. Location_____
4. Entry Purpose_____
5. Hazard Identification_____

6. Start Date _____
7. Start Time _____a.m./p.m.
8. Scheduled Expiration_____a.m./p.m.

B. Personnel

The following person(s) trained in confined space procedures are assigned work in connection with a confined space entry, in accordance with this permit:

9. Entrants: Name (Printed) Name (Printed)

_____

_____

10. Attendants: Name (Printed) Name (Printed)

_____

_____

C. Type of Entry

☐ 11. Permit-Required Confined Space (See Section G)

☐ 12. Alternate entry

a. _____All employees trained
b. _____Atmospheric hazard (identify)_____
c. _____Atmospheric data available
d. _____Ventilation and monitoring without entry
e. _____Space atmosphere tested/no hazardous atmosphere
f. _____Continuous ventilation during entry
g. _____Continuous monitoring during entry

☐ 13. Reclassify space from Permit to Non-permit

a. _____No atmospheric hazard present
b. _____All other hazards eliminated before entry (list)_____

_____

_____
Signature of Entry Supervisor

D. Safety Requirements

	Yes	No	Date/Time	Checked By
14. Area secured_____	____	____	_____	_____
15. Piping disconnected_____	____	____	_____	_____
16. Energy sources and mechanical hazards locked/tagged out_____	____	____	_____	_____
17. Cleaning (flushing/washing) done_____	____	____	_____	_____
18. Required purging or venting done_____	____	____	_____	_____
19. Sources of ignition controlled_____	____	____	_____	_____
20. Cutting, welding permit obtained_____	____	____	_____	_____
21. Use of hazardous or flammable materials approved_____	____	____	_____	_____
22. Other_____	____	____	_____	_____

E. Tests

Test must be taken in the following order: Test to be Taken	Limit	Test Results					Equip. Name	Serial No.	Cal. Date	Initials
23. % of OXYGEN (O_2)	19.5-23.5%									
24. % of LEL flammable concentrations	<10%									
25. CARBON MONOXIDE (CO)	<25 ppm									
26. HYDROGEN SULFIDE (H_2S)	<10 ppm									
27. OTHER										
28. TIME										

Note: Continuous/periodic tests shall be established before starting job. Any questions pertaining to test requirements, contact your supervisor, safety officer, or IU Environmental Health & Safety. Note hazardous conditions under Section A, #5.

F. Personal Protective and Safety Equipment

☐ 29. Retrieval line/hoist ☐ 30. Hard hat ☐ 31. Safety harness

☐ 32. Hearing protection ☐ 33. Eye/foot protection ☐ 34. Fire extinguisher

☐ 35. GFI In Wet Environment ☐ 36. Gas/Oxygen/Toxicity Detector(s) ☐ 37. Ventilation equipment

☐ 38. Respirators (specify): _____

☐ 39. Protective clothing (specify): _____

☐ 40. Gloves (specify): _____

☐ 41. Communication equipment (specify): _____

☐ 42. Others (specify): _____

G. Entry Procedures

☐ 43. Attendant understands duties ☐ 44. Entrant understands exit requirements

☐ 45. Attendant has communication to rescue personnel ☐ 46. Entrant has lifeline

☐ 47. Rescue plan is in place

☐ 48. Pre-Entry Briefing: I/We have reviewed this permit and are aware of the hazards and precautions necessary for performing the designated work in the confined space authorized by this permit: *(Signed by all entrants & attendants)*

Name (Signature) Name (Signature)

_____ _____

_____ _____

49. Certification: I certify that all existing and potential hazards have been evaluated, necessary protective measures have been taken, and acceptable environmental conditions exist:

Printed Name: _____ Signed: _____ Date: _____
(Entry Supervisor)

50. Emergency Phone Numbers **911** Other: Rescue Team _____ Police _____ Fire_____

51. Permit Cancelled/Closed at: _____ on: _____ by: _____
(Entry Supervisor)

Comments:

Section 7.0

Job Hazard Analysis (JHA)

And PPE Selection Form

MOROCORP	**JOB HAZARD ANALYSIS (JHA) AND PPE SELECTION FORM**	**MoroCorp Subsidiary Name:**

SECTION 1: JOB DESCRIPTION

Job/Task Being Evaluated: _____

Location/Area/Worksite: _____

JSA/JHA Completed By: _____

Signature of Person Completing Evaluation: _____ Date: _____

Health and Safety Approval: _____ Date: _____

New ☐ Review ☐

SECTION 2: BASIC HAZARD ASSESSMENT

This form may be used for multiple hazards that affect multiple body parts. For each hazard place an "X" in the "Basic Hazard" columns below.

BODY PART AFFECTED	**Impact**	**Penetration**	**Compression**	**Chemical**	**Heat / Cold**	**Harmful Dust**	**Laceration / Abrasion**	**Other**
Eyes								
Face								
Hands								
Body								
Head								
Other								

SECTION 3: SAFETY PRECAUTIONS/EQUIPMENT REQUIRED (check all that apply)

☐ A. Fire extinguisher (Type_____)
☐ B. Fire shield/curtain
☐ C. Foot Protection
☐ D. Gloves (Type_____)
☐ E. Safety glasses/face shield
☐ F. Body protection (Type_____)
☐ G. Hearing protection (Type_____)
☐ H. Fall protection / P.F.A.S.
☐ I. Respiratory protection (Type_____)
☐ J. Gas/oxygen detection
☐ K. Warning Signs/Barricade
☐ L. Standby Observer
☐ M. Spill Containment
☐ N. Lockout/Tagout
☐ O. Odor advisory
☐ P. Hot Work Permit
☐ Q. Energized Electrical Work Permit
☐ R. Confined Space Entry Permit
☐ S. Notify Security
☐ T. Other: _____

SECTION 4: JOB HAZARD ANALYSIS

Sequence of Job Steps	Potential Hazards	Choose Recommended Safety Precautions/Equipment Required from Above (List by Letter)

Employee Record of Training

Printed Name	Signature	Date

Section 9.0

Energized Electrical Work Permit

And Work Plan

ENERGIZED ELECTRICAL WORK PERMIT AND WORK PLAN

Rondout Electric

Section 1 - PROJECT INFORMATION

Rondout Project: _____ Date: _____

Building:	Room/Location:
Other:	

Section 2 - HAZARD ANALYSIS

Safety Hazard Review Checklist:

SAFE ACCESS TO WORKSITE

☐ Ladder ☐ Scaffolding ☐ Roof ☐ Sewer ☐ Vault/Manhole ☐ Suspended Ceiling ☐ Pit or Tunnel

POTENTIAL HAZARDS AND SAFEGUARDS

☐ Asbestos ☐ Biological Hazards ☐ Chemicals ☐ Compressed Gas ☐ Confined space or Permit required Confined Spaces

☐ Electrical: Power line Overhead ☐ Electrical: Wet environment ☐ Heat/cold stress

☐ Energized Equipment ☐ Mechanical ☐ Hydraulic ☐ Pneumatic ☐ Steam

☐ Excavation/Trenching ☐ Fall Hazards (work plan may be required) ☐ Fire Hazard ☐ Lead ☐ Noise

☐ Materials handling (forklift, lift, hoist, etc.) ☐ Overhead Hazard (possible impact or struck-by)

PERSONAL PROTECTIVE EQUIPMENT

☐ Ears ☐ Eyes ☐ Feet ☐ Hands ☐ Head ☐ Respiratory ☐ FR Protective Clothing/Gear

☐ Other_____

Electrical Energy Source Hazards for This Permit

Check all that apply

☐ 120 volts ☐ 277 volts ☐ 208 volts ☐ 240 volts ☐ 480 volts ☐ Greater than 600V ☐ DC

☐ Emergency Power ☐ Less than 50 volts (permit may not be required) ☐ Other (describe) _____

Justification for Energized (check applicable exemption)

☐ **EXEMPTION 1**

De-energizing introduces additional or increased hazards. Examples include interruption of life support equipment, deactivation of emergency alarm systems, shutdown of hazardous location ventilation equipment, or removal of illumination for an area.

