2020

Health, Safety and Environmental Manual

B&R Tools and Service

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ACKNOWLEDGEMENT FORM

B&R Tools and Service

Safety Manual

I acknowledge that I have reviewed B&R Tools and Service manual. I acknowledge that I am expected to read, understand, and be familiar with the contents. I also understand that I am to put into practice the procedures in this manual to provide a safe work environment for the employees of B&R Tools and Service.

I understand:

- That this manual will be updated from time to time and that I will be responsible for reading the updates.
- That this manual is the property of the company and must be returned immediately upon request.
- That failure to comply with the policies and procedures set forth by this manual could result in suspension or termination of employment.

_____

Signature

_____

Date

B&R Tools and Service

HEALTH AND SAFETY POLICY

B&R Tools and Service is committed to maintaining a safety process which actively involves all employees in identifying, preventing, and correcting workplace safety issues to reduce accidents and injuries. B&R Tools and Service's ultimate goal is ZERO workplace injuries. B&R Tools and Service cares deeply about the safety of our employees, and we want each employee to return home each night safely to his or her family. Our Health and Safety manual provides B&R Tools and Service employees with written health and safety policies and procedures for promoting a safe and healthy work environment. B&R Tools and Service provides training that ensures our employees know how to complete a task in the safest manner possible. If a B&R Tools and Service employee sees unsafe behavior taking place, they are encouraged to let management know, as we all have a responsibility to watch out for each other. As an employee of B&R Tools and Service, management wants you to be aware that your safety is our upmost priority.

If you have any questions, please contact Brad Scoggins.

Sincerely,

B & R Tools and Service, Inc.

Brad Scoggins
B&R Tools and Service
211 & 213 W 57th Street, Odessa, Texas 79764
432-366-0707 Office * 432-366-0007 Fax

Safety Goals for 2020:

Zero workplace incidents
100% CPR training
More emphasis placed on Behavior Based Safety program
Clearly defining roles and responsibilities

Organizational Code of Conduct

B&R Tools and Service and its employees must, at all times, comply with all applicable laws and regulations. B&R Tools and Service will not condone the activities of employees who achieve results through violation of the law or unethical business dealings. This includes any payments for illegal acts, indirect contributions, rebates, and bribery. B&R Tools and Service does not permit any activity that fails to stand the closest possible public scrutiny.

All business conduct should be well above the minimum standards required by law. Accordingly, employees must ensure that their actions cannot be interpreted as being, in any way, in contravention of the laws and regulations governing B&R Tools and Service's operations.

Employees uncertain about the application or interpretation of any legal requirements should refer the matter to their supervisor, who, if necessary, should seek appropriate legal advice. As part of this code of conduct, B&R Tools and Service employees are expected to drive company vehicles, whether for personal or business use, in as safe a manner as possible. While driving company vehicles or own vehicles for work purposes, staff must comply with traffic legislation, be conscious of road safety and demonstrate safe driving and other good road safety habits.

General Employee Conduct

B&R Tools and Service expects its employees to conduct themselves in a businesslike manner. Drinking, gambling, fighting, swearing, and similar unprofessional activities are strictly prohibited while on the job.

Employees must not engage in sexual harassment or conduct themselves in a way that could be construed as such, for example, by using inappropriate language, keeping or posting inappropriate materials in their work area, or accessing inappropriate materials on their computer.

Conflicts of Interest

B&R Tools and Service expects that employees will perform their duties conscientiously, honestly, and in accordance with the best interests of B&R Tools and Service. Employees must not use their positions, or the knowledge gained as a result of their positions for private or personal advantage. Regardless of the circumstances, if employees' sense that a course of action they have pursued, or are presently pursuing, or are contemplating pursuing may involve them in a conflict of interest with their employer, they should immediately communicate all the facts to their supervisor.

Outside Activities, Employment, and Directorships

All employees share a serious responsibility for B&R Tools and Service's good public relations, especially at the community level. Their readiness to help with religious, charitable, educational, and civic activities brings credit to B&R Tools and Service and is encouraged. Employees must, however, avoid acquiring any business interest or participating in any other activity outside B&R Tools and Service that would, or would appear to:

- Create an excessive demand upon their time and attention, thus depriving B&R Tools and Service of their best efforts on the job.
- Create a conflict of interest - an obligation, interest, or distraction - that may interfere with the independent exercise of judgment in B&R Tools and Service's best interest.

Relationships with Clients and Suppliers

Employees should avoid investing in or acquiring a financial interest for their own accounts in any business organization that has a contractual relationship with B&R Tools and Service, or that provides goods or services, or both, to B&R Tools and Service if such investment or interest could influence or create the impression of influencing their decisions in the performance of their duties on behalf of B&R Tools and Service.

Gifts, Entertainment, and Favors

Employees must not accept entertainment, gifts, or personal favors that could, in any way, influence, or appear to influence, business decisions in favor of any person or organization with whom or with which B&R Tools and Service has, or is likely to have, business dealings. Similarly, employees must not accept any other preferential treatment under these circumstances because their positions with B&R Tools and Service might be inclined to, or be perceived to, place them under obligation to return the preferential treatment.

Kickbacks and Secret Commissions

Regarding B&R Tools and Service's business activities, employees may not receive payment or compensation of any kind, except as authorized under B&R Tools and Service's business and payroll policies. In particular, B&R Tools and Service, strictly prohibits the acceptance of kickbacks and secret commissions from suppliers or others. Any breach of this rule will result in immediate termination and prosecution to the fullest extent of the law.

Organization Funds and Other Assets

Employees who have access to Organization funds in any form must follow the prescribed procedures for recording, handling, and protecting money as detailed in B&R Tools and Service's policies and procedures or other explanatory materials, or both. B&R Tools and Service imposes strict standards to prevent fraud and dishonesty. If employees become aware of any evidence of fraud and dishonesty, they should immediately advise their supervisor or seek appropriate legal guidance so that B&R Tools and Service can promptly investigate further.

When an employee's position requires spending Organization funds or incurring any reimbursable personal expenses, that individual must use good judgment on B&R Tools and Service's behalf to ensure that good value is received for every expenditure.

Organization funds and all other assets of B&R Tools and Service are purposed for B&R Tools and Service only and not for personal benefit. This includes the personal use of organizational assets, such as computers.

Organization Records and Communications

Accurate and reliable records of many kinds are necessary to meet B&R Tools and Service's legal and financial obligations and to manage the affairs of B&R Tools and Service. B&R Tools and Service's books and records must reflect in an accurate and timely manner all business transactions. The employees responsible for accounting and recordkeeping must fully disclose and record all assets, liabilities, or both, and must exercise diligence in enforcing these requirements.

Employees must not make or engage in any false record or communication of any kind, whether internal or external, including but not limited to:

- False expense, attendance, production, financial, or similar reports and statements
- False advertising, deceptive marketing practices, or other misleading representations

Dealing with Outside People and Organizations

Employees must take care to separate their personal roles from their organization positions when communicating on matters not involving organization business. Employees must not use organization identification, stationery, supplies, and equipment for personal or political matters.

When communicating publicly on matters that involve organization business, employees must not presume to speak for B&R Tools and Service on any topic, unless they are certain that the views, they express are those of B&R Tools and Service, and it is B&R Tools and Service's desire that such views be publicly disseminated.

When dealing with anyone outside B&R Tools and Service, including public officials, employees must take care not to compromise the integrity or damage the reputation of either B&R Tools and Service, or any outside individual, business, or government body.

Prompt Communications

In all matters relevant to customers, suppliers, government authorities, the public and others in B&R Tools and Service, all employees must make every effort to achieve complete, accurate, and timely communications - responding promptly and courteously to all proper requests for information and to all complaints.

Privacy and Confidentiality

When handling financial and personal information about customers or others with whom B&R Tools and Service has dealings, observe the following principles:

- Collect, use, and retain only the personal information necessary for B&R Tools and Service's business. Whenever possible, obtain any relevant information directly from the person concerned. Use only reputable and reliable sources to supplement this information.
- Retain information only for as long as necessary or as required by law. Protect the physical security of this information.
- Limit internal access to personal information to those with a legitimate business reason for seeking that information. Use only personal information for the purposes for which it was originally obtained. Obtain the consent of the person concerned before externally disclosing any personal information, unless legal process or contractual obligation provides otherwise.

SSE FORM

Mentor's Initials as Completed	SSE Initials as Completed	**Short Service Employee sets clear expectations and consequences for safe behaviors.**
		Does not take unnecessary risks.
		Asks for help when needed.
		Does not try to lift or handle too heavy of a load. Gets mechanical help when needed.
		Raises awareness of possible hazards.
		Intervenes with unsafe behaviors.
		Understands his/her "stop work" authority and responsibility
		New Employee is able to identify the following at the work site:
		Struck by hazards
		Crushed by hazards
		Trip hazards and precautions
		Electrical hazards and precautions
		Fall hazards and precautions
		Hot and / or cold surfaces, piping and equipment
		Chemical hazards and precautions
		Emergency procedures
		Emergency communications
		Respiratory hazards and precautions
		Toxic substance hazards and precautions (ex. Hydrogen Sulfide)
		Damaged equipment and makes repairs or mark it out of service. Ex) damaged pipes, hoses, clamps, air vents, fittings, pumps
		Short Service Employee exhibits compliance to:
		General safety rules and policies
		Safety rules and policies specific to the job being performed
		Housekeeping policies
		PPE requirements
		Short Service Employee shows competency on following equipment or job task:
		a.
		b.
		c.
		d.
		e.

_____ _____

Mentor New Employee

_____ _____

SSE Program Release Date Hire Date

Date: _____ Observer: _____
Rig #: _____Location: _____
Persons/Companies Being Observed:
_____
Number of People Observed: _____ Observation Type: Self □ Peer □ Contractor □

Safe	At Risk	Body Position
		Line of Fire
		Pinch Points
		Eyes on Path
		Eyes on Hands/Tasks
		Ascending/Descending

Safe	At Risk	Body Use
		Lifting/Lowering
		Twisting
		Pushing/Pulling
		Overextended/Cramped
		Response to Ergo Risks
		Posture
		Grip/Force

Safe	At Risk	Tools & Equipment
		Selection/Condition
		Guards
		Barricades and Warnings
		Auxiliary Equipment Use

Safe	At Risk	Procedures
		Lock Out-Tag Out-Try
		Permits
		Pre/Post Job inspection
		JSA

Safe	At Risk	PPE
		Head
		Eyes/Face
		Hearing
		Respiratory
		Hand
		Body Protection
		Fall
		Foot
		Personal Gas Monitor

Safe	At Risk	Environment
		Walking/Working Surfaces
		Housekeeping
		Storage
		Lightning
		Wind Direction

Comments:
Describe any unsafe actions:
_____
_____

Corrective Actions: _____
_____
_____

Observer Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

LOTO Log

Lock/Key No.	Rig No.	System	Date On	Date Off	Supervisor	Remarks

Emergency Response Plan Form

Work Site Information	
Location Name	
Rig #	
Location GPS Coordinates	
Directions to Well Site	
Is Cellular Service Available?	If no, directions to nearest verified cellular signal:
Primary Contacts: First Aid Events: Medical Emergency:	Xstreme MD: 877-520-2911 911 first, if 911 is disabled call nearest medical/fire/rescue # from the list at the end of this document. Please list applicable numbers here: _____
Company Man's Name & Number:	
B&R Tools and Service Site Supervisor Name & Number:	

Using the box below, sketch a diagram of the location. List all muster areas, first aid stations, eye wash stations, SDS locations, Emergency response plans, fire extinguishers, windsocks, location exit points, and equipment on site. Be sure to park crew truck in a position that allows for rapid evacuation form the location.

Employee Incident Report

Work site: _____

Manager/Supervisor_____

Employee Name_____

Job Title_____

Incident_____
_____
_____
_____
_____
_____
_____
_____

Action
Taken_____
_____
_____
_____
_____

	Job Safety Analysis	**Revision Date:** 01/01/20
		B&R Tools and Service

- This form must be filled out before starting any non-routine work for every work crew on location and reviewed daily.
- Where multiple crews are working on a location, a single B&R Tools and Service representative must review and sign the JSAs from each crew to identify and communicate hazards that could affect crews across work areas.
- This form must be revisited and readdressed if conditions change in the scope of work or environment and discussed at the end of the day.
- If using a prewritten JSA for the day, every step must be reviewed verbally, and site-specific information must be added to the JSA, discussed, and signed by the crew.

Site/Location:	Date:

B&R Tools and Service Site Supervisor

Print name and Phone Number: _____

Sign: _____

Description of Work to be Performed:

Emergency Contact Number (9-1-1 or alternate):	Muster Point:
Nearest Crossroads/Coordinates:	Designated smoking areas:

SDS Location(s):

Required Safety Permits: (Check all that apply)

☐ **Confined Space Entry Permit** ☐ **Ground Disturbance Authorization** ☐ **Energized Electrical Work Permit**

☐ **Hot Work Permit** ☐ **Lock Out Tag Out (LOTO)** ☐ **Other:**

PPE for Job or Task: (Check all that Apply, Check mark also implies that PPE has been inspected and approved for use)

☐ **Safety Glasses** ☐ **Hard Hats** ☐ **FRCs** ☐ **Fall Protection** ☐ **Hand Protection** ☐ **High Visibility Vests**

☐ **Atmospheric Monitoring (02, LEL, H2S, CO, etc.)** ☐ **Hearing Protection** ☐ **Respiratory Protection** ☐ **Other:**

List and discuss the Major Job Steps, the Potential Hazards of each step and associated Consequences and Actions to Eliminate or Control Hazards. Revise as conditions change during the course of the job.

Major Job Steps	**Potential Hazards & Consequences**	**Actions to Eliminate or Control Hazards**
List all the steps needed to complete the job for today.	Possible safety and health hazards to consider contact with, struck by, pinch points, falls, working surfaces, overexertion, exposure to chemicals/heat/cold Possible environmental impacts to consider excessive noise, release of gas/liquid/solid/dust, hazardous waste handling, storm water/sediment pollution, wildlife management, river/stream/wetland disturbance	Possible safety and health controls to consider: Elimination (e.g., substituting a toxic chemical) Engineering (e.g., ventilation, barriers, trench box) Administrative (e.g., work permits,

		safe work practices, SDS) PPE Possible environmental controls to consider secondary containment, drip plans, grading/berms, hose/connection inspection, noise suppression, storm water controls, flaring permit, hazardous waste permits, open tank/vent/pit wildlife protection

Verification of Safe Work Requirements

Have all workers received orientation?	□ Yes □ No
Does everyone involved in the work understand the job hazards, specific job tasks, and safe work procedures (such as SDS, proper tools and equipment, opening process equipment and piping, safety manual rules for equipment, and permitting requirements) associated with the work?	□ Yes □ No
Are all workers trained in the specific job tasks?	□ Yes □ No
Does everyone understand the job's emergency evacuation plan?	□ Yes □ No

JSA Participants:

Print: _____ **Sign: _____**

Print: _____ **Sign: _____**

Print: _____ **Sign: _____**

Print: _____ **Sign: _____**

Print: _____ **Sign:_____**

Print: _____ **Sign:_____**

□ End of day review of JSA completed with work crew

Signature of Field Supervisor: _____ Date/Time: _____

Code of Conduct

- **Proactive management includes supervisory leadership and control to change unproductive activities. Conformance with safety policies, rules and regulations is a necessary component of our safety program.**
- **Employee safety responsibilities are communicated during initial orientation. Safety rules and regulations are reviewed with employee by their supervisors and are part of the documented Employee Safety Training Process.**
- **Supervisors understand and enforce safety rules as a part of their job. This process many involve coaching, counseling, verbal or written reprimands and discipline in the form of suspension and/or termination. When appropriate, documented verbal warnings and reprimands are issued and carried out by supervisors.**
- **Failure to adhere to any of the safety rules and safe work practices will result in disciplinary action. All discipline will be documented in the employee's folder. Discipline may be more severe depending on the offense.**

Employee Signature_____Date_____

Supervisor Signature_____Date_____

	Management of Change (MOC) Form	**Revision Date:** 01/02/2020
		B&R Tools and Service

- This form must be filled out prior to any changes for every work crew on location.
- This form must be revisited and readdressed if conditions change in the scope of work or environment and discussed at the end of the day.

Site/Location:	Date:

B&R Tools and Service Site Supervisor (Initiator of Change)

Print name and Phone Number: _____ Sign: _____

Description of Change (explain):

Reason for Change (explain):

Describe Alternatives Considered:

Describe any technical changes required to implement Change:

Describe Risks considered for this Change:

Estimate of resources and cost for Change:

Quality implications for Change:

Work Starts Date (mm/dd/year):	Work Ends Date (mm/dd/year):
Work Starts Time:	Work Ends Time:

Approved or Denied: (to be filled out by supervisor)

☐ **Edit operating procedures** ☐ **Permit required** ☐ **Qualifications verified** ☐ **Training verified**

☐ **Comments:** ☐ **Signature: _____**

Access to Employee Medical and Exposure Records

Scope

B&R Tools and Service has adopted this policy regarding access to employee medical and exposure records.