☐ **EXEMPTION 2**

De-energizing is infeasible, as per the equipment owner or controlling entity, due to equipment design or operational limitations. Examples include testing of electrical circuits that can only be performed with the circuit energized, and work on circuits that form an integral part of a continuous industrial process that would otherwise need to be completely shut down in order to permit work on one circuit or piece of equipment.

☐ **EXEMPTION 3**

Live parts that operate at less than 50V to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs.

EXPLANATION:

Approach Boundaries to Live Parts for Shock Protections (NFPA 70E, Table 130.2 (C))

System Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
☐ Less than 50V	not specified	not specified	not specified
☐ 50V to 300V	3' 6" *	avoid contact	avoid contact
☐ 301V to 750V	3' 6" *	1' 0"	0' 1"
☐ 751V to 15 kV	5' 0" *	2' 2"	0' 7"
☐ 5.1kV to 35kV	6' 0" *	2' 7"	0' 10"
☐ 36.1kV to 46kV	8' 0" *	2' 9"	1' 5"
☐ 46.1kV to 72.5kV	8' 0" *	3' 2"	2" 1"
☐ 72.6kV to 121kV	8' 0" **	3' 3"	2' 8"
☐ 138kV to 145kV	10' 0" ***	3' 7"	3' 1"

* If any conductors are moveable, the limited approach distance is 10'.

** If any conductors are moveable, the limited approach distance is 10' 8".

*** If any conductors are moveable, the limited approach distance is 11' 0".

Multiply single phase voltages by 1.73 to obtain correct voltage level to be used (NFPA 70E C.2.11)

Limited Approach Boundary

Approach limit at a distance from a live part within which a shock hazard exists.

Restricted Approach Boundary

Approach limit at a distance from an exposed live part within which there is an increased risk of shock, due to electrical arc-over, combined with inadvertent movement, for personnel working close to the live part

Prohibited Approach Boundary

Approach limit to a live part within which work is considered the same as making contact with the live part

Flash Hazard Analysis (NFPA 70E.130.3 [A])

Flash Protection Boundary (check method used)

☐ 4' 0" (system less than 600 volts, with 0.1 second clearing time; Ibf<50kA, or 5000 A-sec)

☐ Other (please state the source or attach the work performed to derive the boundary).

Fault Clearing Device (name) _____ Description _____

Manufacturer/Model/Type _____

The person completing this section must complete the Authorization (Section 6)

Hazard/Risk Level Determination

Method Used:

☐ Available short circuit fault current is less than 10,000 amps. (Identify source of calculated value) _____

☐ From NFPA 70E Table 130.7(C) (9) (A)

☐ Other (describe) _____

Hazard/Risk Level: ☐ -1 ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4

At distance of: _____

Section 3 - PERSONAL AND OTHER PROTECTIVE EQUIPMENT

Personal Protective Equipment

Use NFPA 70E Table 130.7(C) (10) and check all that apply:

		CAL RATING		CAL RATING
☐ Pants	☐ FR Long Sleeve Shirt		☐ FR Flash Suit Pants	
☐ Natural Fiber Clothing	☐ FR Pants		☐ FR Hard Hat	
☐ Eye Protection	☐ FR Coverall		☐ FR Safety Goggles	
☐ Tee Shirt	☐ FR Jacket		☐ Arc-rated Face Shield	
☐ Long Sleeve Shirt	☐ FR Flash Suit Jacket		☐ Flash Suit Hood	
☐ Hearing Protection	☐ Leather Gloves		☐ Protective Footwear	

No jewelry or metal objects can be worn or carried in pockets while completing work requiring an energized work permit. This includes wedding rings, necklaces, watches, earrings, keys, coins, pocket knives, etc.

Other Protective Equipment

Insulated tools and equipment required per NFPA 70E Table 130.7(C) (9) (A)

☐ Insulated Tools ☐ Fiberglass-Reinforced Plastic Rods ☐ Rubber Insulating Equipment

☐ Fuse or Fuse Holding Equipment ☐ Portable Ladders ☐ Voltage Rated Plastic Guard Equipment

☐ Ropes and Hand Lines ☐ Protective Shields ☐ Physical or Mechanical Barriers

Section 4 - SITE CONTROL AND SUPPORT

Worksite Control

☐ Locked Access ☐ Barrier Tapes, Stanchions ☐ Other: _____

☐ Electrical Hazard Signs ☐ Attendant

Worker Support Required

☐ Safety Watch Required

Name of Safety Watch: _____

Means of emergency communication (check all that apply).

☐ Radio ☐ Cell Phone ☐ Phone

Section 5 - WORK SCHEDULE AND PERSONNEL

Schedule

Work Date: _____

Work Time: _____ to: _____

Personnel

QUALIFIED PERSON

☐ Performing Work ☐ Safety Watch

Reviewed Hazard Analysis ☐ Yes ☐ No

Completed Job Briefing ☐ Yes ☐ No

Agrees to Requirements ☐ Yes ☐ No

Name (PRINT LEGIBLY) _____

Signature _____ Date _____

QUALIFIED PERSON

☐ Performing Work ☐ Safety Watch

Reviewed Hazard Analysis ☐ Yes ☐ No

Completed Job Briefing ☐ Yes ☐ No

Agrees to Requirements ☐ Yes ☐ No

Name (PRINT LEGIBLY) _____

Signature _____ Date _____

SUPERVISOR

Prepared Hazard Analysis ☐ Yes ☐ No

Completed Job Briefing ☐ Yes ☐ No

Verified Employees are qualified to do this work ☐ Yes ☐ No

Name (PRINT LEGIBLY) _____

Signature _____ Date _____

NOTE:

If any unexpected energy is found, or equipment has been modified since the permit was issued, the permit is VOID.