Purpose

Definition: *Employee medical records* means a record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel, or technician.

- B&R Tools and Service has adopted this policy that medical records must be preserved for the duration of employment plus 30 years.
- Employee exposure records will include environmental and biological monitoring. All employee exposure records will be retained for 30 years.
- Employee access to records will be provided in a reasonable time, place and manner. They are provided to the employee at no cost. Whenever access is requested to an analysis which reports the contents of employee medical records by either direct identifier (name, address, social security number, payroll number, etc.) or by information which could reasonably be used under the circumstances indirectly to identify specific employees (exact age, height, weight, race, sex, date of initial employment, job title, etc.), personal identifiers must be removed before access is provided. Whenever an employee or designated representative requests a copy of a record, the employer shall assure that either a copy of the record is provided without cost to the employee or representative for copying the record, or the record is loaned to the employee or representative for a reasonable time to enable a copy to be made.
- Employees are informed of the provision of recordkeeping upon initial assignment and annually thereafter. Employers will inform their employees of the existence, location and availability of any records, the person responsible for maintaining and providing access to records ad each employee's rights of access to these records.
- Should B&R Tools and Service cease to do business, B&R Tools and Service shall transfer all records subject to this section to the successor employer. Should there not be a successor employer; the records shall be transferred to the Director of the National Institute of Occupational Safety and Health if so, required by a specific occupational safety and health standard.

Asbestos Awareness

Purpose

B&R Tools and Service employees are not expected be assigned to jobs that involve asbestos. However, in rare cases, this asbestos will be found in pipe coating. While working with or around asbestos, employees must follow the guidelines outlined in this program. Asbestos awareness training is required for all employees who work in areas that contain or may contain asbestos and training will be documented.

B&R Tools and Service employees will not be exposed to any airborne asbestos unless he/she has been trained on and abides by these guidelines.

Scope and Application

Covers asbestos exposure in all work as defined in 1910.12(b), regardless of the type of worksite or location. Affected work activities include, but are not limited to, the following:

- Demolition or salvage of structures
- Removal or encapsulation of materials
- Construction, alteration, repair, maintenance, or renovation
- Installation of products containing asbestos
- Spill/emergency clean up
- Transportation, disposal, storage, containment and housekeeping activities are performed

Any employee who performs work in regulated areas is covered by this program.

Definitions

Asbestos: chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically altered; includes PACM

ACM: asbestos containing material, any material containing > 1% asbestos

PACM: presumed asbestos containing material

Competent Person: An individual capable of identifying existing asbestos hazards in the workplace and selecting the appropriated control strategy for asbestos exposure and has the authority to take prompt corrective action to eliminate them (complies with 1926.32(f)).

Permissible Exposure Limits

Time-Weighted Average Limit: 0.1 fiber/cubic centimeter as an 8-hour TWA
Excursion Limit: 1.0 fiber/cubic centimeter as averaged over 30 minutes

Regulated Areas

- Implemented for Class I, II, and III asbestos work; also, other operations where PEL is or may reasonably be exceeded. The TWA and/or excursion limit must be monitored and documented.
- Regulated areas must be separated from the rest of the jobsite in an effective manner: critical barriers or negative pressure enclosures may be used, and signs must be provided. Employees will not disturb the asbestos containing material. Signs and labels shall identify the material which is present, its locations, and appropriate work practices.
- Access will be limited to persons authorized by the employer or the OSH Act.
- Respirators will be provided
- No eating, drinking, smoking, chewing tobacco or gum, or application of cosmetics
- Work within regulated areas must be supervised by a competent person.
- If working on a multi-contractor worksite, employees shall be protected from exposure. If containment is adjacent is inadequate employees shall be removed from the area until the breach is repaired.

Methods of Compliance

- Engineering controls and work practices required regardless of level of exposure
- Vacuum cleaners with HEPA filters for cleanup
- Wet methods or wetting agents during handling, mixing, removal, cutting, application, and cleanup, unless infeasible due to creation of hazards; see (g)(8)(ii) for roofing exceptions
- Prompt cleanup and disposal of waste and debris in leak-tight containers
- Engineering controls and work practices required to achieve the PELs
- Local exhaust ventilation with HEPA filter dust collection system
- Enclosure or isolation of processes producing asbestos dust
- Ventilation of the regulated area to move air from the employee's breathing zone toward HEPA filtered collection device or exhaust

If the above methods are not sufficient to reduce employee exposure to or below PELs they shall still be used and supplemented with PPE and respiratory protection

Respiratory Protection

Respirators shall be provided and used in the following circumstances:

- As a component of work practice controls
- In work operations
- In emergencies

Employees shall be provided with NIOSH approved respirators at no cost to the employees. Powered, air-purifying respirators should be available when the employees choose to use this type, or when the respirator will provide adequate protection.

Fit Testing: Employees shall be fit-tested for negative pressure respirators at the time of initial fitting and at least annually thereafter. Qualitative fit test may be used for half-mask respirators or for full face piece air purifying respirators.

Personal Protective Equipment

- Coveralls, head coverings, gloves, foot coverings, face shields, and vented goggles are required for any employee exposed above the PELs
- Any employee doing work for which a required negative exposure assessment is not produced

- A competent person must examine work suits at least once per work shift for rips or tears, and rips must be immediately mended, or the work suit replaced.

A poorly fitting face mask, or tear in protective clothing can render the PPE ineffective. Inspect the condition and fit of PPE regularly.

Prohibited Tools and Activities

- High speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air
- Compressed air to remove asbestos or ACM except in conjunction with an enclosed ventilation system
- Dry sweeping, shoveling, or other cleanup of ACM or PACM dust and debris
- Employee rotation as a means of reducing employee exposure

Communication of Hazards

Signs

- Warning signs must be used to establish and separate regulated areas
- Wording for signs

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PEROSNNEL ONLY
Additional wording where applicable:
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

Labels

- Labels must be affixed to products containing asbestos
- Containers containing such products including waste containers
- Installed asbestos products, where feasible, including previously installed material identified as ACM/PACM

Exemptions from labeling include:

- Products where asbestos fibers have been modified by a bonding agent, coating, binder, or other material, if no concentration of fibers PELs will be produced any reasonably foreseeable use, handling, etc.
- Products where asbestos fibers have been modified by a bonding agent, coating, binder, or other material, if no concentration of fibers PELs will be produced any reasonably foreseeable use, handling, etc.
- Products where asbestos is <1.0% by weight
- Installed materials where signs providing same information is posted

Wording on labels:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

Additionally, labels must contain a warning statement against breathing asbestos fibers.

Assured Equipment Grounding Conductor Program

Purpose

This program outlines safe work practices to follow to protect workers on construction sites from all electrical injuries resulting from possible equipment malfunctions, improper grounding, and defective electrical tools. It is the policy of B&R Tools and Service that our employees follow safe work practices when performing work operations using extension cord sets and receptacles that are not part of a building or structure, as well as when using equipment connected by a cord and plug.

The Safety Coordinator will have the overall responsibility for implementing this safety and health program. Employees should review a copy of this program. Copies of this program will be available at the job site for inspection and copying by the Office Manager and any affected employee.

Scope

This applies to all B&R Tools and Service employees.

General Requirements

Employees will not be permitted to use any equipment which does not meet the requirements of this program.

Ground Fault Circuit Interrupters (GFCI's) will be used at B&R Tools and Service in addition to an Assured Ground Fault Program on construction sites.

Ground Fault Protection

GFCI's shall be used on all 120-volt, single-phase, 15- and 20- ampere receptacle outlets which are not part of the permanent wiring of any building and are used by B&R Tools and Service employees. GFCI's are not required on receptacles on a two-wire single-phase portable or vehicle-mounted generator rated not more than 5kW where the circuit conductors are not part of the generator frame. All other grounded surfaces need not be protected with GFCI's.

Assured Equipment Grounding

In addition to the use of GFCI's, B&R Tools and Service shall implement and follow assured equipment grounding, which is a testing and identification procedure to verify that electrical equipment is safe to operate in regard to the electrical hazards. Each GFCI, cord set, attachment, cap, plug and receptacle cord sets, and any equipment connected by cord and plug must be visually inspected daily for external defects.

Daily Visual Inspection

Employees will be instructed that each cord set, attachment cap, plug and receptacle of the cord set, and any equipment connected by cords and plugs, must be visually inspected before each day's use for external defects, such as deformed or missing pins, insulation damage, and current test verification code numbers. Any indication of possible internal damage must be checked as well. Damaged equipment shall be tagged "DO NOT USE" and taken out of service until the required repairs and tests have been conducted. Equipment that has not been tested within 3 months must not be used.

Test Procedure

GFCI's, cord sets, receptacles which are not part of the permanent wiring of a structure, and cord and plug connected equipment required to be grounded shall all be tested. The tests shall be performed:

- Before first use.
- Before equipment is returned to service.
- Before equipment is used after any incident in which it was reasonable to suspect it became damaged.
- At intervals not to exceed 3 months, except cord sets and receptacles which are fixed and not exposed to damage should be tested at intervals not to exceed 6 months.

The tests are as follows:

- All equipment-grounding conductors shall be tested for continuity and shall be electrically continuous.
- Each plug and attachment plug shall be tested for the correct attachment of the grounding conductor.
- The grounding conductor shall be connected to its proper terminal.

The method to determine the condition of the affected equipment is as follows:

- *Receptacles*- use receptacle tested to determine correct connection to terminals
- *Cord Sets* – first plug the cord set into a properly wired receptacle, which has been tested as above. Then, plug receptacle tester into the female cord connector of the cord set to determine both continuity of grounding conductor and correct connections to terminals.
- *Cord and Plug Connected Equipment* – use continuity tester. Connect or touch one terminal of continuity tester to the metal frame of the equipment or tool and the other terminal to the grounding prong of the attachment cap plug at the end of the cord. An audible or visual signal of the test indicates that there is continuity of the grounding conductor.

Any equipment which does not pass the tests will not be available for use by B&R Tools and Service employees. Equipment that fails the tests shall be tagged and marked out-of-service by reading "DO NOT USE". The equipment should be removed from service until it has been repaired and has successfully passed the re-tests.

It shall be the site Supervisor's responsibility to ensure that the equipment under their control has been tested. The Foreman does have the ability of performing the respective tests in the field using appropriate testing equipment. The Safety Manager or his designee will perform random safety inspections to ensure compliance with this program.

Test Record

Tests performed as required by this program will be recorded as to the identity of each receptacle, cord set, and cord and plug connected equipment that passed the test and will indicate the last date tested or interval for which it was tested. The test verification record will be by means of a number coded marking tape on the male end of the cord or equipment to identify that it has passed the test. The number coding system shall identify the actual date (month and year) that this equipment was last tested. The first number will be the year (1=1991) and the second number will be the month (04=April). Example: 104 = 1991, April.

B&R Tools and Service will keep record by using color-coded tape to signify the successful testing of the cord set, receptacle, plug and cord connected equipment. The color of the tape will be based upon the seasons of the year:

Green - Spring (April 1 - June 30) Red - Summer (July 1 - September 31)
Blue - Fall (October 1 - December 31) White - Winter (January 1 - March 31).

These records will be made available at the job site for inspection by the Office Manager and any affected employees.

ASSURED EQUIPMENT GROUNDING CONDUCTOR PROGRAM
B&R Tools and Service

TEST RECORD LOG

COMPANY PROJECT: _____
PREPARED BY: _____

I. D. NUMBER	DESCRIPTION	TEST INTERVAL OR DATE	RESULTS (PASS/FAIL)

FIRST QUARTER GREEN **SECOND QUARTER RED** **THIRD QUARTER BLUE** **FOURTH QUARTER WHITE**

Behavior Based Safety Program

B&R Tools and Service will utilize this program to ensure a safe work environment.

This program consists of:

- Goals –program objectives and incident metrics reviewed
- Training- How to conduct the observation and complete the observation form
- Observation- what do the behaviors mean
- Feedback- mentoring and coaching as needed
- Plan of Action- Employees are made aware that they me observed at any time

Goals

B&R Tools and Service is committed to safety from our ownership and management level down. Each and every employee will utilize safe work practices at all times to create a safe work environment.

Training

B&R Tools and Service will be conducting our new hire employee training when applicable to ensure each new hire has been trained in the proper safety procedures B&R Tools and Service requires. Each B&R Tools and Service employee will also be trained in the proper safety procedures for each job they are expected to complete. Management will also be trained to watch for at risk behavior while monitoring a job site to ensure the goals of the program are being met. Refresher training will be available any time an employee or management feels it is needed.

Observation

Observation will only be completed by management level employees of B&R Tools and Service or safety coordinators of B&R Tools and Service. Onsite observation will include communicating with employees being observed and noting any unsafe procedures being utilized. **Observation Cards will be utilized in this process.**

Feedback

B&R Tools and Service believes in the importance of communication. Feedback will be communicated to promote and recognize any safe behaviors being exhibited by the employee, as well as, to explain any at risk behavior observed and help the employee understand how they were placing themselves at risk. Lastly, feedback will be provided to make sure the employee understands how to alter his or her behavior to ensure safety procedures are being followed.

Plan of Action

A Plan of Action will be constructed based on Observation reports from observers who consistently see trends of unsafe practices being utilized. The management of B&R Tools and Service is responsible for the Plan of Action and its implementation. The Plan of Action will be given at our monthly safety meetings, so every employee is made aware of the unsafe practices observed in the field. Should any unsafe practices be observed, the proper procedures will be reviewed at the safety meeting and the trainer will ask questions and check for understanding.

Bloodborne Pathogen Exposure Control Plan

Purpose

The purpose of B&R Tools and Service Bloodborne Pathogen Exposure Control Plan is to provide and maintain a safe working environment for all employees by eliminating and/or minimizing occupational exposure to bloodborne pathogens, including, but not limited to: Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV). It is the responsibility of the B&R Tools and Service to provide and maintain appropriate engineering controls and personal protective equipment, and to develop and promote safe work practices. It is also expected that employees will practice and follow the guidelines set forth by this plan.

Scope

This plan covers all employees who could be "reasonably exposed," as a result of the performance of their job duties, to come into contact with blood or other potentially infectious materials.

Responsibility

The Safety Coordinator shall manage the Bloodborne Pathogen Exposure Control Plan and maintain records pertaining to the plan. Employees will have access to the control plan in a reasonable time, place and manner.

Supervisor Responsibility:

- Assure that incidents where exposures are assumed to be present are controlled through the adherence to company procedures.
- Employer will prepare an exposure determination without regard to the use of personal protective equipment
- Follow all company safe practices and procedures.
- Provide access to employees, copies of this policy.

Employee Responsibility:

- Involve self with situations where there is a possibility of exposure to potentially infectious material only if properly trained and designated by company to respond.
- Follow all company safe practices and procedures.

Compliance Policy

B&R Tools and Service has the highest regard for the safety of its employees and for the general public. Our goal is to ensure a safe and healthy work environment for all employees. The willful non-adherence to company safe practices and procedures for handling and working near potentially infectious materials by any employee will be immediate cause for disciplinary action, up to and including termination of employment. Non-compliance with this safety policy will be reviewed immediately by management to determine disciplinary action.

Definitions

- **Blood:** Human blood, human blood components, and products made from human blood.
- **Bloodborne Pathogens**: Pathogenic microorganisms that are present in human blood and can cause disease in humans. Those pathogens include but are not limited to: Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).
- **Contaminated**: The presence or the reasonably anticipated presence of blood or other exponentially infectious materials on an item or surface.
- **Contaminated Sharps**: Any contaminated object that can penetrate the skin, including, but not limited to: needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.
- **Recontamination**: The use of physical or chemical means to remove, deactivate, or destroy blood borne pathogens on a surface or item to the point that they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.
- **Engineering Controls**: Controls that isolate or remove the blood borne pathogens hazard from the workplace.
- **Exposure Incident**: A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties.
- **Hand washing Facilities**: Facility providing an adequate supply of running potable water, soap, and single-use towels or a hot-air drying machine.
- **HBV**: Hepatitis B virus.
- **HIV**: Human Immunodeficiency virus.
- **Licensed Healthcare Professional**: Person whose legally permitted scope of practice allows him or her to perform the activities required for Hepatitis B vaccination and post-exposure evaluation and follow-up.
- **Occupational Exposures**: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.
- **Other Potentially Infectious Materials (OPIM**): See page 4 for definition.
- **Parenteral**: Piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.
- **Personal Protective Equipment**: Specialized equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard is not considered to be personal protective equipment (PPE).
- **Source Individual**: Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.
- **Sterilize**: The use of a physical or chemical procedure to destroy all microbial life, including highly resistant bacterial endospores.
- **Work Practice Controls:** Controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

Background

OSHA requires employers to identify situations and job classifications in which employees may be exposed to blood or other potentially infectious materials, and to provide protection to these employees in the form of engineering controls, personal protective equipment, training, and risk reduction.

Exposure Determination

In order to protect employees, those at risk must first be identified. The following lists job classifications that are at risk for exposure to potentially infectious material(s).