Section 6 - AUTHORIZATION OF ENERGIZED ELECTRICAL WORK PERMIT

Project Manager or General Foreman

Completed and/or reviewed Flash Hazard Analysis ☐ Yes ☐ No

Comments:

Name (PRINT LEGIBLY) _____

Signature _____ Date _____

On-Site Supervisor Authorizing Work

Reviewed Flash Hazard Analysis ☐ Yes ☐ No

Agreed to Justification ☐ Yes ☐ No

Comments

Name (PRINT LEGIBLY) _____

Signature _____ Date _____

Manager Authorizing Work

Reviewed Flash Hazard Analysis ☐ Yes ☐ No

Agreed to Justification ☐ Yes ☐ No

Comments

Name (PRINT legibly) _____

Signature _____ Date _____

Morocorp Safety Director Comments:

Hazard Risk Category Classifications 600v and Below	Risk Category	Rated Gloves	Rated Tools	Protective Clothing Required
Panelboards Rated 240v and Below				
Breaker or fused switch operation w/ cover on	0	N	N	Shirt (short sleeve), Pants (long), Hard Hat, Safety Glasses
Breaker or fused switch operation w/ cover off	0	N	N	Shirt (short sleeve), Pants (long), Hard Hat, Safety Glasses
Opening hinge covers (to exposed live parts)	0	N	N	Shirt (short sleeve), Pants (long), Hard Hat, Safety Glasses
Panels/Switchboards Rated 240v & up to 600v (Molded Case Bkrs)				
Breaker or fused switch operation	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
600v Motor Control Centers				
Breaker or fused switch or starter operation with doors closed	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
Reading a panel meter while operating a meter Switch	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
600v Class Switchgear (with power bkrs or fused switches)				
Breaker or fused switch with door closed	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
Reading a panel meter while operating a meter Switch	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
Work on control circuits with energized parts 120v exposed	0	N	N	Shirt (long sleeve), Pants (long), Hard Hat, Safety Glasses
Panelboards Rated 240v and Below				
Work on energized parts, including voltage testing	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Remove/reinstall breaker or fused switch	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Removal of bolted covers (to exposed bare, energized parts)	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Panels/Switchboards Rated 240v & up to 600v (Molded Case Bkrs)				
Breaker or fused switch with cover off	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Working on energized parts, including voltage testing	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
600v Motor Control Centers				
Breaker or fused switch or starter operation with doors open	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Working on energized parts, including voltage testing 2	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Work on control circuits with energized parts 120v exposed	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Apllication of safety grounds, after voltage test	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Opening Hinge Covers (to exposed live parts)	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
600v Class Switchgear (with power bkrs or fused switches)				
Breaker or fused switch with cover off	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Working on energized parts, including voltage testing	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Work on control circuits with energized parts 120v exposed	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Insertion or removal(racking) of bkrs from cubicles doors closed	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Apllication of safety grounds, after voltage test	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Opening Hinge Covers (to exposed live parts)	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Other 600v Class (277v through 600v nominal) Equipment Lighting or Small Power Transformers (600v maximum)				
Removal of bolted covers (to exposed bare, energized parts)	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Working on energized parts, including voltage testing	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
Apllication of safety grounds, after voltage test	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Safety Glasses, Hard Hat
Opening Hinge Covers (to exposed live parts)	2	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, Hard Hat, Hearing Protection
600v Motor Control Centers				
Insertion or removal of individual starter (buckets) from MCC	3	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, FR Liner Hard Hat, Hearing Protection
Removal of bolted covers (to exposed bare, energized parts)	3	Y	Y	T-Shirt (short sleeve), Pants (long), FR Coveralls, Full Face Shield, FR Liner Hard Hat, Hearing Protection

Rated Gloves
Rated and tested for max. line to line voltage of work to be done

Rated Tools
Rated and tested for max. line to line voltage of work to be done

Y = Yes (required)
N = No (not required)
FR = Fire Rated

	Safety Glasses	Safety Shoes	Hardhat	Faceshield	P.F.A.S. *	F.R. Rated Clothing	Hearing Protection	Cut Resistant Gloves	Leather Gloves	Hi-Vis Safety Vest								
Hand Tool Use																		
Power Tool Use																		
Working at Heights																		
Live Electrical Work																		
Working near vehicle traffic																		

* P.F.A.S. = Full body harness and lanyard

Section 13.0

Moro Corp. Hot Work Permit

Morocorp Hot Work Permit

Morocorp Subsidiary: _____

Morocorp Hot Work Permit: is required for any maintenance or construction operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: brazing, cutting, grinding, soldering, torch use, and welding.

Instructions:
The employee performing the inspection of the work site must complete the Morocorp Hot Work Permit form prior to the start of any Hot Work. The employee performing the inspection of the work site must insure all safety precautions on the Hot Work Permit are in compliance prior to the start of any Hot Work.

The employee performing the inspection of the required safety precautions must sign and post the permit at the jobsite for the duration of the Hot Work.

Required Safety Precautions Checklist:

- ☐ Available sprinklers, fire hoses, and fire extinguishers are in service and operable.
- ☐ Hot Work equipment is in good repair.

Requirements within 35 feet (11 meters) of work:

- ☐ Flammable liquids, dust, lint and oily deposits are removed.
- ☐ Explosive atmosphere in area is eliminated.
- ☐ Floors are swept clean.
- ☐ Combustible floors are wet down, and covered with damp or fire-resistive sheets.
- ☐ Other combustibles are removed when possible. Otherwise, fire-resistive tarpaulins or metal shields are used.
- ☐ All wall and floor openings are covered.
- ☐ Fire resistive tarpaulins are suspended beneath work.

Work on walls or ceilings:

- ☐ Surrounding construction material is noncombustible and without combustible covering or insulation.
- ☐ Combustibles on other side of walls are moved away.

Work on enclosed equipment:

- ☐ Enclosed equipment is cleaned of all combustibles.
- ☐ Containers have been purged of flammable liquids/vapors.

Fire Watch/Hot Work area monitoring:

- ☐ Fire Watch will be provided during and for at least 30 minutes after Hot Work is complete, including any breaks.
- ☐ Fire Watch is supplied with suitable fire extinguishers and fire-fighting equipment.
- ☐ Fire Watch is trained in the use of fire extinguishing equipment and alarm.

Other Precautions Taken:

Name of Employee performing the Hot Work: _____

Company Name or Department: _____

Name of Person performing Fire Watch: _____

Job's start date: _____ Job's start time: _____

Location/Building/Floor/Room: _____

Nature of Job: _____

I verify the above location has been examined and that the precautions checked on the Required Safety Precautions Checklist have been taken to prevent fire and permission is granted to perform this work.

Name of Person Performing Safety Inspection of Permit Requirements:

Name: _____ Date: _____

Signature:_____

Job's completion date: _____ Job's completion time: _____

Authorizing Fire Safety Approval required if any safety precaution are not in compliance.

Authorizing Fire Safety Name: _____ Date: _____

Other Safety Precautions:

_____

_____

_____

_____

Morocorp Safety Director Comments:

Section 16.0

Accident Investigation Forms

Employee's Report of Injury Form

Instructions: Employees shall use this form to report all work related injuries, illnesses, or "near miss" events (which could have caused an injury or illness). This form shall be completed by employees as soon as possible and given to supervision for further action.