- Employees trained and designated as first aid providers, and who oversee first aid supplies and transports to medical provider.
- Management and supervisors who are trained in first aid and who will respond to incidents.
- Maintenance and/or housekeeping staff who will be called upon to clean up a spill of blood or OPIM.

Control Methods

Universal Precautions

Universal Precautions (UP) is the approach to infection control. It is the practice of assuming all blood and OPIM are potentially infectious regardless of the source. UP shall apply to human blood, blood products and OPIM as well as any body fluids, tissues, or inanimate objects contaminated or potentially contaminated with same. UP requires placing effective barriers between the employee and the blood or OPIM in order to interrupt the transmission of blood borne pathogens through parenteral contact, or contact with the skin, eyes, or mucous membranes. Universal Precautions are more thoroughly discussed below.

Training

- All new employees shall receive training in Universal Precautions, pertinent to the scope of their responsibilities and work activities.
- All employees shall receive a review of Universal Precautions at least annually.
- All employees performing tasks which have been determined to have a potential for exposure are required to participate in a training and education program prior to initiating the task(s). {All managers/supervisors and designated first aid providers.} This training will be updated annually.

Training will be provided at no cost to the employee and during reasonable normal working hours. Training shall be conducted by individuals knowledgeable in the subject matter as it relates to the control of Blood borne Pathogens and to the specific tasks being performed. The training will contain the following elements:

Hand Washing

- Hand washing facilities shall be made available and readily accessible to all employees who may incur exposure to blood or other potentially infectious materials. Where hand washing facilities are not feasible, B&R Tools and Service will provide an antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes.
- Wash hands after removing gloves or other personal protective equipment.
- Wash hands after contact with blood or other potentially infectious material.
- In the event hand washing facilities are not immediately available, a substitute antiseptic hand cleaner or towelettes will be used. Hands shall be washed with running water and soap as soon as possible.

Waste

- The Supervisor shall properly package waste, to prevent spill or leakage, and label it for disposal. Waste will be placed in plastic trash bags if biohazard bags are not available. Biohazard waste will be labeled and disposed of in the waste dumpster unless it can be removed by the local emergency response service (if they responded to the incident). Do not discard in a trash can where employees will have to handle the waste again; dispose of it directly into the dumpster. Warning labels and signs shall be used to warn employees of items containing blood or other potentially infectious material.

Blood or Body Fluid Spills

- In the event of a blood or body fluid spill, all visible organic matter must first be removed and then the area decontaminated. To assist with cleanup there is a spill kit located in each department office or break room. Follow instructions on spill kit.
- Broken glass and other sharps shall be picked up using a dustpan and brush, not by hand.
- Decontamination shall be done by thoroughly cleaning the area of spill with an approved disinfectant or bleach.
- Special caution shall be taken when disinfecting sharp edges such as cutting knives or saw teeth.

- All equipment and environmental working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

Resuscitation Equipment

Protective resuscitation devices (pocket masks) are located in first aid kits to provide personnel with immediate access for emergency situations. These devices shall be used in place of emergency mouth- to-mouth resuscitation. Once used, these items shall be properly bagged for disposal.

Work Practice Controls & Engineering

Personal Protective Equipment

- PPE will be provided by this company at no cost to employees, and when used correctly by employees, will eliminate or minimize direct exposure to potentially infectious or contaminated material by providing an appropriate barrier.

- PPE available in general includes:
  - Disposable latex gloves and rubber industrial gloves
  - Pocket masks
  - Face shields

- Single-use disposable gloves shall be worn when it is reasonably anticipated that hand contact with blood or OPIM will occur. Gloves will be supplied in all company first aid kits.
  - Clean, single-use (disposable) latex gloves are available in various sizes. These are located in each first aid box.
  - Gloves shall be worn when there is anticipated or potential contact with blood or body fluids.
  - Gloves shall be worn when the employee has non-intact skin (cuts, abrasions, dermatitis, etc.).
  - Gloves shall be worn by the persons responsible for the transportation and handling of soiled linen and red bag waste.
  - Gloves shall be worn when cleaning any surface or areas soiled with OPIM
  - Gloves shall be worn when handling surfaces soiled with blood or blood products
  - Gloves shall be changed when visibly soiled or damaged

- Pocket Masks
  - These masks are for use when providing cardiopulmonary resuscitation (CPR).
  - The masks provide a barrier between the user and the victim, protecting against saliva and expired air.
  - The masks will be clean, single-use (disposable) types, with one-way valves.

Blood and/or OPIM

Spill Clean-up and Disposal of Biohazard Waste Blood borne Spill Kit Contents:

- Rags, paper towels,
- Bleach or germicide
- Mop
- Broom
- Dustpan
- Trash bags or biohazard bags
- Latex gloves
- Spray bottle

Post Exposure Incident Evaluation and Follow-up Reporting

- All exposure incidents and blood or body fluid contact must be reported to a supervisor immediately after occurrence and be followed up by a licensed healthcare provider.
- An exposure incident is defined as a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or OPIM that results from the performance of an employee's duties. In the event of an exposure, employees will have the opportunity, AT NO COST TO THE EMPLOYEE, to receive a confidential medical evaluation with the company medical provider.

Treatment

An incident report will be sent to the company medical provider with a copy of this B&R Tools and Service Bloodborne Pathogen Standard, a written summary of the exposure incident including the route of exposure and circumstances, and all medical records relevant to the appropriate treatment of the employee, including vaccination status.

Medical Treatment

The exposed employee will be offered serologic HIV/HBV testing in the manner recommended by the CDC as soon as possible after the incident and the opportunity for retesting as recommended by the CDC. Testing will be performed at an accredited laboratory at no cost to the employee. If the employee initially declines serologic testing, he / she may elect to have the baseline studies drawn and saved for up to 90 days. At any point during this time period, he / she may elect to have the tests performed on the saved blood.

Hepatitis B Vaccine Program

All employees who have jobs which may be "reasonably anticipated" to bring them in contact with items contaminated by blood or body fluids shall be offered Hepatitis B vaccine free of charge. These workers must be immunized against Hepatitis B or sign a declination form. Any employee who declines the vaccine initially may request it, free of charge, at any future date.

Employees will have the opportunity to receive post-exposure prophylaxis (i.e., gamma globulin, Hep B immune globulin, AZT) when medically indicated, at no cost to the employee.

Follow-up of the exposed worker will include counseling, medical evaluation of any febrile illness that occurs up to 12 weeks post-exposure, and the use of safe and effective post-exposure measures according to standard medical practice.

Recordkeeping

B&R Tools and Service will, within 15 days, obtain a copy of the healthcare professional's written report and provide the employee with a copy. This opinion will be limited to whether hepatitis B vaccine was indicated and whether it was given, if the employee was made aware of the results of the evaluation, and any medical conditions resulting from exposure to blood or OPIM which may require further treatment. All other findings or diagnoses will remain confidential.

Medical records shall include:

- Each exposure will be documented in accordance with 29 CFR, Access to Employee Exposure and Medical Records. Records shall be maintained for at least the duration of employment plus thirty years.

- Each exposure record shall include:
  - The name and Social Security number of the employee.
  - A copy of the employee's HBV vaccination status including dates and any records relative to the employee's ability to receive the vaccination.

- A copy of all results of examinations, medical tests, and follow-up procedures.
- The employer's copy of the healthcare professional's written opinion.
- A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to an exposure incident, and documentation of the routes and circumstances of an exposure.
- These records shall not be disclosed to anyone without the employee's express written consent, except as required by OSHA regulations, or state law.
- Exposures shall be recorded on the OSHA 300 form if medical treatment is required, or if duties are restricted to time lost in accordance with OSHA guidelines.
- HBV and HIV infections shall be recorded on the OSHA 300 log if the illness can be traced back to an occupational injury or accident.

Training Records

B&R Tools and Service shall maintain training records for three years from the date of training. Records shall include:

- The dates of the training sessions;
- An outline describing the material presented;
- The names and qualifications of persons conducting the training; and
- The names and job titles of all persons attending the training sessions.

Evaluation and Review

B&R Tools and Service shall review this Bloodborne Exposure Control Plan for effectiveness at least annually and as needed to incorporate changes to the standard or changes in the workplace.

Compressed Gas Cylinders Policy

Handling

Compressed gas cylinders should be handled only by those familiar with the hazards and who understand how to safely handle, transport and store compressed gas cylinders. Cylinders containing compressed gases are heavy and awkward to move. Improper handling of compressed gas cylinders can result in sprains, strains, falls, bruises, or broken bones. Other hazards such as fire, explosion, chemical burns, poisoning, and cold burns could occur if gases accidently escape from the cylinder due to mishandling. Take the following precautions to prevent injuries caused by the improper handling of compressed gas cylinders.

Never

- Drag or slide cylinders, even for short distances.
- Drop cylinders or permit them to strike each other violently.
- Subject cylinders to mechanical shocks that may cause damage to their valves.
- Use cylinders as rollers for moving material or other equipment.
- Tamper with pressure-relief devices.
- Permit oil, grease, or other readily combustible substances to come in contact with cylinders, valves, or other equipment in oxidizer service.
- Remove any product labels or shipping hazard labels.
- Refill compressed gas cylinders. This is to be done only by qualified producers of compressed gases.
- Lift a cylinder by its cap using a sling or a magnet.
- Attempt to catch a falling cylinder.
- Allow cylinders within the 100 Gauss line.

Always

- Move cylinders using a suitable hand truck or cart
- Leave the valve protection cap and valve seal outlet in place until the cylinder has been secured in place and is ready to be used.
- Secure cylinders when in storage, transit, or use.
- When returning cylinders to the supplier, properly close the cylinder valve, replace and secure any valve outlet seals, and properly install the cylinder cap.
- Use a cylinder cage or cradle to lift a cylinder.
- Use the proper PPE for cylinder handling (safety glasses, leather gloves and safety shoes).
- Remember when a cylinder cap cannot by removed by hand, cylinder shall be tagged “Do Not Use” and returned to the designated storage area for return to vendor.
- Use tools provided by the supplier to open and close cylinder valves.
- Ensure leaking cylinders are moved to an isolated, well ventilated area away from ignition sources. Soapy water should be used to detect leaks. If the leak is at the junction of the cylinder valve and cylinder, do not try to repair it. Contact the supplier and ask for response instructions.
- Ensure cylinders are marked as “MT” and dated when empty. Never mix gases in a cylinder and only professionals should refill cylinders.
- Handle empty cylinders as carefully as full cylinders.

Storage

Take the following precautions to prevent injuries caused by asphyxiation, fire, explosion, high pressure, and improper handling of compressed gas cylinders.

Never

- Allow storage temperature to exceed 125°F (52°C).
- Permit smoking or open flames in oxidizer or flammable gas storage areas.
- Expose cylinders to corrosive materials such as ice melting compounds.
- Do not store oxidizing gases near flammable solvents, combustible materials or near unprotected electrical connections, gas flames or other sources of ignition.

Always

- Store cylinders upright with valve outlet seals and valve protection caps in place (hand tight).
- Secure cylinders when in storage, transit or use.
- Segregate full and empty cylinders.
- Store cylinders in a dry, cool, well-ventilated, secure area protected from the weather and away from combustible materials.
- Store only the amount of compressed gas required for the specific application.
- Store cylinders away from heavily traveled areas and emergency exits.
- Provide adequate access for cylinder handling.
- Visually inspect stored cylinders on a routine basis for any indication of leakage or problems.
- Protect cylinders from wet or damp ground.
- Separate cylinders containing oxygen or oxidizing gases, e.g., chlorine, (empty or full) from cylinders containing flammable gases by a minimum distance of 20 feet or by a barrier at least 5 feet high having a fire-resistance rating of at least one-half hour, e.g., a concrete block wall.
- Ensure cylinders are equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil and dirt and solvents.
- Ensure storage areas are designated for full and empty cylinders and labeled appropriately.
- Inspect hoses and connections regularly for damage. Hoses should be stored in cool areas and protected from damage.

Proper Use of Compressed Gases

Take the following precautions to prevent injuries by the improper use of compressed gases.

Never

- Attempt to mix gases in a cylinder.
- Insert an object (e.g., wrench, screwdriver, etc.) into valve cap openings to remove a stuck cylinder cap. Doing so may damage or open the valve, causing a leak to occur. Use an adjustable strap – wrench to remove over-tight or rusted caps.
- Allow any part of a cylinder to be exposed to temperatures exceeding 125°F (52°C).
- Permit cylinders to become part of an electrical circuit.
- Use oxygen as a substitute for compressed air.
- Strike an arc on a cylinder.
- Return product into a cylinder.
- Use cylinder color as a primary means to identify the contents of a cylinder.
- Heat a cylinder to increase its pressure.
- Discharge the contents from any gas cylinder directly toward any person.
- Refill any non-refillable cylinder after use of the original contents.
- Force cylinder valve connections that do not fit.

- Reduce the residual pressure of a cylinder below the operating pressure of the system.
- Modify, tamper with, paint deface, obstruct, remove or repair any part of the cylinders.

Always

- Know and understand the gases and associated equipment you will be using. Refer to the supplier's SDS to determine the proper PPE and any other special requirement for the gas being used.
- Secure cylinders when in storage, transit, or use.
- Use a pressure regulating device where, due to the gas capacity of the supply source system rating may be exceeded.
- Use a suitable pressure relief device to protect a system using a compressed gas where the system has a pressure rating less than the compressed gas supply source and where, due to the gas capacity of the supply source or for any other reason, the system pressure rating may be exceeded.
- Use regulators approved for the specific gas.
- Leak-test lines and equipment with an inert gas before using.
- Use check valves when reverse flow is possible especially in a multi gas system of incompatible gasses.
- Loosen the valve outlet seal slowly when preparing to connect a cylinder.
- Open cylinder valves slowly and carefully after the cylinder has been connected to the process.
- Keep container valve closed when not in use.
- Stand clear of the regulator and valve outlet while opening the valve.
- Prevent sparks and flames from contacting cylinders.
- Discontinue use and contact the supplier if a cylinder valve is difficult to operate. Wrenches should not be used on valves equipped with handwheels. If the valve is faulty, tag the cylinder, identifying the problem, and notify the supplier.
- Close the cylinder valve and release all pressure from the downstream equipment connected to the cylinder anytime an extended non-use period is anticipated.
- Remember, the cylinder label or decal is the only positive way to identify the contents of a cylinder.
- Keep liquid oxygen containers, piping and equipment clean and free of grease, oil and organic materials.

Transport

- Cylinders must be transported in a vertical secured position using a cylinder basket or cart and must not be rolled.
- Regulators should be removed, and cylinders capped before movement.
- Cylinders should not be dropped or permitted to strike violently.
- Never use a protective cap to lift cylinders.

CYLINDER GAS RECEIPT AND DELIVERY

Incoming/Distribution Location

The driver will check in with the receiving department upon arrival on site. Receiving personnel will tag the cylinders with a three-part status tag (FULL, IN USE, EMPTY), stamp the back of the tag with receipt date, enter the requestors name project code and BM request number and sign and delivery receipt. Driver will deliver cylinders to the requested locations (OPMD Receiving Dock, NMR Receiving Dock or C wing receiving area) and pick up any empties. Gas identification should be stenciled or stamped on the cylinder or affixed with a label. No compressed gas cylinder should be accepted for use that does not legibly identify its content by name.

Delivery/Pick-up

Receiving will alert the requestor of their gas delivery via e-mail. The requestor should check that their gas was received. A non-reply to this email within 48 hours confirms receipt. Appropriate cylinder trucks are available at the OPMD Receiving area to safely transport gas to work areas.

Training

All employees should be trained on the use, handling, and storage of compressed gas cylinders

Record of Employee Training

Employees have been made aware of the risk for compressed gas cylinders and have been trained in the appropriate actions as defined in the procedures of this program. The following is a list of employees who have received training on Compressed Gas Cylinder Policy.

Topics in this training include

Identification
Proper Use of Cylinders
Proper Storage and Storage Areas
Proper Handling
Hoses and Connections
Inspection
Proper Use of Regulators and Tools
Transportation
Empty Cylinders
Engineering Controls

Printed Name	Signature	Date

Confined Space

B&R Tools and Service has adopted this policy in the event that entry to a confined space is required.

Definitions:

Confined Space- Is classified as a space large enough that an employee can enter to perform assigned work, however, has limited or restricted means for entry or exit, and that is a space that is not designed for continuous employee occupancy. (tanks, silos, vats, pits, tunnels, sewers, crawl spaces, etc.)

Permit Required Confined Space- Any confined space that is deemed to have a physical or atmospheric hazard present.

Non-Permit Required Confined Space- Any confined space that has not been deemed to have a physical or atmospheric hazard.

Atmospheric Hazard-

- oxygen Deficient or Saturated environments <19.5% or > 23.5% oxygen concentration
- combustibles present, i.e. methane, hydrogen, acetylene, etc.
- substances that exceed the PEL- hydrogen sulfide, carbon monoxide

Physical Hazard-

- falls from heights
- slippery walking surfaces
- electrical hazards
- engulfment
- noise
- environmental hazards (heat/cold stress)

Entry- is when a person passes through, or any part of the entrant's body breaks the plane of the opening the opening to a permit-required confined space

Permit Required Confined Space- 1910.146

B&R Tools and Service has implemented this policy to ensure proper and safe work practices are followed to protect employees from hazards associated with work within a confined space. This program will be reviewed within one year of revision date and will be revised as necessary.

Training:

- Training will be conducted prior to initial assignment.
- Training will be provided to each affected employee before entry into a confined space.
- Before there is a change in assigned confined space duties
- Whenever there is a change in permit space operations that presents a new hazard and or if special deviations have occurred.
- Upon evaluation of the task, if supervisors deem employees are participating in unsafe work practices.
- All training will be documented.
- Employees will be trained and demonstrate proficiency in the following areas:

- Recognize and understand the hazards that may be present during entry, including information on the mode of entry, signs/symptoms, and consequence of exposure.
- Properly use PPE required for the specific designated confined space
- Demonstrate a proper understanding of all roles of confined space entry

Four roles of Confined Space Entry:

Authorized entrant- any employee who is authorized by the employer for entry into a confined space

An entrant will:

- Know the hazards that may exist during entry
- Recognize warning signs and symptoms of exposure to a dangerous situation
- Proper use of equipment
- Communicates with the attendant as needed and alerts other entrants of the need to evacuate the space
- Correctly uses PPE designated for the confined space

Attendant: the trained employee who is stationed outside the entrance of the confined space who monitors the authorized entrant. It is B&R Tools and Service policy that our company will utilize only one attendant per one entrant. In the event B&R Tools and Service has several confined spaced entrants at once, each entrant will have an attendant assigned solely to him or her.

An attendant will:

- Maintain communication with authorized entrants
- Monitor activities inside and outside the space
- Summon rescue and other emergency services
- Remain outside the permit space during entry operations until relieved by another attendant
- Performs non-entry rescues as specified by the employer's rescue plan
- Recognizes and understands the hazards that are associated with entry
- Performs no duties that might interfere with the attendant's primary duty to monitor and protect the entrant(s)

Entry Supervisor: the person responsible for determining if acceptable entry conditions are present where an entry is planned (i.e., foreman, crew chief, etc.)

An entry supervisor will:

- Know and understand hazards that may be present during entry including signs, symptoms and consequences of exposure
- Verify that barriers are in place, if needed, to prevent vehicles and/or pedestrians from entering the vicinity and to protect entrants from external hazards
- Verifies that all test specified by the permit have been conducted and that all equipment specified by the permit is acceptable for entry during its duration, before endorsing the permit
- Verifies that rescue services are available and that the means for summoning them are operable
- Prevents unauthorized individuals who attempt to enter the permit space during entry operations
- Determines that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained
- Must coordinate with all individuals on location (employees, contractors, sub-contractors) to ensure safety of his

or her entrant and to maintain the integrity of the permit
- Terminates the entry and cancels permit when the job is complete, or conditions change and create an unsafe atmosphere inside the confined space

Rescue Team

A rescue plan will be established before entry and a rescue team will be on standby, onsite for IDLH (Immediately Dangerous to Life and Health) conditions while work is being performed. The members of this team must be properly trained to perform the needed rescue services.

Personal Protective Equipment (PPE)-

The company will establish the PPE required for each specific confined space entry after a hazard assessment of the confined space is complete. PPE could include: Appropriate Boots, hard hats, safety glasses, SCBA's, chemical suits, etc.

Confined Space Permit:

- Permit must be completed before entry is authorized
- Entry supervisor must sign the permit
- Permit must be made available at the time of entry so entrants can confirm that pre-entry preparations have been completed.
- Duration may not exceed the time identified on the permit
- Retain each canceled entry permit for at least 1 year to facilitate review of the program
- Problems encountered during entry shall be noted on the permit so that appropriate revisions can be made to the program

Atmospheric Testing and Controls:

- All atmospheric testing monitors must be kept calibrated and a calibration sticker must be applied to the monitor in order to enable all personnel to visually verify that the calibration has been completed
- Atmospheric testing must be conducted at least hourly or whenever changes occur that could alter the atmospheric conditions inside the confined space
- Additional testing can and will be conducted at any time upon the request of any onsite personnel
- Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. The atmosphere within the space will be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Entrants will be made aware of the results.

Disciplinary Safety Policy

Purpose

Any employee of the B&R Tools and Service who deliberately violates a safety rule will be counseled on that safety rule. The positions responsible for enforcement of the disciplinary program are safety coordinator, project manager or job foreman.

As a minimum, any employee who violates a safety rule will be counseled on that safety rule.

In addition, he or she will have to submit a letter to the Safety Coordinator within 24 hours, explaining the safe/Correct way to perform the task.

A safety violation will be considered not following verbal or written safety procedures, guidelines, rules, horse play, failure to wear selected PPE, abuse of selected PPE.

The procedure to be followed after issuing a safety violation will include discussing the infraction and inform the individual of the rule or procedure that was violated and the corrective action that will be taken.

If the employee feels there were conditions or circumstances that caused them to violate the safety rule, it will be their responsibility to explain the situation in writing and to make the recommendation on how to correct it. The letter will be made part of their employee record.

Physical inspections of work areas must be conducted to ensure compliance with safety rules and policies.

Violations

- As a minimum, any employee who violates a safety rule a second time will be suspended without pay for one week.
- Any employee who violates a safety rule a third time will be deemed to have deliberately violated the rule and will be fired immediately.
- If it has been a year since the last safety violation the B&R Tools and Service may treat new incidence as a first, per supervisor’s discretion.

Driving Safety Policy

Purpose

B&R Tools and Service has implemented this policy to inform workers of the written Driving Safety program. The helps to ensure the safety and health of employees and to reduce at-fault crash costs and injuries by promoting a safe driving culture within B&R Tools and Service.

Objectives

- To ensure that staff who drive vehicles in the course of their work demonstrate safe, efficient driving skills and other good road safety habits at all times.
- To maintain all company vehicles in a safe, clean and roadworthy condition to ensure the maximum safety of the drivers, occupants and other road users, and reduce the impacts of company vehicles on the environment – this also applies to personal vehicles used for work purposes.

Code of conduct

The code of conduct for B&R Tools and Service states that: “While driving company vehicles or own vehicles for work purposes, staff must comply with traffic legislation, be conscious of road safety and demonstrate safe driving and other good road safety habits”.

The following actions in company vehicles will be viewed as serious breaches of conduct and dismissal may be a consequence:

- drinking or being under the influence of drugs while driving
- driving while disqualified or not correctly licensed
- reckless or dangerous driving causing death or injury
- failing to stop after a crash
- acquiring tickets leading to suspension of license
- any actions that warrant the suspension of a license

Responsibilities

Responsibilities as an employee

Only authorized employees will drive a motor vehicle in the course and scope of work or operate a company-owned vehicle.

Every driver of a company vehicle will:

- Ensure they hold a current driver license for the class of vehicle they are driving, and this license is carried when driving a company vehicle
- Employee must complete a pre-trip inspection
- Employee will utilize back in parking only
- Employee will perform a 360 degree walk around of the vehicle prior to driving
- Immediately notify their supervisor or manager if their driver license has been suspended or cancelled or has had limitations assigned.

- be responsible and accountable for their actions when operating a company vehicle or driving for the purposes of work
- display the highest level of professional conduct when driving a company vehicle
- regularly check the oil, tire pressures, radiator and battery levels of company vehicles they regularly use
- notify supervisors if employee is fatigued to the point of not being able to perform their duties safely
- ensuring employee is physically and mentally fit to perform their job functions safely, and taking responsibility for their own safety as well
- obey all traffic laws while driving
- assess hazards while driving and anticipate 'what if' scenarios
- drive within the legal speed limits
- always wear a safety belt (driver and all occupants)
- never drive under the influence of alcohol or drugs, including prescription and over the counter medication if they cause drowsiness – to do so will result in disciplinary measures
- avoid distraction when driving – the driver will adjust car stereos/mirrors etc. before setting off, or pull over safely in order to do so
- **Electronic device use including cell phone use while operating a motor vehicle is strictly prohibited**
- report any traffic violations, near-hits, crashes and scrapes to their manager, including those that do not result in injury, and follow the crash procedures outlined in this policy
- report any tickets or violations to a manager at the earliest opportunity
- report vehicle defects to a manager before the next vehicle use.
- Ensure that all loads are secure and do not exceed the manufacturer's specifications and legal limits for the vehicle.
- Use the vehicle only for its intended purpose

In addition, it is required that all drivers:

- take regular and adequate rest breaks, at least every two hours
- stop when tired
- plan their journeys, taking into account pre-journey work duties, the length of the trip and post-journey commitments

If an employee is driving their own vehicle for the purposes of work, the same policies apply. In addition:

- the employee must seek the employer's agreement before using their vehicle for work
- the car must be legally registered, warranted and insured for the purposes of work – the employee must show evidence of this on request
- the employee must not carry loads for which the vehicle is unsuited, nor may they carry more passengers than for whom there are seat belts
- the vehicle must not be used in conditions for which it was not designed (such as off-road).

Responsibilities as an employer:

The employer will take all steps to ensure company vehicles are as safe as possible and will not require staff to drive under conditions that are unsafe and/or likely to create an unsafe environment, physical distress, fatigue, etc.

The employer will do this by undertaking the following tasks:

Giving priority to safety features when selecting new vehicles, including:

- choosing vehicles that are safe and reliable
- choosing vehicles with ABS brakes and airbags
- only buying vehicles that are light in color
- fitting all vehicles with a first aid kit, fire extinguisher, reflective vest, flashlight and emergency triangle.

Ensuring all vehicles are well maintained and that the equipment promotes driver, operator and passenger safety by:

- servicing the vehicles according to manufacturers' recommendations
- setting up procedures where employees check vehicles' oil, water, tire pressures and general cleanliness on a monthly basis, then record the inspections
- keeping maintenance schedules in the glove boxes of all vehicles, which are completed each time the vehicles are serviced in any way
- following the maintenance schedules in the vehicles' manuals
- setting up a procedure to identify and rectify faults as soon as practicable.

Collecting and collating statistics on incidents, crashes and their causes, including:

- the number of crashes
- who was thought to be at fault
- the probable causes of the crashes and other contributors, such as unrealistic work schedules
- the financial cost of all crashes
- the number of prosecutions
- the number of near-miss events
- other costs, such as downtime, workers compensation claims, temporary workers and lost productivity.

Monitoring and managing work schedules to ensure they do not encourage unsafe driving practices by:

- recommending staff to have 10 hours' minimum continuous rest and 11 hours' maximum driving time every 24 hours

Taking into account individual drivers' needs by:

- Requiring staff to keep driving logs that are regularly checked by a supervisor or manager.
- Ensuring employees are physically fit and capable to perform their job duties as assigned
- Ensuring employees possess valid drivers' licenses for the class of vehicle being driven
- Responding quickly to eliminate workplace hazards
- Ensuring employees follow safe job procedures

Identifying driver training needs and arranging appropriate training or retraining, including providing:

- a thorough induction to the company's road safety policies and procedures
- driver training opportunities to all staff
- driver assessment and required training as part of all staff inductions

- advanced driver training or specific practical training as required and identified
- regular staff seminars or refresher meetings on safety features, fatigue, driver responsibility, drink-driving and fuel-efficient driving
- driver training log updates on personnel files.

Encouraging safe driving behavior by:

- not paying staff speeding or other infringement fines
- forbidding the use of mobile phones in vehicles while driving
- encouraging regular breaks while driving
- providing taxis and designated drivers to and from work social events
- providing food and non-alcoholic drinks at work functions
- encouraging the use of taxis and buses whenever necessary
- ensuring the employer is informed if existing staff become unlicensed.

Encouraging better fuel efficiency by:

- providing training on, and circulating information about, travel planning and efficient driving habits
- encouraging the use of other transport and/or remote conferencing whenever practical.

What employees are to do if there is a crash in a company vehicle?

Immediately stop your vehicle at the scene or as close to it as possible, making sure you are not obstructing traffic. Ensure your own safety first. Help any injured people and call for assistance if needed.

Try to get the following information:

- details of the other vehicle(s) and registration number(s)
- name(s) and address(es) of the other vehicle owner(s) and driver(s)
- name(s) and address(es) of any witness(es)
- name(s) of insurer(s).

Give the following information:

- your name and address and company details.

If you damage another vehicle that is unattended, leave a note on the vehicle with your contact details.

Contact the police:

- if there are injuries
- if there is a disagreement over the cause of the crash
- if you damage property other than your own
- if damage to the vehicle looks to be worth more than $2500.

Follow-up

If there is an injury or major damage, report the crash to your manager as soon as you can.

How the success of the policy will be measured

The success of this policy will be measured by the increase or decrease in:

- the number of crashes involving company vehicles
- the number of at-fault crashes involving company vehicles
- the number of traffic infringements received
- the costs of repairs and maintenance
- other financial costs associated with vehicle use
- the average cost of vehicle-related workers' compensation claims.

Dropped Objects

Purpose

The purpose of this Dropped Object Prevention Plan is to establish corporate-wide guidelines for eliminating dropped objects when working at height. This prevention plan is intended to significantly reduce both hazards and serious injury and risks to employees that dropped objects can pose. This plan should help mitigate dropped objects by ensuring that workers are properly trained to secure tools at height and understand correct procedures.

Scope

All employees of B&R Tools and Service.

Application

This Dropped Object Prevention Plan applies to:

- All locations where personnel are employed to perform work at height or where they may be exposed to a dropped object by working below other personnel, tools, equipment and platforms.
- The requirements of this plan must be observed by all personnel involved in working at height or below at height activities.
- This Dropped Object Prevention Plan must be reviewed in any job safety analysis or pre-task planning for activities that require working at height with tools, and in those activities that require working below such activities.
- This plan establishes minimum expectations in order to mitigate the risk of damage to property or personnel done by dropped or falling objects. It is the expectation of B&R Tools and Service that any tools and materials that could be considered drop hazards are secured with secondary drop systems.

Definitions

Primary Drop System: Primary Drop Systems are systems which serve as the tool's primary form of drop prevention and typically include the worker's hand placement or grip on the tool. Other forms of primary protection may include main support systems for the tool (such as holstering a tool on the body or the platform a tool may be resting while not in use).

Secondary Drop System: Secondary Drop Systems serve as a backup in the event the primary system fails and are utilized to prevent damage from a dropped or falling object after it has fallen. Secondary systems may include passive systems such as guardrails with toe-board and mesh netting, screens, floor/hole coverings, and tool canopies that have side protection. They may also include tool restraint systems which are utilized to secure a tool or object to an employee or stationary structure to prevent it from falling (these include pouches and transport buckets with closure systems). Tool arrest systems include tool tethers, which will arrest the fall of the tool and prevent it from striking a lower level and others below.

Drop Hazard: Any tool, material or object that has an opportunity to fall from elevation to a lower level causing potential for damage to property, injury or death.

Mitigation: The elimination or reduction of the frequency, magnitude, or severity of exposure to risks by the minimization of the potential impact of a threat or warning.

Anchorage: A secure point of attachment for tethers, tools and transport buckets with closure systems which is independent of an anchorage used for fall protection for personnel.

Attachment Point: A device designed and utilized to create a connection point on a tool to which the user can connect a tether or lanyard.

Tool Lanyard/Tether: An extension made of durable materials that is designed to prevent an object from being dropped. These will typically utilize a connection point on either end of the tether for securing an object to a worker or stationary item.

Tool Bucket: A bucket designed for the purpose of carrying tools and materials. These tool buckets must be capable of being closed and secured in order to prevent the contents of the tool bucket from spilling. All tool buckets being utilized by B&R Tools and Service must utilize a closure system.

Tool Pouch: A bag or pouch that is designed to secure its contents (nuts, bolts, nails, screws, small hand tools, etc.) from being spilled or dropped. Many tool pouches allow the user to remove a tool for use while preventing it from becoming a drop hazard through use of tethers, retractors, etc.

Tool Holster: A bag or pouch designed to secure single tools or items (hammers, wrenches, levels, radios, bottles, etc.) in order to keep them easily accessible while, in use with other necessary components, helps prevent them from becoming drop hazards.

Tool Belt: A device that is designed to ergonomically support and manage other dropped prevention items such as, lanyards/tethers, pouches, and holsters on the person of the worker.

Dropped Object Zone (DOZ): An area with potential to be impacted by drop hazards currently present in a work-in-progress above. These Dropped Object Zones are to be secured with barricades to prevent unauthorized entry. Signage stating the hazard and who to contact for information will be posted at the DOZ as well.

Safety Net: A device installed beneath work-in-progress to catch falling objects or personnel.

Tool Canopy: A structure designed to rest over an area that is capable of withstanding the impact force of dropped objects or tools. It is recommended that tool canopies have side protection if a potential for tool deflection exists.

Static Load Maximum Static Load, or Tensile Strength, refers to the maximum load an object can withstand before failing. This measurement does not take into account Drop Distance or Velocity.