I am reporting a work related: ❑ Injury ❑ Illness ❑ Near miss	
Your Name:	
Job title:	
Company Name:	
Have you told your supervisor about this injury/near miss? ❑ Yes ❑ No	
Date of injury/near miss:	Time of injury/near miss:
Names of witnesses (if any):	
Where, exactly, did it happen?	
What were you doing at the time?	
Describe step by step what led up to the injury/near miss. (continue on the back if necessary):	
What could have been done to prevent this injury/near miss?	
What parts of your body were injured? If a near miss, how could you have been hurt?	
Did you see a doctor about this injury/illness? ❑ Yes ❑ No	
If yes, whom did you see?	Doctor's phone number:
Date:	Time:
Has this part of your body been injured before? ❑ Yes ❑ No	
If yes, when?	Supervisor:
Your signature:	Date:

Supervisor's Accident Investigation Form

Name of Injured Person _____

Date of Birth _____ Telephone Number _____

Address _____

City _____ State_____ Zip _____

(Circle one) Male Female

What part of the body was injured? Describe in detail. _____

_____

What was the nature of the injury? Describe in detail. _____

_____

_____

Describe fully how the accident happened? What was employee doing prior to the event? What equipment, tools being using? _____

_____

_____

Names of all witnesses:

_____ _____

_____ _____

Date of Event _____ Time of Event _____

Exact location of event: _____

What caused the event? _____

_____

_____

Were safety regulations in place and used? If not, what was wrong? _____

_____

Employee went to doctor/hospital? Doctor's Name: _____

Hospital Name: _____

Recommended corrective action: _____

_____

_____

_____ _____

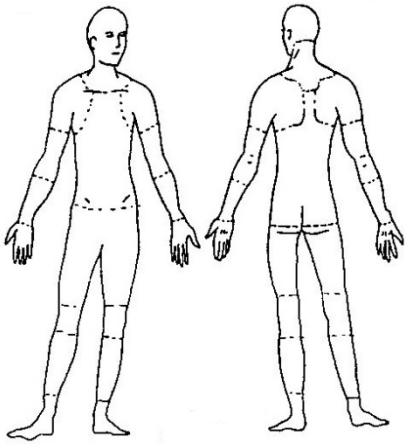
Supervisor Signature Date

Incident Investigation Report

Instructions: Complete this form as soon as possible after an incident that results in injury or illness.
(Optional: Use to investigate a minor injury or near miss that *could have resulted in a serious injury or illness*.)

This is a report of a: ❑ Death ❑ Lost Time ❑ Dr. Visit Only ❑ First Aid Only ❑ Near Miss	
Date of incident:	This report is made by: ❑ Employee ❑ Supervisor ❑ Other_____

Step 1: Injured employee (complete this part for each injured employee)

Name:	Sex: ❑ Male ❑ Female	Age:
Department:	Job title at time of incident:	
Part of body affected: (shade all that apply) 	Nature of injury: (most serious one) ❑ Abrasion, scrapes ❑ Amputation ❑ Broken bone ❑ Bruise ❑ Burn (heat) ❑ Burn (chemical) ❑ Concussion (to the head) ❑ Crushing Injury ❑ Cut, laceration, puncture ❑ Hernia ❑ Illness ❑ Sprain, strain ❑ Damage to a body system: ❑ Other _____	This employee works: ❑ Regular full time ❑ Regular part time ❑ Seasonal ❑ Temporary Months with this employer Months doing this job:

Step 2: Describe the incident

Exact location of the incident:	Exact time:
What part of employee's workday? ❑ Entering or leaving work ❑ Doing normal work activities ❑ During meal period ❑ During break ❑ Working overtime ❑ Other_____	
Names of witnesses (if any):	

Number of attachments:	Written witness statements:	Photographs:	Maps / drawings:

What personal protective equipment was being used (if any)?

Describe, step-by-step the events that led up to the injury. Include names of any machines, parts, objects, tools, materials and other important details.

Description continued on attached sheets: ❑

Step 3: Why did the incident happen?

Unsafe workplace conditions: (Check all that apply)
- ❑ Inadequate guard
- ❑ Unguarded hazard
- ❑ Safety device is defective
- ❑ Tool or equipment defective
- ❑ Workstation layout is hazardous
- ❑ Unsafe lighting
- ❑ Unsafe ventilation
- ❑ Lack of needed personal protective equipment
- ❑ Lack of appropriate equipment / tools
- ❑ Unsafe clothing
- ❑ No training or insufficient training
- ❑ Other: _____

Unsafe acts by people: (Check all that apply)
- ❑ Operating without permission
- ❑ Operating at unsafe speed
- ❑ Servicing equipment that has power to it
- ❑ Making a safety device inoperative
- ❑ Using defective equipment
- ❑ Using equipment in an unapproved way
- ❑ Unsafe lifting
- ❑ Taking an unsafe position or posture
- ❑ Distraction, teasing, horseplay
- ❑ Failure to wear personal protective equipment
- ❑ Failure to use the available equipment / tools
- ❑ Other: _____

Why did the unsafe conditions exist?

Why did the unsafe acts occur?

Was a 'Shortcut' taken that may have encouraged the unsafe conditions or acts? ❑ Yes ❑ No
If yes, describe:

Were the unsafe acts or conditions reported prior to the incident? ❑ Yes ❑ No

Have there been similar incidents or near misses prior to this one? ❑ Yes ❑ No

Step 4: How can future incidents be prevented?

What changes do you suggest to prevent this incident/near miss from happening again?

❑ Stop this activity ❑ Guard the hazard ❑ Train the employee(s) ❑ Train the supervisor(s)

❑ Redesign task steps ❑ Redesign work station ❑ Write a new policy/rule ❑ Enforce existing policy

❑ Routinely inspect for the hazard ❑ Personal Protective Equipment ❑ Other: _____

What should be (or has been) done to carry out the suggestion(s) checked above?

Description hjn
bcontinued on attached sheets: ❑

Step 5: Who completed and reviewed this form? (Please Print)

Written by: Department:	Title: Date:
Names of investigation team members:	
Reviewed by:	Title: Date:

Morocorp Safety Director Comments:

Section 21.0

OSHA 300 Form and Instructions

OSHA
Forms for Recording
Work-Related Injuries and Illnesses

U.S. Department of Labor
Occupational Safety and Health Administration

Dear Employer:

This booklet includes the forms needed for maintaining occupational injury and illness records for 2004. These new forms have changed in several important ways from the 2003 recordkeeping forms.

In the December 17, 2002 Federal Register (67 FR 77165-77170), OSHA announced its decision to add an occupational hearing loss column to OSHA's Form 300, Log of Work-Related Injuries and Illnesses. This forms package contains modified Forms 300 and 300A which incorporate the additional column M(5) Hearing Loss. Employers required to complete the injury and illness forms must begin to use these forms on January 1, 2004.

In response to public suggestions, OSHA also has made several changes to the forms package to make the recordkeeping materials clearer and easier to use:

- On Form 300, we've switched the positions of the day count columns. The days "away from work" column now comes before the days "on job transfer or restriction."
- We've clarified the formulas for calculating incidence rates.
- We've added new recording criteria for occupational hearing loss to the "Overview" section.
- On Form 300, we've made the column heading "Classify the Case" more prominent to make it clear that employers should mark only one selection among the four columns offered.

The Occupational Safety and Health Administration shares with you the goal of preventing injuries and illnesses in our nation's workplaces. Accurate injury and illness records will help us achieve that goal.

Occupational Safety and Health Administration
U.S. Department of Labor

What's Inside...

In this package, you'll find everything you need to complete OSHA's *Log* and the *Summary of Work-Related Injuries and Illnesses* for the next several years. On the following pages, you'll find:

- ***An Overview: Recording Work-Related Injuries and Illnesses —*** General instructions for filling out the forms in this package and definitions of terms you should use when you classify your cases as injuries or illnesses.

- ***How to Fill Out the Log —*** An example to guide you in filling out the *Log* properly.

- ***Log of Work-Related Injuries and Illnesses —*** Several pages of the *Log* (but you may make as many copies of the *Log* as you need.) Notice that the *Log* is separate from the *Summary*.

- ***Summary of Work-Related Injuries and Illnesses —*** Removable *Summary* pages for easy posting at the end of the year. Note that you post the *Summary* only, not the *Log*.