Dynamic Load Maximum Dynamic Load refers to the load an object can withstand without failing when dropped from a specified Drop Distance. Maximum Dynamic Load is usually much less than Maximum Static Load due to the dramatic increase in force caused by the velocity of a falling object.

Responsibilities

Management/Supervision is responsible for:

- Communicating the expectation that dropped objects will be eliminated within B&R Tools and Service and ensuring that this plan and associated procedures are implemented.
- Coordinating assessments to ensure implementation and effectiveness of the procedure.
- Ensuring employees have appropriate equipment and materials to implement the procedure effectively.

- Ensuring workers have necessary opportunity for required training.

Health and Safety is responsible for:

- Communicating this procedure and supporting information to applicable employees.
- Conducting assessments to evaluate the procedure's effectiveness.
- Conducting necessary training with applicable employees.

All Employees are responsible for:

- Notifying his or her supervisor of any drop hazards within their scope of work.
- Conducting work only after all drop hazards have been eliminated or property mitigated.
- Stopping work if hazardous conditions prevent the job from being done safely.
- Immediately reporting any dropped or fallen objects.
- Including potential drop hazards in Job Hazard Analyses and Pre-job Planning

Training

In many circumstances additional training related specifically to dropped and falling objects will be necessary for employees. Training will be provided to each employee who may create or be exposed to drop hazards during their work with B&R Tools and Service.

This training shall include:

- The nature of drop hazards and dropped objects in the workplace
- Correct procedures and equipment use for drop prevention
- Purpose and application of applicable Primary and Secondary Drop Systems
- Proper storage and handling of equipment and materials at height
- Reporting requirements for incidents and near misses

When there is reason to believe that an employee who has undergone training does not have adequate understanding or comprehension of B&R Tools and Service standards regarding drop prevention, it will be required that said employee is re-trained. Other circumstances which could necessitate re-training are changes in procedure, changes in drop prevention equipment, etc. Training should be documented.

Date:_____ Operator:_____

Rig #: _____ Location:_____

Safe	At Risk	Equipment	Description of Defect Found

Comments:

Describe any additional unsafe conditions: _____

_____

_____

_____

Corrective Actions: _____

_____

_____

_____

Operator Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Drug and Alcohol Program

Purpose

The purpose of this policy is to ensure that B&R Tools and Service maintains a workplace free of drug and alcohol use for the safety and well-being of its employees and the general public.

Scope

This policy applies to all B&R Tools and Service employees.

Policy

The sale, use, purchase, distribution, transfer or manufacture of illegal drugs by employees on company premises (including company vehicles) or while on company business is prohibited.

The illegal use of any legal drugs such as prescription medications during working hours is prohibited. The use of prescription medication while at work is limited to medications prescribed for the individual that do not materially impair his/her ability to work safely.

Possession, use of, or being under the influence of alcoholic beverages on company premises and/or vehicles is prohibited except where possession or use for company-sponsored activities has the prior approval of the location manager.

B&R Tools and Service will cooperate with all law enforcement agencies regarding the sale, purchase, manufacture, transfer, possession, or use of illegal drugs or alcohol on company premises. In appropriate circumstances, illegal substances found on company premises will be turned over to the appropriate authorities.

Due to potential workplace implications, any employee convicted of a drug related felony during the course of company business will be immediately suspended pending disciplinary review that may result in termination.

In all cases described below, the company will use an approved certified lab or clinic for drug and alcohol testing and specimen collection.

All specimens will be handled and analyzed in accordance with applicable federal requirements.

The alcohol cut-off level for a positive test established by B&R Tools and Service is as follows:

- .00 - .019 Negative test
- .020+ Positive test

The drug cut-off level for a positive test is as follows: (ng=nanograms)

MDMA screen	250 ng/ml	200 ng/ml
Oxycodone/Oxymorphone scrn, ur	100 ng/ml	100 ng/ml
Cocaine	150 ng/ml	100ng/ml
6 am screen (10)	10ng/ml	10ng/ml

Urine creatinine		
Benzodiazepines	200ng/ml	100ng/ml
Methadone	300ng/ml	100ng/ml
Mathaqualone	300ng/ml	200ng/ml
Bartiturates	200ng/ml	100ng/ml
Marijuana metabolite	20ng/ml	10ng/ml
Opiates	300ng/ml	100ng/ml
Phencyclidine	25ng/ml	25ng/ml
Amphetamines (class)	300ng/ml	250ng/ml
Propoxyphene/metabolite	300ng/ml	200ng//ml
Adulta-PH		

CBD

Federal and Texas law have changed to allow possession of products derived from hemp with less than 0.3 % tetrahydrocannibinol (THC). As a result of these changes, CBD products with less than 0.3% THC are legal to possess. However, due to the nature of the recent changes, nearly all CBD products are unregulated. There is a zero-tolerance policy on all drug usage. In the event of a positive drug test, the medical review officer will contact the individual to determine if there is a reasonable medical explanation for the positive test result. Due to the unregulated nature of CBD products, use of these products will not be viewed as a reasonable medical explanation for a drug test positive for THC. It will be the determination of the medical review officer if the final drug test result is positive. In the event the final result is positive, the employee will be terminated.

Testing

Pre-employment Drug Screen

To maintain a drug-free workplace, B&R Tools and Service requires pre-employment drug screens on all potential employees. The drug screen is performed post-offer but must be completed before the first day of work. Management will coordinate the screening during the hiring process. To maintain confidentiality, the testing lab will be instructed to release results to authorized personnel only.

Any candidate who fails a post-offer pre-employment drug screen will have their offer of employment rescinded and will be ineligible for hire for at least twelve (12) months from the date of the test result.

In the case of a diluted specimen, the candidate must retake the drug screen within 24 hours of receiving notice to retake the test. If the candidate produces another diluted sample, the offer will then be rescinded. If the candidate refuses to retest or does not retest within the specified 24-hour period, the offer will be rescinded.

Probable Cause Testing

B&R Tools and Service will conduct testing if there is a reasonable suspicion of drug or alcohol influence while on the job. This is done for the safety of the suspected employee and for the protection of fellow B&R Tools and Service employees and the general public.

The Office Manager will coordinate this testing once it is deemed necessary.

Any supervisor or manager who suspects that an employee is under the influence of drugs or alcohol while on duty should immediately contact the Administrative Department or upper management to determine if probable cause is warranted based on the employee's observed behavior. Final approval to invoke for-cause testing rests with the owners. Any

employee who is found to be under the influence of drugs or alcohol on the job will be terminated, and potential rehire status will be in question.

If a supervisor suspects an employee as being under the influence of drugs or alcohol while at work, management should observe and record uncommon physical characteristics of the suspected employee for:

- Smell of alcohol
- Slurred speech
- Disoriented (does not know where they are, time, date)
- Lack of motor skills and coordination, walking or moving about with difficulty
- Unusual mood changes (ecstatic, nervous)
- Excessive perspiration
- Bloodshot or watery eyes
- Any other unusual behaviors uncommon to the employee

Observe and record other evidence as follows:

- Any witnesses who observed drug or alcohol usage on the job
- Bottles, cans, cups with traces of alcohol
- Traces of drugs (remainder of marijuana cigarettes)
- Excessive trips to the restroom
- A pattern of absenteeism

If after discussion with the Administrative Department or designee there is a reasonable suspicion of drug or alcohol influence, the supervisor or manager should:

- Take the suspected employee into an office along with the supervisor or manager who observed the behaviors.
- Ask the employee if they are under the influence of any drug or alcohol at the moment.
- Explain the behaviors observed by you and the supervisor or manager present that lead you to suspect probable cause and the danger they may pose to themselves or co-workers;
- Tell the employee that you would like for them to submit to a drug and alcohol test.
- Explain to the employee that if he/she refuses to take the test, refusal will be interpreted as a resignation and the employee will be terminated.
- Suspend the employee pending the outcome of the test results.
- Drive the employee to the collection facility.
- After the specimen has been collected, determine if it is safe for the employee to drive home;
- Terminate the employee if the test results are positive.
- Reinstate the employee with back pay for hours lost if the test results are negative.

Post-Accident/Injury Testing

B&R Tools and Service will conduct post-accident/injury drug and alcohol testing on employees involved in an on the job accident/injury, causing damage to company property, property of others, or where medical treatment is required as a result of the accident or injury.
In all cases, post-accident/injury drug and alcohol testing must be completed within 24 hours of the incident.

Any employee who is found to be under the influence of drugs or alcohol on the job will be subject to termination and even upon possible future re hire will not be allowed back to client sites.

Return to Duty and Follow up Testing

If there has been a suspension due to drug and alcohol use **Return to Duty Testing is Required.**

At-Random Drug Screening

B&R Tools and Service will randomly test employees for compliance with its drug-free workplace policy. As used in this Policy, "random testing" means a method of selection of employees for testing, performed by an outside third party. The selection will result in an equal probability that any employee from a group of employees will be tested. Furthermore, B&R Tools and Service has no discretion to waive the selection of an employee selected by this random selection method.

At-Random Testing must be completed within 24 hours of notification. No leave, vacation time, or time away from work will be granted until the completion of the random testing is complete. All testing must be done at the designated facility chosen by B&R Tools and Service Company.

Disciplinary Action

An employee who is found to be under the influence of drugs or alcohol on the job will be subject to termination.

Employment Action and Confidentiality

B&R Tools and Service maintains a zero-tolerance stance to alcohol/drug use while on the job. As such, positive test results in all categories of testing will result in rescission of the job offer for employment candidates, and termination of employment for company employees. Candidates or employees who test positive according to the cut-off levels established in this policy will be ineligible for rehire for at least twelve (12) months from the date of the positive test result. Employees who refuse to submit to drug/alcohol testing for probable cause or post-accident testing will be terminated immediately. B&R Tools and Service will maintain confidentiality to the extent possible. Only authorized personnel will receive test results.

Electrical Safety Program

Policy

Work activities involving electrical hazards shall be conducted safely.

This policy covers minimum performance standards applicable to all B&R Tools and Service personnel, employees, and locations. Local practices requiring more detailed or stringent rules or local, state or other federal requirements regarding this subject can and should be added as an addendum to this procedure as applicable. Training will be completed on an as needed basis and annually for all B&R Tools and Service employees. Employees who face a risk of electric shock who are non-qualified shall be trained and familiar with electrically related safety practices. Employees shall be trained in safety related work practices that pertain to their respective job assignments.

Purpose

To establish the procedures that shall be followed in the safe performance of work activities involving general electrical hazards.

Scope

This policy applies to all B&R Tools and Service employees, i.e., B&R Tools and Service offices work sites, client job sites, etc.

Definitions

Approved: means acceptable to the authorities.

Authorized Person: means a person approved or assigned by B&R Tools and Service associates to perform a specific duty or duties or to be at a specific location or locations at the jobsite.

Cabinet: means an enclosure designed either for surface or flush mounting.

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

Conductor (bare): means a conductor having no covering or electrical insulation whatsoever.

Conductor (insulated): means a conductor encased within material of composition and thickness that is recognized as electrical insulation.

Defect: means any characteristic or condition that tends to weaken or reduce the strength of the tool, object, or structure of which it is a part.

Disconnect: means a device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

Enclosed: means surrounded by a case, housing, fence or walls which shall prevent persons from accidentally contacting energized parts.

Enclosure: means the case or housing of apparatus, or the fence or walls surrounding an installation to prevent personnel from accidentally contacting energized parts, or to protect the equipment from physical damage.

Exposed: (as applied to live parts) means capable of being inadvertently touched or approached nearer than a safe distance by a person. It is applied to parts not suitably guarded, isolated, or insulated.

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

Isolated: means not readily accessible to persons unless special means for access are used.

Labeled: means equipment or materials to which has been attached a label, symbol or other identifying mark of a qualified testing laboratory which indicates compliance with appropriate standards or performance in a specified manner.

NEC: stands for National Electric Code.

Non-Qualified: means any employee who is not permitted to work on or near exposed energized parts.

Qualified: means persons who are capable of working safely on equipment and are familiar with electrical properties, the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.

Receptacle: means a contact device installed at the outlet for the connection of a single attachment plug. A single receptacle is a single contact device with no other contact device on the same yoke. A multiple receptacle is a single device containing two or more receptacles.

Requirements

General

Feasible engineering and administrative controls shall be applied to mitigate or minimize the risk of injury and illness from exposure to electrical hazards. Where such hazards still exist after application of these controls, local 'hot work' procedures apply.

Where feasible, employees shall not perform live electrical work. Branches that engage in live work are required to provide applicable safe work procedures, PPE, and equipment.

In existing installations, no changes in circuit protection shall be made to increase the load in excess of the load rating of the circuit wiring.

Worn or frayed electric cords or cables shall be removed from work areas for repair or disposal. Plugs equipped with a grounding prong must have the prong in place. Damaged plugs must be repaired. Repairing cords shall be limited to shortening only by an authorized person, as determined by the Safety Officer.

Working spaces, walkways, and similar locations must be kept clear of cords to eliminate hazards. Extension cords shall not be fastened with staples, hung from nails, or suspended by wire.

Control equipment, utilization equipment, and busways approved for use in dry locations only shall be protected against damage from the weather during building construction.

Metal raceways, cable armor, boxes, cable sheathing, cabinets, elbows, couplings, fittings, supports, and support hardware shall be of materials appropriate for the environment in which they are to be installed.

Electrical switches shall be labeled to indicate the system, equipment, service, or tool they control. This includes switch boxes, cabinets, motor control cabinets, stationary equipment, control panels, and other such switches or disconnects.

Persons who perform electrical work shall wear hard hats that are proof tested to 20,000 volts and shall not wear clothing with or without PPE that could increase injury (100% cotton is better than blended materials).

In work areas where the exact location of underground electric power lines is unknown, employees using jackhammers, bars, or other hand tools that may contact a line shall be provided with insulated protective gloves. Gloves must be rated to (or exceed) the voltage for which they may be exposed. The gloves shall be inspected before use and replaced as per the manufacturer's specifications.

Wiring components and equipment in hazardous environments shall be maintained in a condition consistent with NEC requirements (i.e. no loose or missing screws, gaskets, threaded connections, seals, or other impairments to a tight condition).

Portable ladders must have non-conductive side rails.

Hazardous locations are those locations where flammable vapors, liquids or gases, or combustible dusts or fibers may be present. There are six "classifications" for these types of locations, as follows:

- **Class I Division 1 and Division 2**
- **Class II Division 1 and Division 2**
- **Class III Division 1 and Division 2**

Equipment, wiring methods, and installations of electrical equipment in hazardous (classified) locations must be designated as "intrinsically safe" or be approved for the classification location.

Energized Electrical Parts and Systems

Safety-related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits which are or may be energized. The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.

Live parts to which an employee may be exposed shall be de-energized before the employee works on or near them, unless it can be demonstrated that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. Live parts that operate at less than 50 volts to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs.

If the exposed live parts are not de-energized (i.e., for reasons of increased or additional hazards or infeasibility), other safety-related work practices shall be used to protect employees who may be exposed to the electrical hazards involved. Such work practices shall protect employees against contact with energized circuit parts directly with any part of their body or indirectly through some other conductive object. The work practices that are used shall be suitable for the conditions under which the work is to be performed and for the voltage level of the exposed electric conductors or circuit parts.

Working on or near exposed de-energized parts

This section applies to work on exposed de-energized parts near enough to expose employee/s to an electrical hazard.

While an employee is exposed to contact with fixed electrical equipment or circuits which have been de-energized, the circuits energizing the parts shall be locked out.

The circuits and equipment to be worked on shall be disconnected from electrical energy sources (and locked out). Control circuit devices, such as push buttons, selector switches, and interlocks, shall not be used as the sole means for de-energizing circuits or equipment.

Procedures for the release of stored electric energy shall be covered in the Addendum to this policy section (as hot work). When capacitors or associated equipment are handled, they shall be treated as energized.

Stored non-electrical energy in devices that could reenergize electrical parts shall be blocked or relieved to the extent that the parts could not be accidentally energized by the device.

Working on or near exposed energized parts

Every effort shall be made to preclude work on energized electrical parts. When this is not possible, the requirements of this section shall apply. Potential contact with live energized parts includes work performed on exposed live parts (involving either direct contact or contact by means of tools or materials) or near enough to them for employees to be exposed to any hazard they present.

Only qualified persons shall work on electrical equipment that has not been de-energized. If work is to be performed near overhead lines, the lines shall be de-energized and grounded, or other protective measures shall be provided before work is started.

If the lines are to be de-energized, arrangements shall be made with the person or organization that operates or controls the electric circuits involved to de-energize and ground them. If protective measures, such as guarding, isolating, or insulating are provided, these precautions shall prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools, or equipment.

Overhead electrical lines

While conducting site activities near overhead lines, field personnel need to be aware of the location of the lines so as not to use conductive equipment (e.g., metal equipment to include: drill rigs; hand auger extensions; geo-probe units; excavators, etc.) in close proximity to power lines.

When calculating clearance distances for a drill rig; consider both the length of the derrick, and the length of the rods. Position the rig such that if rods are ever fully extended from the top of the derrick, the rods will still be at least 10 feet away from the power lines.