- ***Worksheet to Help You Fill Out the Summary —*** A worksheet for figuring the average number of employees who worked for your establishment and the total number of hours worked.

- ***OSHA's 301: Injury and Illness Incident Report —*** A copy of the OSHA 301 to provide details about the incident. You may make as many copies as you need or use an equivalent form.

Take a few minutes to review this package. If you have any questions, ***visit us online at www.osha. gov*** **or** ***call your local OSHA office.*** We'll be happy to help you.

An Overview: Recording Work-Related Injuries and Illnesses

The Occupational Safety and Health (OSH) Act of 1970 requires certain employers to prepare and maintain records of work-related injuries and illnesses. Use these definitions when you classify cases on the Log. OSHA's recordkeeping regulation (see 29 CFR Part 1904) provides more information about the definitions below.

The *Log of Work-Related Injuries and Illnesses* (Form 300) is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened. The *Summary* — a separate form (Form 300A) — shows the totals for the year in each category. At the end of the year, post the *Summary* in a visible location so that your employees are aware of the injuries and illnesses occurring in their workplace.

Employers must keep a *Log* for each establishment or site. If you have more than one establishment, you must keep a separate *Log* and *Summary* for each physical location that is expected to be in operation for one year or longer.

Note that your employees have the right to review your injury and illness records. For more information, see 29 Code of Federal Regulations Part 1904.35, *Employee Involvement*.

Cases listed on the *Log of Work-Related Injuries and Illnesses* are not necessarily eligible for workers' compensation or other insurance benefits. Listing a case on the *Log* does not mean that the employer or worker was at fault or that an OSHA standard was violated.

When is an injury or illness considered work-related?

An injury or illness is considered work-related if an event or exposure in the work environment caused or contributed to the condition or significantly aggravated a preexisting condition. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the workplace, unless an exception specifically applies. See 29 CFR Part 1904.5(b)(2) for the exceptions. The work environment includes the establishment and other locations where one or more employees are working or are present as a condition of their employment. See 29 CFR Part 1904.5(b)(1).

Which work-related injuries and illnesses should you record?

Record those work-related injuries and illnesses that result in:

- death,
- loss of consciousness,
- days away from work,
- restricted work activity or job transfer, or
- medical treatment beyond first aid.

You must also record work-related injuries and illnesses that are significant (as defined below) or meet any of the additional criteria listed below.

You must record any significant work-related injury or illness that is diagnosed by a physician or other licensed health care professional. You must record any work-related case involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum. See 29 CFR 1904.7.

What are the additional criteria?

You must record the following conditions when they are work-related:

- any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material;
- any case requiring an employee to be medically removed under the requirements of an OSHA health standard;
- tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- an employee's hearing test (audiogram) reveals 1) that the employee has experienced a Standard Threshold Shift (STS) in hearing in one or both ears (averaged at 2000, 3000, and 4000 Hz) and 2) the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS.

What is medical treatment?

Medical treatment includes managing and caring for a patient for the purpose of combating disease or disorder. The following are not considered medical treatments and are NOT recordable:

- visits to a doctor or health care professional solely for observation or counseling;

What do you need to do?

1. Within 7 calendar days after you receive information about a case, decide if the case is recordable under the OSHA recordkeeping requirements.
2. Determine whether the incident is a new case or a recurrence of an existing one.
3. Establish whether the case was work-related.
4. If the case is recordable, decide which form you will fill out as the injury and illness incident report.

   You may use *OSHA's 301: Injury and Illness Incident Report* or an equivalent form. Some state workers compensation, insurance, or other reports may be acceptable substitutes, as long as they provide the same information as the OSHA 301.

How to work with the Log

1. Identify the employee involved unless it is a privacy concern case as described below.
2. Identify when and where the case occurred.
3. Describe the case, as specifically as you can.
4. Classify the seriousness of the case by recording the **most serious outcome** associated with the case, with column G (Death) being the most serious and column J (Other recordable cases) being the least serious.
5. Identify whether the case is an injury or illness. If the case is an injury, check the injury category. If the case is an illness, check the appropriate illness category.

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- diagnostic procedures, including administering prescription medications that are used solely for diagnostic purposes; and
- any procedure that can be labeled first aid. (*See below for more information about first aid.*)

What is first aid?

If the incident required only the following types of treatment, consider it first aid. Do NOT record the case if it involves only:

- using non-prescription medications at non-prescription strength;
- administering tetanus immunizations;
- cleaning, flushing, or soaking wounds on the skin surface;
- using wound coverings, such as bandages, BandAids™, gauze pads, etc., or using SteriStrips™ or butterfly bandages.
- using hot or cold therapy;
- using any totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc.;
- using temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards).
- drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters;
- using eye patches;
- using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye;
- using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye;
- using finger guards;
- using massages;
- drinking fluids to relieve heat stress

How do you decide if the case involved restricted work?

Restricted work activity occurs when, as the result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping, an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

How do you count the number of days of restricted work activity or the number of days away from work?

Count the number of calendar days the employee was on restricted work activity or was away from work as a result of the recordable injury or illness. Do not count the day on which the injury or illness occurred in this number. Begin counting days from the day after the incident occurs. If a single injury or illness involved both days away from work and days of restricted work activity, enter the total number of days for each. You may stop counting days of restricted work activity or days away from work once the total of either or the combination of both reaches 180 days.

Under what circumstances should you NOT enter the employee's name on the OSHA Form 300?

You must consider the following types of injuries or illnesses to be privacy concern cases:

- an injury or illness to an intimate body part or to the reproductive system,
- an injury or illness resulting from a sexual assault,
- a mental illness,
- a case of HIV infection, hepatitis, or tuberculosis,
- a needlestick injury or cut from a sharp object that is contaminated with blood or other potentially infectious material (see 29 CFR Part 1904.8 for definition), and
- other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log.

You must not enter the employee's name on the OSHA 300 *Log* for these cases. Instead, enter "privacy case" in the space normally used for the employee's name. You must keep a separate, confidential list of the case numbers and employee names for the establishment's privacy concern cases so that you can update the cases and provide information to the government if asked to do so.

If you have a reasonable basis to believe that information describing the privacy concern case may be personally identifiable even though the employee's name has been omitted, you may use discretion in describing the injury or illness on both the OSHA 300 and 301 forms. You must enter enough information to identify the cause of the incident and the general severity of the injury or illness, but you do not need to include details of an intimate or private nature.

What if the outcome changes after you record the case?

If the outcome or extent of an injury or illness changes after you have recorded the case, simply draw a line through the original entry or, if you wish, delete or white-out the original entry. Then write the new entry where it belongs. Remember, you need to record the most serious outcome for each case.

Classifying injuries

An injury is any wound or damage to the body resulting from an event in the work environment.

Examples: Cut, puncture, laceration, abrasion, fracture, bruise, contusion, chipped tooth, amputation, insect bite, electrocution, or a thermal, chemical, electrical, or radiation burn. Sprain and strain injuries to muscles, joints, and connective tissues are classified as injuries when they result from a slip, trip, fall or other similar accidents.

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Classifying illnesses

Skin diseases or disorders

Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants, or other substances.

Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

Respiratory conditions

Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work.

Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis, and other pneumoconioses.

Poisoning

Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or the breath that are caused by the ingestion or absorption of toxic substances into the body.

Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; poisoning by other chemicals, such as formaldehyde.

Hearing Loss

Noise-induced hearing loss is defined for recordkeeping purposes as a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more in either ear at 2000, 3000 and 4000 hertz, and the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 hertz) in the same ear(s).

All other illnesses

All other occupational illnesses.

Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases, such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

When must you post the Summary?

You must post the *Summary* only — not the *Log* — by February 1 of the year following the year covered by the form and keep it posted until April 30 of that year.

How long must you keep the Log and Summary on file?

You must keep the *Log* and *Summary* for 5 years following the year to which they pertain.

Do you have to send these forms to OSHA at the end of the year?

No. You do not have to send the completed forms to OSHA unless specifically asked to do so.

How can we help you?

If you have a question about how to fill out the *Log*,

- ❑ ***visit us online at www.osha.gov*** or
- ❑ ***call your local OSHA office.***

Optional

Calculating Injury and Illness Incidence Rates

What is an incidence rate?

An incidence rate is the number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 full-time workers) over a given period of time (usually one year). To evaluate your firm's injury and illness experience over time or to compare your firm's experience with that of your industry as a whole, you need to compute your incidence rate. Because a specific number of workers and a specific period of time are involved, these rates can help you identify problems in your workplace and/or progress you may have made in preventing work-related injuries and illnesses.

How do you calculate an incidence rate?

You can compute an occupational injury and illness incidence rate for all recordable cases or for cases that involved days away from work for your firm quickly and easily. The formula requires that you follow instructions in paragraph (a) below for the total recordable cases or those in paragraph (b) for cases that involved days away from work, *and* for both rates the instructions in paragraph (c).

(a) *To find out the total number of recordable injuries and illnesses that occurred during the year,* count the number of line entries on your OSHA Form 300, or refer to the OSHA Form 300A and sum the entries for columns (G), (H), (I), and (J).

(b) *To find out the number of injuries and illnesses that involved days away from work,* count the number of line entries on your OSHA Form 300 that received a check mark in column (H), or refer to the entry for column (H) on the OSHA Form 300A.

(c) *The number of hours all employees actually worked during the year*. Refer to OSHA Form 300A and optional worksheet to calculate this number.

You can compute the incidence rate for all recordable cases of injuries and illnesses using the following formula:

Total number of injuries and illnesses x *200,000* ÷ *Number of hours worked by all employees* = *Total recordable case rate*

(The 200,000 figure in the formula represents the number of hours 100 employees working 40 hours per week, 50 weeks per year would work, and provides the standard base for calculating incidence rates.)

You can compute the incidence rate for recordable cases involving days away from work, days of restricted work activity or job transfer (DART) using the following formula:

(Number of entries in column H + Number of entries in column I) x *200,000* ÷ *Number of hours worked by all employees* = *DART incidence rate*

You can use the same formula to calculate incidence rates for other variables such as cases involving restricted work activity (column (I) on Form 300A), cases involving skin disorders (column (M-2) on Form 300A), etc. Just substitute the appropriate total for these cases, from Form 300A, into the formula in place of the total number of injuries and illnesses.

What can I compare my incidence rate to?

The Bureau of Labor Statistics (BLS) conducts a survey of occupational injuries and illnesses each year and publishes incidence rate data by various classifications (e.g., by industry, by employer size, etc.). You can obtain these published data at www.bls.gov/iif or by calling a BLS Regional Office.

Worksheet

Total number of injuries and illnesses		200,000	÷	Number of hours worked by all employees	=	Total recordable case rate
	x					

Number of entries in Column H + Column I		200,000	÷	Number of hours worked by all employees	=	DART incidence rate
	x					

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How to Fill Out the Log

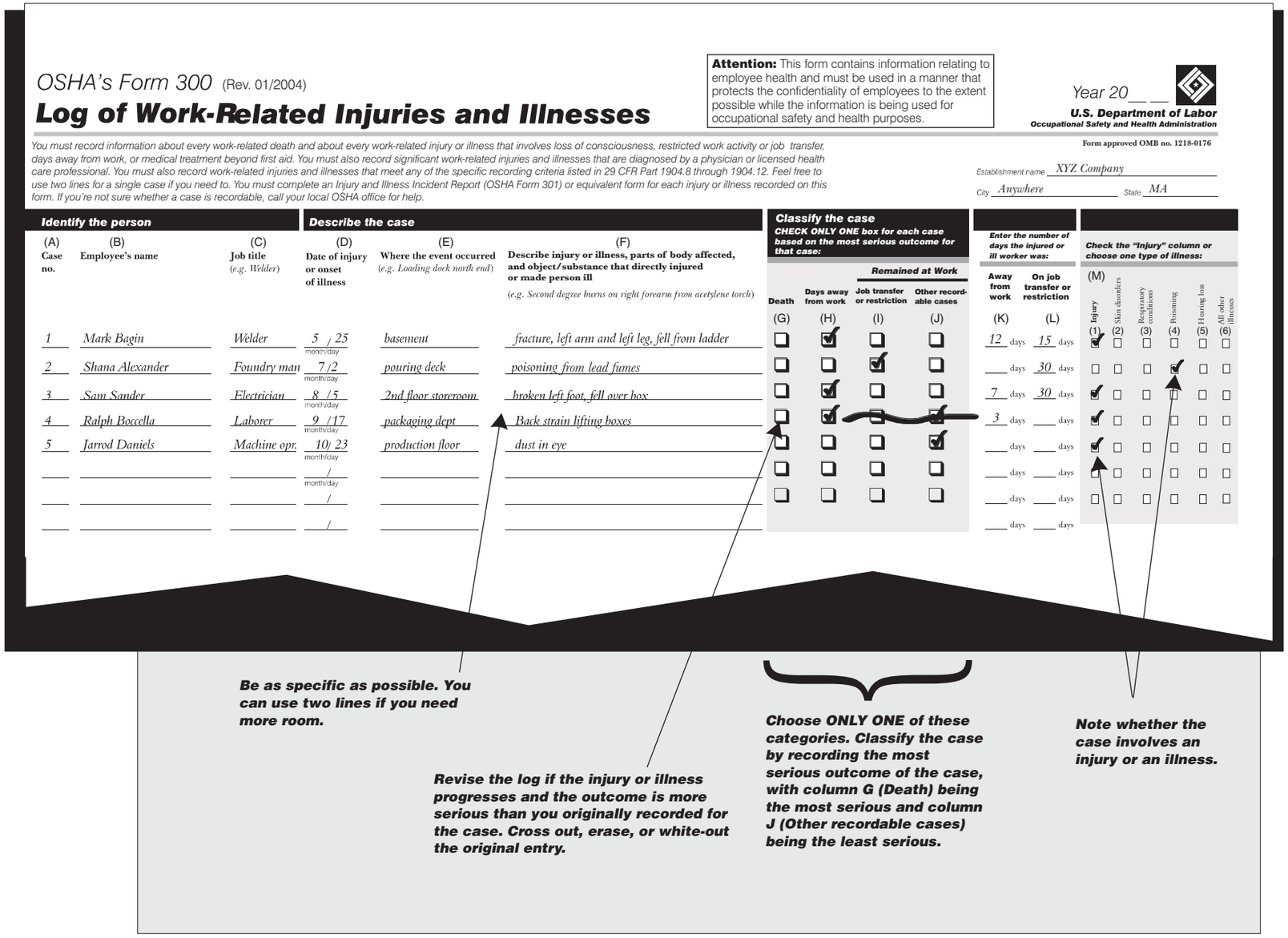
The *Log of Work-Related Injuries and Illnesses* is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened.