Note that rods can lean or sway when elevated so it may be necessary to maintain more than a 10-foot distance on the ground to ensure that there is a 10-foot horizontal distance between the rods and the power line. If clearances cannot be met, overhead lines must be de-energized and grounded.

Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 feet is maintained. Higher voltages require greater clearance distances. Contact the electrical utility company to verify line voltage. If the voltage is higher than 50kV, the clearance shall be increased 4 in. for every 10kV over that voltage.

Table 12-1	
Voltage	**Required Clearance**
0-50 kV	10 feet
50-200 kV	15 feet
200-350 kV	20 feet
350-500 kV	25 feet
500-750 kV	35 feet
750-1000 kV	45 feet

- If a vehicle is in transit with its structure lowered, the clearance shall be reduced to 4 ft. If the voltage is higher than 50kV, the clearance shall be increased 4 in. for every 10kV over that voltage

- If insulating barriers (boots) are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure
- If the equipment is an aerial lift insulated for the voltage involved, and if the work is performed by a qualified person, the clearance (between the uninsulated portion of the aerial lift and the power line) may be reduced to the distance given

When an unqualified person is working in an elevated position near overhead lines or working on the ground in the vicinity of overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the clearance distances indicated in Table 12-1.

For voltages normally encountered with overhead power lines, objects which do not have an insulating rating for the voltage involved shall be considered to be conductive.

When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person shall not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than the clearance distances indicated in Table 12-2, unless:

- The person is insulated from the energized part (gloves, with sleeves if necessary, rated for the voltage involved are considered to be insulation of the person from the energized part on which work is performed), or
- The energized part is insulated both from other conductive objects at a different potential and from the person, or
- The person is insulated from conductive objects at a potential different from that of the energized part

Table 12-2	
Approach Distances for Qualified Employees - Alternating Current	
Voltage range (phase to phase)	**Minimum approach distance**
300V and less	Avoid contact
Over 300V, not over 750V	1 ft. 0 in.
Over 750V, not over 2kV	l ft. 6 in.
Over 2kV, not over 15kV	2 ft. 0 in.
Over 15kV, not over 37kV	3 ft. 0 in.
Over 37kV, not over 87.5kV	3 ft. 6 in.
Over 87.5kV, not over 121kV	4 ft. 0 in.
Over 121kV, not over 140kV	4 ft. 6 in.

If the equipment is an aerial lift insulated for the voltage involved, and if the work is performed by a qualified person the clearance (between the uninsulated portion of the aerial lift and the power line) may be reduced to the distance indicated in Table 12-2. However, employees standing on the ground shall not contact the vehicle or mechanical equipment or any of its attachments, unless:

- The employee is using protective equipment rated for the voltage or the equipment is located so that no uninsulated part of its structure (that portion of the structure that provides a conductive path to employees on the ground) can come closer to the line than permitted in this section.

- If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized

overhead lines is intentionally grounded, employees working on the ground near the point of grounding shall not stand at the grounding location whenever there is a possibility of overhead line contact. Additional precautions, such as the use of barricades or insulation, shall be taken to protect employees from hazardous ground potentials, depending on earth resistivity and fault currents, which can develop within the first few feet or more outward from the grounding point.

Illumination

Employees shall not enter spaces containing exposed energized parts, unless illumination is provided that enables the employees to perform the work safely. Where lack of illumination or an obstruction precludes observation of the work to be performed, employees shall not perform tasks near exposed energized parts. Employees shall not reach blindly into areas which may contain energized parts.

Confined Space or enclosed space work

When an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized parts, protective shields, protective barriers, or insulating materials shall be used as necessary to avoid inadvertent contact with these parts. Doors, hinged panels, and the like shall be secured to prevent swinging into an employee and causing the employee to contact exposed energized parts (reference the Confined Spaces section (10) of this manual).

Conductive materials and equipment

Conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts.

For instance, an employee should measure the length of a sledgehammer and the expected radius of his swing prior to using the hammer near an energized circuit. If such a circuit is present, a sign must be posted to warn the employees. The job supervisor must inform the employees of the location of the lines, the hazards involved, and the protective measures to be taken.

Portable ladders

Portable ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized parts

Conductive apparel

Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) shall not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping, or other insulating means.

Housekeeping duties

Where live parts present an electrical contact hazard, employees shall not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided.

Electrically conductive cleaning materials (including conductive solids such as steel wool, metalized cloth, and silicon carbide, as well as conductive liquid solutions) shall not be used in proximity to energized parts unless procedures are followed which will prevent electrical contact.

Interlocks

Only a qualified person following the requirements of this section may defeat an electrical safety interlock, and then only temporarily while working on the equipment. The interlock system shall be returned to its operable condition when this work is completed.

Grounding, GFCIs and Assured Grounding Procedures

Equipment, tools and cord sets shall be provided and utilized so as to protect employees from electrical shock and to prevent fire. See Assured Grounding Conductor Program.

Equipment and tools

Note: Portable equipment which is "double insulated" and endorsed by a nationally recognized testing facility need not have a grounding conductor but is subject to the inspection requirements of this section.

Tools and equipment subject to inspection and testing include:

- Portable Electrical Tools such as grinders, drills and stapling guns
- Stationary tools such as table saws, drill presses, and jig saws
- Portable electrical extension cords
- Portable and Temporary lighting systems and cords

Receptacles shall be of the grounding type and their contacts shall be grounded by connection to the equipment grounding conductor of the circuit supplying that receptacle in accordance with the NEC.

Visual inspections

- Visual inspection of tools and equipment are required prior to each use and shall include:
- General condition
- Plugs and caps, and presence of ground prong
- Electrical cord sets
- External defects, and missing parts

Defective tools shall be tagged, taken out of service and placed in a secured location until they are repaired or destroyed.

Testing

The following tests shall be performed on all applicable equipment:

- Equipment grounding conductors shall be tested for continuity and shall be electrically continuous
- Receptacle and attachment cap or plug shall be tested for correct attachment of the equipment-grounding conductor. The equipment- grounding conductor shall be connected to its terminal

Required tests should be performed as indicated below:

- Before first use
- Before being returned to service following any repairs
- Before being used, after any incident that can be reasonably suspected to have caused damage (for example, when a cord set is run over)
- At intervals not to exceed 3 months

Test equipment must be evaluated for proper operation immediately before and after tests are conducted.

Removal from service

Any equipment failing any test shall be taken out of service, shall be tagged with a "Danger, Do Not Use" tag, secured and repaired or destroyed.

Ground Fault Circuit Interrupters (GFCI's)

Ground Fault Circuit Interrupters (GFCI's) shall be used on receptacles ≥15 amps up to and including 30 amps for t ool and equipment used in construction applications and potentially wet environments (either indoors or outdoors). Receptacles of temporary wiring systems and portable generators shall be protected with a GFCI.

The minimum requirements relative to the use of Ground Fault Circuit Interrupters are:

- Prior to use, and periodically thereafter, verify that the GFCI is in good working order. (e.g., Plug the GFCI into an outlet, plug a power tool or light in to the GFCI, hit the "test" button and verify that it interrupts current flow). Periodically re-test the GFCI to ensure continued effectiveness.
- Remove from service any GFCI that has insufficient load capacity, is damaged or is ineffective for any reason. Affix a "Danger, Do Not Use" tag and store the GFCI in a secure location until it can be replaced or repaired. Destroy and discard any GFCI that cannot be repaired or re- used.
- Train employees in the provisions of this section as related to safe us of GFCIs. This training should include:
    - Double insulated tools
    - Defective cords and plugs
    - Heavy moisture, and wet conditions
    - Operation, selection, and use of GFCI's

Assured Grounding Program

When this is not possible (feasible) to use GFCI's, the Assured Grounding procedures in this section shall apply and the Branch Office shall include as the Addendum to this policy section an Assured Grounding Program. It is best to avoid situations where an Assured Grounding Program is required because it is very labor intensive to comply. If unavoidable, the elements of this program shall include as a minimum:

- Written description of program
- Program coordinator
- Inspections
- Documented Testing
- Availability of Equipment
- Integrity of testing equipment (repairs/testing of test equipment)
- Handling of defective tools and equipment
- Who will perform tests, and repairs
- Recordkeeping
- How receptacles will be provided with GFCI's

Only qualified persons shall perform inspection and "color code" labeling of tools and equipment.

The color code scheme for labeling tools and equipment, as indicated in the following table, shall be used in the Addendum color scheme. This color code scheme is consistent with guidance from the Association of General Contractors. Tools and equipment shall be color coded on a quarterly basis when inspected and marked according to the Quarterly Code. If inspections are conducted monthly, the Monthly Code should be used. For example, "Red & Blue" means the inspection was conducted in the third quarter during August.

Month	**Monthly Color Code**	**Quarterly Code**
January	White	Green
February	White & Green	
March	White & Red	
April	Green	Red
May	Green & Red	
June	Green & Blue	
July	Red	Blue
August	Red & Blue	
September	Red & White	
October	Blue	White
November	Blue & White	
December	Blue & Green	

Temporary Wiring

This section applies to temporary electrical power and lighting wiring methods that may be of a class less than would be required for a permanent installation.

Temporary wiring shall be removed immediately upon completion of work and when the purpose for which the wiring was installed no longer applies.

General requirements for temporary wiring

Feeders shall originate in a distribution center. The conductors shall be run as multi- conductor cord or cable assemblies or within raceways.

Branch circuits shall originate in a power outlet or panel board. Conductors shall be run as multi-conductor cord or cable assemblies or open conductors or shall be run in raceways. Conductors shall be protected by over current devices at their ampacity.

Receptacles shall be of the grounding type. Unless installed in a complete metallic raceway, each branch circuit shall contain a separate equipment-grounding conductor, and receptacles shall be connected to the grounding system. Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits that supply temporary lighting.

Disconnecting switches or plug connectors shall be installed to permit the disconnection of ungrounded conductors of each temporary circuit.

Lamps for general illumination shall be protected from accidental contact or breakage. Metal-case sockets shall be grounded.

The electric cords shall not be used to suspend temporary lights unless cords and lights are designed for this means of suspension. Temporary lighting shall be properly supported.

Portable electric lighting used in wet and/or other conductive locations, as for example, drums, tanks, and vessels, shall be operated at 12 volts or less. However, 120-volt lights may be used if protected by a ground-fault circuit interrupter.

A mounted box (with a cover) shall be used wherever a change is made to a raceway system or a cable system that is metal clad or metal sheathed. Non-metallic wiring system joints below seven foot (7') shall have mounted boxes and be covered. Exposed temporary joints shall have the wire nuts or other mechanical devices taped with black (electrical)

tape to prevent them from falling off. Temporary joints including the ground wire shall have a mechanical connection.

Flexible cords and cables shall be protected from damage. Sharp corners and projections shall be avoided. Flexible cords and cables may pass through doorways or other pinch points, if protection is provided to avoid damage. Cords and temporary wiring passing through walls shall be properly protected (e.g. sleeved).

Extension cord sets used with portable electric tools and appliances shall be of three-wire type and shall be designed for hard or extra-hard usage. Flexible cords used with temporary and portable lights shall be designed for hard or extra-hard usage. See the NEC, ANSI/NFPA 70, in Article 400, Table 400-4 that lists various types of flexible cords, some of which are noted as being designed for hard or extra-hard usage. Note: SEU, SER or other similar cables cannot be laid on the floor despite their rating.

For temporary wiring over 600 volts, nominal, fencing, barriers, or other effective means shall be provided to prevent access of other than authorized and qualified personnel.

Batteries

General

Batteries of the unsealed type shall be located in enclosures with outside vents or in well ventilated rooms and shall be arranged so as to prevent the escape of fumes, gases, or electrolyte spray into other areas.

Ventilation shall be provided to ensure diffusion of the gases from the battery and to prevent the accumulation of an explosive mixture.

Appropriate face shields, aprons, goggles and rubber gloves shall be provided for workers handling acids or batteries. Contact lenses are prohibited while working with batteries, unless using a type of goggle that will not allow the transference of gases.

Facilities for quick drenching of the eyes and body shall be provided within 25 feet of battery handling areas. Facilities shall be provided for flushing and neutralizing spilled electrolyte and for fire protection in the areas of battery use.

Battery charging installations shall be located in areas designated for that purpose. When batteries are being charged, the vent caps shall be kept in place to avoid electrolyte spray. Vent caps shall be maintained in a functioning condition.

Battery manufacturer guideline specifics covering 5.5.2 through 5.5.4 of this policy sections shall be met.

Smoking, eating or drinking in areas where batteries are being stored, charged or worked with is prohibited.

Handling and Transportation

Packaging, markings and transportation of batteries shall be in accordance with Federal, State and local laws, regulations and standards.

After the packaging is removed, batteries shall be inspected for defect, including, but not limited to:

- Bulging
- Cracking
- Leaking

Batteries shall not be forced into equipment/locations.

Where feasible, old and new batteries shall not be intermixed.

Storage

Batteries shall be kept in their original packaging until they are ready to be used. New and used batteries shall be kept separate.

Batteries should be stored separate from combustibles and flammables and protected from being crushed, punctured or exposed to incompatible environmental conditions.

Used batteries, not intended for re-use, shall be properly disposed.

Disposal

Batteries being disposed of shall be done so in accordance with Federal, State and local laws, regulations and standards. When possible, batteries should be recycled.

Clearances in the Workplace

Employees shall not be permitted to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by de-energizing the circuit and grounding it (if appropriate) or by guarding it effectively by insulation or other means.

Supervisors and/or Competent Person(s) shall ascertain by inquiry, direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The supervisor/Competent Person shall post and maintain proper warning signs where such a circuit exists. The supervisor/Competent Person shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.

Barriers or other means of guarding shall be provided to ensure that workspace for electrical equipment will not be used as a passageway during periods when energized parts of electrical equipment are exposed.

Fuses

Installing or removing fuses shall be considered as work with live electrical energy and shall be covered in the Addendum to this policy section for operations conducting such activities.

Persons who perform work on high voltage fuses (over 600 volts) shall wear appropriate head, face, body flash suits, protective footwear and insulated gloves.

Insulating electrical gloves, sleeves, aprons, and other protective electrical clothing shall be tested for leaks and integrity prior to initial use and periodically. These tests shall meet the requirements of OSHA Standard 29 CFR 1910.137.

Protector gloves shall be worn over insulating gloves, except as defined in the above referenced standard.

Only manufacturer-qualified personnel shall inspect and make repairs to electrical insulating protective clothing.

Workspace Clearances - <u>600 Volts</u>, nominal, <u>or less</u>

Working space about electric equipment

Sufficient access and working space shall be provided and maintained about electric equipment to permit ready and safe operation and maintenance of such equipment.

Working clearances

Except as required or permitted elsewhere in this section, the dimension of the working space in the direction of access to live parts operating at 600 volts or less and likely to require examination, adjustment, servicing, or maintenance while live shall not be less than indicated in the table below.

In addition to the dimensions shown in the following table, workspace shall not be less than 30 inches wide in front of the electric equipment. Distances shall be measured from the live parts if they are exposed, or from the enclosure front or opening if the live parts are enclosed. Walls constructed of concrete, brick, or tiles are considered to be grounded.

Working space is not required in back of assemblies such as dead-front switchboards or motor control centers where there are no renewable or adjustable parts such as fuses or switches on the back and where connections are accessible from locations other than the back.

Minimum Depth of Clear Working Space in Front of Electric Equipment (feet)			
Nominal voltage to ground conditions*	**(a)***	**(b)***	**(c)***
0-150	3	3	3
151-600	3	3 ½	4
*Conditions (a), (b), and (c) are as follows: (a) 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 insulating material. Insulated wire or insulated bus bars operating at not over 300 volts are not considered live parts. (b) Exposed live parts on one side and grounded parts on the other side. (c) Exposed live parts on both sides of the workspace [not guarded as provided in Condition (a)] with the operator between.			
Note: For International System of Units (SI): one foot=0.3048m.			

Working space required by this in this section shall not be used for storage. When normally enclosed live parts are exposed for inspection or servicing, the working space, if in a passageway or general open space, shall be guarded.

At least one entrance shall be provided to give access to the working space about electric equipment.

Where there are live parts normally exposed on the front of switchboards or motor control centers, the working space in front of such equipment shall not be less than 3 feet.

The minimum headroom of working spaces about service equipment, switchboards, panel boards, or motor control centers shall be 6 feet 3 inches.

Guarding of live parts

Except as required or permitted live parts of electrical equipment operating at 50 volts or more shall be guarded against accidental contact by cabinets or other forms of enclosures, or by any of the following means:

- By location in a room, vault, or similar enclosure that is accessible only to qualified persons
- By partitions or screens so arranged that only qualified persons will have access to the space within reach of the live parts. Any openings in such partitions or screens shall be so sized and located that persons are not likely to come into accidental contact with the live parts or to bring conducting objects into contact with them
- By location on a balcony, gallery, or platform so elevated and arranged as to exclude unqualified persons

In locations where, electric equipment could be exposed to physical damage, enclosures or guards shall be so arranged and of such strength to prevent damage.