If your company has more than one establishment or site, you must keep separate records for each physical location that is expected to remain in operation for one year or longer.

We have given you several copies of the *Log* in this package. If you need more than we provided, you may photocopy and use as many as you need.

The *Summary* — a separate form — shows the work-related injury and illness totals for the year in each category. At the end of the year, count the number of incidents in each category and transfer the totals from the *Log* to the *Summary*. Then post the *Summary* in a visible location so that your employees are aware of injuries and illnesses occurring in their workplace.

You don't post the Log. You post only the Summary at the end of the year.



OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20__ __

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name: XYZ Company
City: Anywhere State: MA

Identify the person			Describe the case			Classify the case (CHECK ONLY ONE box for each case based on the most serious outcome for that case:)				Enter the number of days the injured or ill worker was:		Check the "Injury" column or choose one type of illness:					
							Remained at Work										
(A) Case no.	(B) Employee's name	(C) Job title (e.g. Welder)	(D) Date of injury or onset of illness	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death (G)	Days away from work (H)	Job transfer or restriction (I)	Other recordable cases (J)	Away from work (K)	On job transfer or restriction (L)	(M) Injury (1)	Skin disorders (2)	Respiratory conditions (3)	Poisoning (4)	Hearing loss (5)	All other illnesses (6)
1	Mark Bagin	Welder	5/25	basement	fracture, left arm and left leg, fell from ladder	☐	☑	☐	☐	12 days	15 days	☑	☐	☐	☐	☐	☐
2	Shana Alexander	Foundry man	7/2	pouring deck	poisoning from lead fumes	☐	☐	☑	☐	___ days	30 days	☐	☐	☐	☑	☐	☐
3	Sam Sander	Electrician	8/5	2nd floor storeroom	broken left foot, fell over box	☐	☑	☐	☐	7 days	30 days	☑	☐	☐	☐	☐	☐
4	Ralph Boccella	Laborer	9/17	packaging dept	Back strain lifting boxes	☐	☑	☐	☐	3 days	___ days	☑	☐	☐	☐	☐	☐
5	Jarrod Daniels	Machine opr.	10/23	production floor	dust in eye	☐	☐	☐	☑	___ days	___ days	☑	☐	☐	☐	☐	☐
			/			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			/			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			/			☐	☐	☐	☐	___ days	___ days						

Be as specific as possible. You can use two lines if you need more room.

Revise the log if the injury or illness progresses and the outcome is more serious than you originally recorded for the case. Cross out, erase, or white-out the original entry.

Choose ONLY ONE of these categories. Classify the case by recording the most serious outcome of the case, with column G (Death) being the most serious and column J (Other recordable cases) being the least serious.

Note whether the case involves an injury or an illness.

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20__ __

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name ______________________

City ______________________ State ____________

Identify the person			Describe the case			Classify the case: CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "Injury" column or choose one type of illness: (M)					
(A) Case no.	(B) Employee's name	(C) Job title (*e.g., Welder*)	(D) Date of injury or onset of illness	(E) Where the event occurred (*e.g., Loading dock north end*)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (*e.g., Second degree burns on right forearm from acetylene torch*)	(G) Death	(H) Days away from work	Remained at Work: (I) Job transfer or restriction	Remained at Work: (J) Other record-able cases	(K) Away from work	(L) On job transfer or restriction	(1) Injury	(2) Skin disorder	(3) Respiratory condition	(4) Poisoning	(5) Hearing loss	(6) All other illnesses
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
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			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
			___/___ month/day			☐	☐	☐	☐	___ days	___ days	☐	☐	☐	☐	☐	☐
					Page totals ➤	___	___	___	___	___	___	___ (1) Injury	___ (2) Skin disorder	___ (3) Respiratory condition	___ (4) Poisoning	___ (5) Hearing loss	___ (6) All other illnesses

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 20__ __

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no work-related injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete and accurate before completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0."

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR Part 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
_____	_____	_____	_____
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
_____	_____
(K)	(L)

Injury and Illness Types

Total number of . . .

(M)

(1) Injuries _____

(2) Skin disorders _____

(3) Respiratory conditions _____

(4) Poisonings _____

(5) Hearing loss _____

(6) All other illnesses _____

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

Establishment information

Your establishment name _____

Street _____

City _____ State _____ ZIP _____

Industry description (*e.g., Manufacture of motor truck trailers*)

_____

Standard Industrial Classification (SIC), if known (*e.g., 3715*)

____ ____ ____ ____

OR

North American Industrial Classification (NAICS), if known (e.g., 336212)

____ ____ ____ ____ ____ ____

Employment information *(If you don't have these figures, see the Worksheet on the back of this page to estimate.)*

Annual average number of employees _____

Total hours worked by all employees last year _____

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

_____ _____
Company executive Title

( ) - / /
Phone Date

Optional

Worksheet to Help You Fill Out the Summary

At the end of the year, OSHA requires you to enter the average number of employees and the total hours worked by your employees on the summary. If you don't have these figures, you can use the information on this page to estimate the numbers you will need to enter on the Summary page at the end of the year.

How to figure the average number of employees who worked for your establishment during the year:

❶ ***Add*** the total number of employees your establishment paid in all pay periods during the year. Include all employees: full-time, part-time, temporary, seasonal, salaried, and hourly.

The number of employees paid in all pay periods = ❶ _____

❷ ***Count*** the number of pay periods your establishment had during the year. Be sure to include any pay periods when you had no employees.

The number of pay periods during the year = ❷ _____

❸ ***Divide*** the number of employees by the number of pay periods.

❶ _____ / ❷ _____ = ❸ _____

❹ ***Round the answer*** to the next highest whole number. Write the rounded number in the blank marked *Annual average number of employees*.

The number rounded = ❹ _____

For example, Acme Construction figured its average employment this way:

For pay period...	Acme paid this number of employees...
1	10
2	0
3	15
4	30
5	40
▼	▼
24	20
25	15
26	+10
	830

Number of employees paid = 830 ❶

Number of pay periods = 26 ❷

830 / 26 = 31.92 ❸

31.92 rounds to 32 ❹

32 is the annual average number of employees

How to figure the total hours worked by all employees:

Include hours worked by salaried, hourly, part-time and seasonal workers, as well as hours worked by other workers subject to day to day supervision by your establishment (e.g., temporary help services workers).

Do not include vacation, sick leave, holidays, or any other non-work time, even if employees were paid for it. If your establishment keeps records of only the hours paid or if you have employees who are not paid by the hour, please estimate the hours that the employees actually worked.

If this number isn't available, you can use this optional worksheet to estimate it.

Optional Worksheet

_____ ***Find*** the number of full-time employees in your establishment for the year.

X _____ ***Multiply*** by the number of work hours for a full-time employee in a year.