Entrances to rooms and other guarded locations containing exposed live parts shall be marked with conspicuous warning signs forbidding unqualified persons to enter.

Workspace Clearances - <u>over 600 volts</u>, nominal

Conductors and equipment used on circuits exceeding 600 volts, nominal, shall comply with all applicable provisions of this section and with the following provisions that supplement or modify those requirements. The provisions of paragraphs (5.9.2), (5.9.3), and (5.9.4) of this section do not apply to equipment on the supply side of the service conductors.

Enclosure for electrical installations

Electrical installations in a vault, room, closet or in an area surrounded by a wall, screen, or fence, access to which is controlled by lock and key or other equivalent means, are considered to be accessible to qualified persons only.

A wall, screen, or fence less than 8 feet in height is not considered adequate to prevent access unless it has other features that provide a degree of isolation equivalent to an 8- foot fence. The entrances to buildings, rooms or enclosures containing exposed live parts or exposed conductors operating at over 600 volts, nominal, shall be kept locked or shall be under the observation of a qualified person at all times.

Installations accessible to qualified persons only

Electrical installations having exposed live parts shall be accessible to qualified persons only and shall comply with requirements of this standard and applicable regulatory standards.

Installations accessible to unqualified person(s)

Electrical installations that are open to unqualified persons shall be made with metal- enclosed equipment or shall be enclosed in a vault or in an area, access to which is controlled by a lock. Metal-enclosed switchgear, unit substations, transformers, pull boxes, connection boxes, and other similar associated equipment shall be marked with appropriate caution signs. If equipment is exposed to physical damage from vehicular traffic, guards shall be provided to prevent such damage. Ventilating or similar openings in metal-enclosed equipment shall be designed so that foreign objects inserted through these openings will be deflected from energized parts.

Workspace above equipment

Sufficient space shall be provided and maintained about electric equipment to permit ready and safe operation and maintenance of such equipment. Where energized parts are exposed, the minimum clear workspace shall not be less than 6 feet 6 inches high (measured vertically from the floor or platform), or less than 3 feet wide (measured parallel to the equipment). The depth shall be as required in the table below. The workspace shall be adequate to permit at least a 90-degree opening of doors or hinged panels.

The minimum clear working space in front of electric equipment such as switchboards, control panels, switches, circuit breakers, motor controllers, relays, and similar equipment shall not be less than specified in the following table, unless otherwise specified. Distances shall be measured from the live parts if they are exposed, or from the enclosure front or opening if the live parts are enclosed.

However, working space is not required in back of equipment such as dead front switchboards or control assemblies where there are no renewable or adjustable parts (such as fuses or switches) on the back and where connections are accessible from locations other than the back. Where rear access is required to work on de-energized parts on the back of enclosed equipment, a minimum working space of thirty (30) inches horizontally shall be provided.

Minimum Depth of Clear Working Space in Front of Electric Equipment (feet)			
Nominal voltage to ground conditions*	**(a)***	**(b)***	**(c)***
601 to 2,500	3	4	5
2,501 to 9,000	4	5	6
9,001 to 25,000	5	6	9
25,001 to 75 kV	6	8	10
Above 75kV	8	10	12
*Conditions (a), (b), and (c) are as follows: (a) 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 insulating materials. Insulated wire or insulated bus bars operating at not over 300 volts are not considered live parts. (b) Exposed live parts on one side and grounded parts on the other side. Walls constructed of concrete, brick, or tiles are considered to be grounded surfaces. (c) Exposed live parts on both sides of the workspace [not guarded as provided in Condition (a)] with the operator between.			
Note: For International System of Units (SI): one foot=0.3048m.			

Lighting outlets and points of control

The lighting outlets shall be so arranged that persons changing lamps or making repairs on the lighting system will not be endangered by live parts or other equipment. The points of control shall be so located that persons are not likely to come in contact with any live part or moving part of the equipment while turning on the lights.

Elevation of unguarded live parts

Unguarded live parts above working spaces shall be maintained at elevations not less than specified in the following table.

Elevation of Unguarded Energized Parts Above Working Space	
Nominal voltage between phases	**Minimum elevation**
601-7,500	8 feet 6 inches
7,501-35,000	9 feet.
Over 35kV	9 feet+0.37 inches per kV above 35kV
Note: For SI units: one inch=25.4 mm; one foot=0.3048 m.	

Entrance and access to workspace

At least one entrance not less than 24 inches wide and 6 feet 6 inches high shall be provided to give access to the working space about electric equipment. On switchboard and control panels exceeding 48 inches in width, there shall be one entrance at each end of such board where practicable. Where bare energized parts at any voltage or insulated energized parts above 600 volts are located adjacent to such entrance, they shall be guarded.

Emergency Action Plan

OSHA regulations

OSHA requires companies to be prepared for emergencies that may be encountered in their work environment.

The requirements can be found in OSHA 29CFR 1910.37 and .38

It is not the intent of B&R Tools and Service to have its' employees trained as professional fireman or emergency response teams. They are first responders only. Every employee will be trained in use and care of fire extinguishers, emergency response, first aid and CPR training, and proper notification procedures. B&R Tools and Service will delegate and train employees to assist in a safe and orderly evacuation of other employees. This training will be provided to every employee of B&R Tools and Service. Every employee will have an emergency action plan to review. This plan will be reviewed to each new employee of B&R Tools and Service, when the plan if changed, or when an employee's responsibilities under the plan change. The name or job title of every employee, who may be contacted by employees needing more information about the plan, will be provided. A list of contacts will be ready and made available to employees. The plan will be available for all employees to review.

Emergency Evacuation Plan shall include procedures for: reporting a fire or other emergency, emergency evacuation, including type of evacuation and exit route assignments, procedures to follow by employees who remain to operate critical plant operations before they evacuate, accounting for all employees after evacuation, procedures to follow by employees who perform medical or rescue duties and obtaining the name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

Emergency Procedures

In all emergencies, the employee must evaluate the situation and contact the following as needed:

1. All Personnel must know directions to current location.
    a. Location needs to be listed on the JSA.
2. Evacuate to a muster area or safe area. An alarm system shall be distinctive and recognizable as a signal to evacuate the work area.
3. Quickly survey personnel to account for all employees, and survey equipment to determine further need.
4. Contact 911.
    a. If 911 doesn't respond, refer to end of section
5. Contact Supervisor
6. After area is secured and situation is under control, follow incident reporting procedures.
7. Contact safety coordinator within 8 hours.

Field

It is the responsibility of all employees to be aware of each site-specific plan, including evacuation procedure <u>BEFORE</u> work begins.

All Incidents That Do Not Involve A Fatality

If the emergency does not involve a fatality, then the employee will administer First Aid and or CPR at their discretion, to their level of training and contact 911 if necessary.

Fatality Incidence

If the emergency involves a fatality, then the employee will:

1. Contact 911 and then contact the above list in order.
2. The employee will then stay on the location.
3. Allow only authorized personnel to enter.
4. Immediately provide written witness statement

The Occupational Safety and Health Administration must be contacted within 8 hours of any fatality or catastrophe that involves employees of this company.

Note: A catastrophe is any accident that puts two or more people in the hospital.

Fires

If the emergency is a fire that cannot be controlled with a fire extinguisher:

1. The employees are to flee upwind, if possible, following the evacuation plan.
2. Contact 911.
3. Contact list of contacts in order.
    a) Safety coordinator
    b) Manager

Weather

If the emergency is weather related such as high winds or tornado then; the employee is to get in a low area such as a ditch or a draw, taking care to check for toxic fumes etc.

Lightning Storm

- Get into a vehicle and move away from storage tanks.
- Do not get into any vehicle that has extended poles or derricks.
- Move away from all metal equipment.

Fire Prevention Plan

Office and Field areas:

- Flammable chemicals shall be stored or transported in approved containers only.
- Portable fire extinguishers will be inspected monthly
- Ignition sources shall be kept clear of flammable materials. These include cigarette lighters, matches etc.
- Burning of waste oil, grass, weeds, brush, trash or any flammable material is prohibited without management approval.

Violent and Hostile Behavior:

- Any act or threatened act of violence on the part of anyone in any work area must be reported to management and management will investigate and call law enforcement if necessary.
- Employees are not to endanger their own welfare if the person engaging in the violent act is armed in any manner. The employee is to flee the area and notify all other personnel, notify law enforcement.

Required Emergency Materials

- A copy of company Emergency Action Plan.
- First Aid Kit.
- Fire Extinguisher.
- Emergency Phone Numbers.

Emergency Responder Information

In the event 911 does not respond, call applicable County Sheriff's office.

West Texas Area

EMERGENCY RESPONSE INFORMATION

	MEDICAL	FIRE DEPARTMENT	SPILL RESPONSE	POLICE DEPARTMENT	TOW SERVICE
MIDLAND	(432) 685-1111 Midland Memorial	(432) 685-7332 Midland Fire Dept.	(432) 563-2200 Etech Enviro	(432) 688-4640 Sheriff's Dept. Patrol	(432) 570-0865 B&B Wrecker
PECOS	(432) 447-3551 Reeves County Hospital	432-445-3519 Pecos Fire Dept.	(432) 563-2200 Etech Enviro	(432) 445-4901 Reeves Co. Sheriff	(432) 445-3246 B&B Wrecker
HOWARD COUNTY	(432) 263-1211 Scenic Mountain Medical Center	(432) 264-2304 Big Spring Fire Dept.	(432) 563-2200 Etech Enviro	(915) 264-2244 County Sheriff	(432) 267-3747 Mitchem Wrecker Service
MARTIN COUNTY	(432) 607-3200 Martin County EMS, and (432) 756-3345 Hospital	(325) 378-2419 County	(432) 563-2200 Etech Enviro	(432) 756-3336 Martin Co. Sheriff	
CROCKETT COUNTY	(325) 392-3404 Crockett Co. EMS	325-392-2626 Volunteer	(432) 563-2200 Etech Enviro	(325)-392-2661 County Sheriff	
REAGAN COUNTY	(325) 884-2561 Reagan Memorial Hospital	(325) 884-3650 Volunteer	(432) 563-2200 Etech Enviro	(325) 884-2424	
GLASSCOCK COUNTY		432-354-2512 Volunteer	(432) 563-2200 Etech Enviro	(432) 354-2404 Sheriffs Dept.	
STERLING COUNTY		(325) 378-2419 Volunteer	(432) 563-2200 Etech Enviro	(325) 378-4771 Sheriffs Dept.	
Odessa			(432) 367-0211 Etech Enviro		
CHEMTREC			24 hour emergency Response 1-800-424-9300		
Xstreme MD	(337) 704-0891 Or (877) 520-2911				

Environmental Sustainability

Purpose

The purpose of this environmental sustainability program is to address implementing procedures to protect the climate. It is of upmost importance to B&R Tools and Service to limit the amount of greenhouse gases by using low-emission technologies, driving less or carpooling as much as possible and implementing the use of renewable energy sources when possible.

Scope

This procedure applies to all B&R Tools and Service employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence; however, this document covers B&R Tools and Service employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Procedure

It is the goal of B&R Tools and Service to have as little impact on the environment as possible while conducting operations. This will be accomplished through the following ways:

- When purchasing new materials B&R Tools and Service will take into consideration the impact a product has on the environment prior to purchase. Preference will be given to products that minimally impact the environment, are made of recycled and renewable material and products that are energy efficient as much as possible.
- Vehicles and equipment will be kept in good condition with up to date preventive maintenance, will not be left idling when unnecessary and alternative fuels when possible. The most efficient vehicles and equipment will be used when possible.
- When work activities may affect the local animal or plant population or habitat, a plan shall be in place to minimize any environmental impact to them.

Minimizing Waste

An efficient material management system will be used to reduce the impact on the environment by limiting the amount of materials that are used, left over as waste or transported.

Water Conservation

Water conservation measures will be used when possible. This will include repairing any equipment leaking water, use of a broom instead of hose for cleaning areas, upgrading equipment efficiency and educating employees of B&R Tools and Service on the importance of water conservation.

Energy Conservation

Energy conservation measures will be used when possible. This will include shutting down equipment when not in use, the use of energy efficient light bulbs, using new energy efficient technology, and using equipment with the ENERGY STAR mark.

Recycling

It is the policy B&R Tools and Service to segregate waste in order to ensure opportunities for reuse and recycling. The collection of recycled material will reduce the total load on the environment. Bins of sufficient size must be lined with a

plastic bag and clearly labeled for use. Cardboard will be flattened, staples and excess shipping tape removed. No cardboard shall be placed in the dumpster used for the landfill.

Waste Handling

The handling, organization and storage of waste and scrap materials will be disposed of to minimize potential impact to the environment. Waste materials will be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities receptacles must be covered to prevent dispersion of waste materials and to control the potential for runoff.

Education and Training

Employees shall be instructed on ways to ensure the least impact to the environment during work activities.

- General instruction on ways to reduce environmental impact of work activities for B&R Tools and Service
- Minimization methods to reduce waste
- Recycling methods
- The importance of use of energy efficient and renewable energy sources as well as ways to conserve energy.

Equipment Operator Safety Policy

Purpose

The Purpose of this Equipment Operator safety program is to provide information on their areas of use, maintenance and operation.

Scope

All employees who operate or anticipate operating equipment during their employment must complete appropriate training, evaluation and comply with this program.

Responsibilities

The Safety Coordinator is responsible for:

- Providing program oversight
- Annually reviewing this policy and making any necessary changes

Supervisors are responsible for:

- Designating and identifying employees responsible for operating equipment
- Ensuring the no employees operate equipment without training and certification

Equipment operators are responsible for:

- Attending and passing appropriate safety training and evaluation before operating one and every three years thereafter
- Operating and maintaining vehicles in a safe manner and according to the training provided
- Reporting all vehicle problems to their supervisor

Operator Training and Evaluation

Each equipment operator must be determined to be competent, as demonstrated by the successful completion of the training and evaluation described in this section. Personnel who have not yet been trained to operate equipment may operate equipment for the purposes of training only under direct supervision of the trainer.

- Training shall consist of a combination of formal instruction (lecture, discussion, interactive computer learning, video, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee) and evaluation of the operator's performance in the workplace.
- Operator training and evaluation will be conducted by Supervisor personnel that have the knowledge, training, and experience to train forklift operators and evaluate their competence.
- All B&R Tools and Service equipment operators shall receive initial training in the following topics:
    - Operating instruction, warning, and precautions for all types of truck the operator will be authorized to use.
    - Truck controls and instrumentation: location, purposes and operation.
    - Differences between the various types of equipment and an automobile.
    - Engine or motor operation.
    - Steering and maneuvering.
    - Visibility (including restrictions due to loading)

  - Vehicle capacity
  - Vehicle stability
  - Any vehicle inspection and maintenance that the operator will be required to perform.
  - Refueling and or changing or batteries
  - Operating limitations and any workplace related topics (e.g., surface conditions, narrow isles, pedestrian traffic, hazardous locations)
- Refresher training in all the above listed topics, and any other relevant topics, will be provided to equipment operators:
  - When the operator has been observed to operate the vehicle in an unsafe manner
  - When the operator has been involved in an accident or near-miss incident
  - When the operator has received an evaluation that reveals that the operator is not operating a truck safely
  - When the operator is assigned to drive a different type of truck, or a condition in the workplace changes in a manner that would affect the safe operations of the equipment
  - At least every three years
- Upon completion of the training program, all operators must be evaluated for performance of proper procedures prior to receipt of an operator certificate.
- The training instructor will document/certify the training and evaluation and will include in the documentation the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation

Inspections

A pre-use inspection

- A pre-use inspection identifies potential hazards that may be encountered from damaged equipment and should be performed at least daily by the operator. If at any time any piece of equipment is found to be in need of repair, defective, or in any way unsafe, the equipment shall be removed from service until it has been restored to safe operating conditions.
- The pre-use inspection process is as follows:
  - Inspect for any signs of obvious damage
  - Ensure the equipment is free to travel
  - Check over the equipment to ensure it is in working order including fluid levels, lines for wear or crimping and tires for wear

Fall Protection

Purpose

B&R Tools and Service's fall protection policy is in place to ensure proper and safe work practices, and procedures, to ensure worker's safety concerning fall hazards.

Scope

B&R Tools and Service will provide fall protection to protect employees when an employee will be potentially exposed to all hazards. All equipment used in fall protection systems will comply with ANSI & ASTM requirements Standards indicate any unprotected work or working surface above 4ft for general industry will require mandatory use of fall protection. If a fall arrest system is involved in stopping a fall, the system will be removed from service and destroyed.

A qualified person (i.e. one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work or the project) will develop all site specific fall plans.