_____ This is the number of full-time hours worked.

\+ _____ ***Add*** the number of any overtime hours as well as the hours worked by other employees (part-time, temporary, seasonal)

_____ ***Round*** the answer to the next highest whole number. Write the rounded number in the blank marked *Total hours worked by all employees last year.*

U.S. Department of Labor
Occupational Safety and Health Administration

OSHA's Form 301
Injury and Illness Incident Report

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

This *Injury and Illness Incident Report* is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the *Log of Work-Related Injuries and Illnesses* and the accompanying *Summary,* these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by _____

Title _____

Phone (_____)_____--_____ **Date** ____/ ____/ ____

Information about the employee

1) **Full name** _____

2) **Street** _____

City _____ **State** _____ **ZIP** _____

3) **Date of birth** _____ / _____ / _____

4) **Date hired** _____ / _____ / _____

5) ❒ **Male**
❒ **Female**

Information about the physician or other health care professional

6) **Name of physician or other health care professional** _____

_____

7) **If treatment was given away from the worksite, where was it given?**

Facility _____

Street _____

City _____ **State** _____ **ZIP** _____

8) **Was employee treated in an emergency room?**
❒ **Yes**
❒ **No**

9) **Was employee hospitalized overnight as an in-patient?**
❒ **Yes**
❒ **No**

Information about the case

10) **Case number from the *Log*** _____ *(Transfer the case number from the Log after you record the case.)*

11) **Date of injury or illness** _____ / _____ / _____

12) **Time employee began work** _____ **AM / PM**

13) **Time of event** _____ **AM / PM** ☐ **Check if time cannot be determined**

14) ***What was the employee doing just before the incident occurred?*** **Describe the activity, as well as the tools, equipment, or material the employee was using. Be specific.** ***Examples:*** **"climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."**

15) ***What happened?*** **Tell us how the injury occurred.** ***Examples:*** **"When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."**

16) ***What was the injury or illness?*** **Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or sore."** ***Examples:*** **"strained back"; "chemical burn, hand"; "carpal tunnel syndrome."**

17) ***What object or substance directly harmed the employee?*** ***Examples:*** **"concrete floor"; "chlorine"; "radial arm saw."** ***If this question does not apply to the incident, leave it blank.***

18) ***If the employee died, when did death occur?*** **Date of death** _____ / _____ / _____

If You Need Help...

If you need help deciding whether a case is recordable, or if you have questions about the information in this package, feel free to contact us. We'll gladly answer any questions you have.

- **Visit us online at www.osha.gov**
- **Call your OSHA Regional office and ask for the recordkeeping coordinator**

  or

- **Call your State Plan office**

Federal Jurisdiction

Region 1 - 617 / 565-9860
Connecticut; Massachusetts; Maine; New Hampshire; Rhode Island

Region 2 - 212 / 337-2378
New York; New Jersey

Region 3 - 215 / 861-4900
DC; Delaware; Pennsylvania; West Virginia

Region 4 - 404 / 562-2300
Alabama; Florida; Georgia; Mississippi

Region 5 - 312 / 353-2220
Illinois; Ohio; Wisconsin

Region 6 - 214 / 767-4731
Arkansas; Louisiana; Oklahoma; Texas

Region 7 - 816 / 426-5861
Kansas; Missouri; Nebraska

Region 8 - 303 / 844-1600
Colorado; Montana; North Dakota; South Dakota

Region 9 - 415 / 975-4310

Region 10 - 206 / 553-5930
Idaho

State Plan States

Alaska - 907 / 269-4957

Arizona - 602 / 542-5795

California - 415 / 703-5100

*Connecticut - 860 / 566-4380

Hawaii - 808 / 586-9100

Indiana - 317 / 232-2688

Iowa - 515 / 281-3661

Kentucky - 502 / 564-3070

Maryland - 410 / 527-4465

Michigan - 517 / 322-1848

Minnesota - 651 / 284-5050

Nevada - 702 / 486-9020

*New Jersey - 609 / 984-1389

New Mexico - 505 / 827-4230

*New York - 518 / 457-2574

North Carolina - 919 / 807-2875

Oregon - 503 / 378-3272

Puerto Rico - 787 / 754-2172

South Carolina - 803 / 734-9669

Tennessee - 615 / 741-2793

Utah - 801 / 530-6901

Vermont - 802 / 828-2765

Virginia - 804 / 786-6613

Virgin Islands - 340 / 772-1315

Washington - 360 / 902-5554

Wyoming - 307 / 777-7786

*Public Sector only

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Have questions?

If you need help in filling out the *Log* or *Summary,* or if you have questions about whether a case is recordable, contact us. We'll be happy to help you. You can:

- Visit us online at: **www.osha.gov**
- Call your regional or state plan office. You'll find the phone number listed inside this cover.

Section 23.0

Moro Corp. Physical Demands Analysis

MOROCORP PHYSICAL DEMANDS ANALYSIS

Morocorp Subsidiary: _____

Position detailed in this analysis: _____

Analysis completed by: _____ **Date:** _____

PHYSICAL DEMANDS

Please mark the following based on the physical activities required on the job with an **X**.
(This analysis is based upon a full time employee working 8 hours/day.)

1. Physical Activities required

	Total Hours to Be Performed Daily			
Physical Activities Required	**Less Than 1**	**1-3**	**3-5**	**more than 5**
Walking or Standing				
Lifting* - 1-5 pounds				
Lifting* - 6-10 pounds				
Lifting* - 11-25 pounds				
Lifting* - 26-50 pounds				
Lifting* - 51-100 pounds				
Lifting* - over 100 pounds				
Carrying** - 1-5 pounds				
Carrying** - 6-10 pounds				
Carrying** - 11-25 pounds				
Carrying** - 26-50 pounds				
Carrying** - 51-100 pounds				
Carrying** - over 100 pounds				
Reaching above shoulder height				
Reaching at shoulder height				
Reaching below shoulder height				

* includes pushing and pulling effort while stationary
** includes pushing and pulling effort while walking

2. The number of times per day the listed activity is performed.

Weight (lbs.)	Lifting*	Carrying**
1-5		
6-10		
11-25		
26-50		
51-100		
over 100		

* includes pushing and pulling effort while stationary
** includes pushing and pulling effort while walking

3. The percentage of the day the following activity is performed.

% Sitting _____ + % Standing _____ + % Walking _____ =100%

% Indoors work _____ + % Outdoors work _____ =100%

% Driving _____ %Working around others _____ % Working alone _____

4. The extent of which the following actions are performed:

	Often	Significant	Seldom	Never
Ascending and descending stairs				
Ascending and descending ladders				
Stooping				
Kneeling				
Reaching above shoulders				
Reaching below shoulders				

5. The position has the following occupational requirements as indicated by the X:

☐ Far Vision ☐ Near Vision ☐ Hearing ☐ Talking ☐ Depth perception

B. EMOTIONAL STRESS

1. Employees in this position have to answer to the following amount of customer complaints:

☐ Often ☐ Sometimes ☐ Not at all

2. Employees in this position are expected to perform the job at a normal, somewhat leisurely pace the following amount of time:

☐ Most of the time ☐ None of the time ☐ Occasionally

3. Employees in this position depend upon the assistance of others in order to accomplish his/her daily tasks:

☐ Yes ☐ No

If yes, how often?

☐ Most of the time ☐ Occasionally

The closeness employees in this position work with fellow workers:

☐ Very closely ☐ Minor contact ☐ No contact

4. Employees in this position supervise others:

☐ Yes ☐ No

5. Employees in this position are routinely subject to close supervision:

☐ Yes ☐ No

6. This positions duties consist of:

☐ Primarily pre-scheduled activities ☐ Primarily random tasks

7. What percentage of the positions' time is spent meeting deadlines set by others.

_____ %

8. Employees in this position have the following amount of responsibility for overall performance of his/her particular department.

☐ 100% ☐ Great Deal ☐ Significant ☐ Minor