Employees will be trained, and training will be documented in the following concerning fall protection:

- Recognition of fall hazards
- Components of a fall arrest system
    - Tie-off Point
    - Full body Harness
    - Lanyard
    - Fall brake
- Fall protection procedures
    - erecting
    - maintaining
    - disassembling
    - tag lines, all rescue lines
    - tag lines must be behind and above
- Fall protection safe work practice
    - **including proper tie-off points of above and behind the worker,**
    - as well as identifying weight restrictions of tie-off points. **All tie-off points must be able to withstand 5000 pounds of force.**
- **Proper inspection of fall protection**
- Correct procedures for storing and handling fall protection equipment
- Correct Procedures of cleaning fall protection

Retraining of all protection practices will be provided when:

- Changes in work environment occur that has the possibility of creating a new hazard to the employee
- Changes in the equipment or fall protection occur
- The employee is observed using incorrect or unsafe fall protection practices.

Employee Responsibility:

- Inspect fall protection prior to use.
- Use fall protection properly when required
- Properly maintain and store fall protection

In the event of a fall, prompt rescue and medical attention is necessary and will be provided; even when the fall arrest system worked properly.

Accident investigations shall be conducted to evaluate the fall protection plan for potential updates to practices, procedure or training in order to prevent reoccurrence.

Fall protection is required where the potential to fall four feet or more exists.

A written plan will be written and implemented prior to the beginning of work where fall protection hazards exist.

This plan will include:

- An identification of all fall hazards in the work area
- The method of fall arrest or fall restraint to be used
- The procedures for assembly, maintenance and disassembly of the fall protection system
- Procedures of handling, storage and securing of tools and materials
- The method of providing overhead protection for workers who may be in or pass through the area below the work site
- The plan will be available on location
- Ensure employees are trained and aware of hazards prior to the beginning of work
- Inspections of fall protection devices and systems to ensure compliance

Types of Fall Restraint Systems

Standard guardrails:

- Top rail will be 39-45 inches above the working surface and will be smooth and easy to grasp
- Mid-rail screen or mesh will be provided between the top rail and working surface
- Will be capable of supporting 250 pounds in the down or outward direction at any point along the top edge
- Mid-rail will be able to support 150-pound load in the down or outward direction
- Top rails and mid-rails will be at least ¼ inch thick, plastic or steel banding will not be used
- Chain gates will be used to cover hoisting areas and the guardrails will extend 4 feet minimum on either side of the opening
- Rails will be constructed so as not to deflect under test loads. If cable or rope is used it will have tension adjusting capability and remain taut at all times
- Wood railings- will be a minimum stress grade construction grade lumber. Posts will consist of 2X4 inch lumber and will be spaced not more than 8 feet apart on centers. The top rail will consist of 2x4 lumber while the intermediate rail will be at least 1x6 inch lumber
- Pipe railings- Post, top rails and intermediate railings will be at least 1.5 inches diameter with posts spaced not more than 8 feet apart on centers
- Structural steel railings- Posts, top rails and intermediate rails will be at least 2x2 inch by 3/8-inch angles with posts spaced not more than 8 feet apart on centers

Portable guardrails:

- Portable guardrails may be used in locations where permanent guardrails are not feasible
- Top rails 39-45 inches above the working surface and must be smooth and easy to grasp
- Mid-rail screen or mesh will be provided between the top rail and working surface
- Guardrail systems will be capable of supporting 250 pounds in the downward or outward direction at any point along the top edge
- Mid-rail will support a 150-pound load in the downward or outward direction

Harness, lanyards, lifelines and anchor points

- An approved class III full-body harness will be used
- All full body harness and lanyard hardware assemblies will be capable of withstanding a tensile loading of 4,000 pound without cracking, breaking or deforming
- Anchorage points used for fall restraint will support four times the intended load
- Restraint protection and positioning devices will be rigged to allow the movement of employees only as far as the sides end edges of the walking/working surface
- Full body harnesses will be attached to securely rigged restraint lines
- Rope grab devices are prohibited for fall restraint applications unless they are part of a fall restraint systems designed especially for the purpose by the manufacturer and used in strict accordable with the manufacturer's recommendations and instructions
- Body harness systems will be rigged to minimize free fall distance with a maximum free fall distance allowed of 4 feet and ensure that employees will not contact any lower level
- Hardware will have a corrosion resistant finish and all surfaces and edges will be smooth to prevent damage to the attached body harness or lanyard
- When vertical lifelines or droplines are used not more than one employee will be attached to one lifeline
- Full body harness systems will be secured to anchorages capable of supporting 5,000 pounds per employee except when self-retracting lifelines or other deceleration devices are used which limit free fall to two feet. In that case they will be capable of supporting 3,000 pounds
- Independent lifelines will have a minimum tensile strength of 5,200 pounds except with self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less and will have a minimum tensile strength of 3,0000 pound
- Horizontal lifelines will have a tensile strength capable of supporting a fall impact load of at least 5,200 pounds per employee using the lifeline applied anywhere along the lifeline
- Lanyards will have a minimum tensile strength of 5,200 pounds
- All components of body harness systems whose strength is not otherwise specified will be capable of supporting a minimum fall impact load of 5,000 pounds applied at the lanyard point of connection
- Snap-hooks will not be connected to loops made in webbing-type lanyards
- Snap-hooks will not be connected to each other and only one snap-hook per D-ring
- Full body harness systems will be inspected prior to each use or signs of mildew, wear, damage and other deterioration. Defective components will be removed from service.

Fatigue Management Program

B&R Tools and Service is committed to providing and maintaining safe processes and environments for work for all its employees, including those whose work involves shift work, extended hours, or on-call arrangements.

Many industry work related activities may be contributed to fatigue; if not properly managed. Fatigue is a mental or physical exhaustion that prevents a person from functioning normally and can impair safe work performance. Fatigue can be caused by both work and non-work-related factors. Non-work factors include family responsibilities, social activities, health issues-such as sleep disorders study commitments, sporting commitments. Work factors include shift work especially night shift or extended working hours.

Not all people respond to fatigue in the same way, fatigue can cause reduced concentration, impaired coordination, compromised judgment and slower reaction time, ultimately increasing the risk of incidents and injuries.

Training will be provided as a new hire and on an annual basis on how to recognize fatigue, how to control fatigue through appropriate work and personal habits, and the requirements of reporting fatigue to supervision.

Responsibilities

Managers and employees have a responsibility to ensure that fatigue does not impact the health, safety, and well-being of themselves or others.

Managers

- Ensuring systems of work that minimize the risk of fatigue for example, reasonable rosters, reasonable overtime practices, and adequate recuperation between shifts
- Providing opportunities for employees to obtain adequate rest from work; chairs will be provided for workers to sit periodically, and will provide periodic rest breaks for personnel
- Management will provide ergonomic equipment to improve workstation conditions such as anti-fatigue mats for standing, lift assist devices for repetitive lifting, proper lighting and control of temperature, and other ergonomic devices as deemed appropriate.
- Management will periodically analyze and evaluate work tasks to control fatigue.
- Supervisors will be trained to analyze and assess employees for signs of fatigue, including training to make safety critical decisions and take appropriate actions to prevent loss.

Employees

- Using time off from work to recuperate in order to be fit and able for the next shift.
- Avoiding behaviors and practices that contribute to fatigue, and which could place themselves and others at risk, for example, secondary employment, or not using time off of work to recuperate
- Employees in safety critical positions must report signs of fatigue and lack of mental acuity to supervision
- Employees must not chronically use over the counter or prescription drugs to increase mental alertness. Employees are discouraged from taking any substance known to increase fatigue, including fatigue that sets in after the effects of the drug wear off.

Signs and Symptoms

Recognizing signs and symptoms of fatigue is a key element in fatigue management. This signs and symptoms include but are not limited to:

- You find it difficult to stay awake during working hours, or falling asleep against your will
- Your body feels heavy
- You have feelings of depression
- You have difficulty concentrating
- Irritability
- Giddiness
- Loss of appetite
- Digestive problems
- Increased susceptibility to illness
- Reduced decision-making ability
- Reduced ability to do complex planning
- Reduced communication skills
- Reduces attention and vigilance
- Memory Loss

Fire Protection and Extinguishers Program

Purpose

This Fire Prevention/Protection Policy is intended to provide B&R Tools and Service compliance with all related regulation and standard safe work practice. The purpose of the policy is to prevent fires and to provide guidelines for action in the event that a fire does occur.

Fire prevention program combines the following policies:

- PPE Policy
- Electrical Safety Policy
- Emergency Action Plan

These policies encompass methods used for incidence avoidance, incident response and specialized training required in the event of a fire.

Issues addressed in the above policies include, but are not limited to:

- Evacuation Procedure
- Extinguisher Training
- Basic Process Safety Training (if applicable)
- Hot Work Safety Training (if applicable)
- Confined Space Entry Safety Training (if applicable)
- Emergency Life Support Training
- Respiratory Protective Devices Training (if applicable)
- Assured Grounding Programs

Scope

This policy applies to all employees.

Policy

Employees shall be informed of the proper actions to take in the event of a fire. Training will be conducted prior to initial assignment and annually or on an as needed basis. This includes but is not limited to; notification and evacuation procedures. It is STRESSED that at no time does the task of fighting fire supersede an employee's primary duties of:

- Ensuring their own personal safety, as well as the safety of others.
- Reporting the incident to the proper authority and ensuring personnel accountability for yourself and all subordinates at the jobsite, in accordance with company and client policy.

Procedure

- All employees are responsible for good housekeeping practices to enhance fire prevention methods.
- Supervisors will be held accountable for the housekeeping of their job sites.
- If applicable, welding machine mufflers will be equipped with an approved spark

arresting muffler.

- Only approved containers will be used during fueling operations. These shall be of the self- closing type.
- Flammable material shall be kept under the control. It shall be stored in compliance with applicable OSHA and client regulations. The quantity of flammable/combustible material shall be kept to a minimum on the job site.
- Welding, cutting and grinding sparks shall be contained.
- Hot work areas shall be kept wetted down, and a fire extinguisher and hose maintained on each jobsite.
- Oily rags shall be immediately disposed of in designated hazardous waste containers.
- No hot work is to be performed without a Hot Work Permit.
- All vehicle entry into process areas requires a permit or permission from the operator.
- Use bonding straps to discharge and prevent static charges during transfer of flammable liquids from one container to another.
- Report all spills or suspicious odors immediately.
- Fire extinguishers are to be kept in areas easily accessible to employees. Only approved fire extinguishers are to be used. Fire extinguishers must have monthly visual inspections, as well as annual maintenance inspections. They must have an inspection tag attached. Extinguishers are to be maintained in a fully charged, ready to operate state. Any faulty fire extinguishers must be repaired or replaced Extinguishers are to be inspected before each use and documented annually. Training is provided to all employees who use or may use fire extinguishers. If an employee will be working in an area with a high risk of fire, specific training for that work site or job task will be given to the aforementioned employee, with annual retraining being repeated after initial training. The employer will provide portable fire extinguishers for employees use in the workplace, the employer will also provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved in incipient stage firefighting.
- **NEVER** put yourself or others a risk while attempting to extinguish an incipient fire.
- **DO NOT USE** any fire hoses larger than 1-3/4", unless fully trained as an industrial firefighter.
- **NEVER** attempt to extinguish a pressurized fuel fed fire.
- **DO NOT** direct a fire nozzle with a straight stream at any type of LPG fire. This action could extinguish the fire, producing an LPG vapor cloud capable of detonation.
- **DO NOT USE** fire monitors as the force can damage small equipment and certain high chrome alloy equipment cannot have water applied as cracking could occur.
- **DO NOT APPLY** water to any acid or caustic release as it can cause a violent reaction. Additionally, low concentration acids or caustics become extremely corrosive, causing an increasing leak condition.

In the Event of a Fire

- Remain calm
- Only extinguish a fire when it is clearly within your abilities and the equipment available
- Know the location of the nearest alarm and how to activate the emergency system
- Know the evacuation routes and collection points
- If the fire cannot be extinguished, leave the area immediately and report to your evacuation area
- Await further instructions from the Incident Commander, or designated responsible personnel

Fire Extinguishment (Pass) Method:

- P- Pull the Pin
  - This will allow you to discharge the extinguisher
- A- Aim
  - Aim at the base of the fire. You want to hit the fuel, not the flame. If you aim at the flame the extinguishing agent will fly through the flames and it will not extinguish the flame
- S- Squeeze
  - Squeeze the top handle. This depresses a button that releases the pressurized extinguishing agent.

- S- Sweep
    - Sweep from side to side until the fire is extinguished

Basic Fire Science

The combination of fuel, heat, and oxygen are three of the elements that help create what we know as the fire tetrahedron. To understand fire better, a fourth factor is added, a molecular chain reaction. This is due to the fact that fire results from a series of reactions in which complicated molecules "crack" into easily oxidized fragments. Disruption of this chain, along with the removal of fuel, heat or oxygen, is recognized as a method of fire extinguishment through the use of dry chemical extinguishers.

Heat Energy: Can be produced by building up (composition) or breaking about (decomposition) of molecules by heat or a solution when materials are dissolved in a liquid or by combustion.

Heat Transfer: A law of physics states that heat tends to flow up from a hot substance or place to a cold substance or place. This is through conduction (transfer of heat through a medium such as metals) or through convection (transfer of heat with a medium-usually circulatory).

Fuels: Those substances that will burn when heat is applied. The most common fuels are not pure elements such as carbon, but compounds and mixtures such as paper and wood.

Oxygen: Makes up a major portion of the oceans and earth's crust and one-fifth of our atmosphere. Atmospheric oxygen is the major source of oxygen that supports combustion. Oxygen itself does not burn, however, without it, combustion is impossible. Normal burning is the combination of fuels with oxygen under the influence of heat.

Combustion: A rapid oxidation or chemical combination accompanied by heat.

Oxidation: The ability of materials to produce oxygen during a chemical reaction.

Spontaneous Combustion: When oxidation is allowed to occur enough oxygen is available, heat is produced, molecules become more energetic and combine with oxygen at an increasing rate, temperatures rise and visible heat (flames) are produced.

Classification of Fires:

- Class A - **Ordinary combustibles (wood/paper/textiles)**
- Class B - **Flammable liquids (gasoline/oils/grease)**
- Class C - **Live electric (wiring/generators/motors)**
- Class D - **Combustible metals (finely divided form/chips, turnings)**
- Class K- **Cooking oils or fats**

Types of Fire Extinguishers:

- **Water** - extinguisher for ordinary combustible fires **(Class A fires)**
- **Dry Chemical or CO2** - extinguisher for electrical equipment fires and for flammable liquid fires **(Class B or C Fires)**
- **Multipurpose /Dry Chemical** - extinguisher for ordinary combustible fires, liquid fires, and electrical equipment fires **(Class B or C fires, if marked, may include Class A fires)**
- **Foam** - extinguishing agent for hydrocarbon fires **(Class A & B fires)**
- **Class K- kitchen fires**
- **Class D- combustible metals**

First Aid and CPR Policy

Policy

To ensure that prompt and effective medical assistance is provided to the employees of B&R Tools and Service in case of workplace injury or illness, the following first aid and medical services procedure is provided.

It is the responsibility of each manager / supervisor to assure that compliance to the First Aid & Medical Services Procedure is provided.

This policy covers minimum performance standards applicable to all B&R Tools and Service employees, and locations. Local practices requiring more detailed or stringent rules or local, state or other federal requirements regarding this subject can and should be added as an addendum to this procedure as applicable.

Purpose

This First Aid & Medical Services Procedure is designed to establish specific common guidelines for branches to follow in assuring that prompt medical attention is provided to employees suffering from either a work related or non-work-related injury or illness.

Each facility and jobsite must ensure that readily available medical personnel and first aid supplies are available to all employees to provide advice and consultation within reason, regarding matters of employee occupational health and to respond in case of accident. This includes identifying and posting the location of a designated medical treatment facility and/or emergency care center in a conspicuous location at each fixed location or fixed jobsite. Should outside medical services be unable to respond in a reasonable amount of time, the facility and jobsite may use various strategies to provide access within this time frame, such as training internal personnel who will be capable of acting as voluntary first responders.

Scope

This policy applies to all B&R Tools and Service, and work sites, i.e., B&R Tools and Service offices, client job sites, etc., and includes visitors, vendors, and subcontractors.

50% of employees must be trained in First Aid and CPR.

Definitions

Established Medical Treatment Facility means the occupational medical treatment provider and/or emergency care center identified as being capable of and established by a location to initially treat employee injuries and illnesses.

First Aid means the following types of treatment:

- Using non-prescription medications at non-prescription strength
- Cleaning, flushing, or soaking wounds on the skin surface
- Using wound coverings, such as bandages, 'Band-Aids', gauze pads, etc., or using 'Steri-Strips' or butterfly bandages
- Using hot or cold therapy
- Using any totally non-rigid means of support, such as elastic bandages, wraps, etc.

- Using temporary immobilization devices while transporting an employee, such as 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

Illness can be classified as a skin disease/disorder, respiratory condition, poisoning, or other illnesses resulting from an event in the work environment. Examples include, but are not limited to:

- Contact dermatitis
- Eczema
- Silicosis
- Asbestosis
- Toxic inhalation
- Poisonings by lead, mercury, or other metals
- Poisonings by carbon monoxide, hydrogen sulfide, or other gases
- Poisonings by organic solvents or by other chemicals
- Heatstroke, sunstroke, heat exhaustion, or other heat-related factors
- Freezing, frostbite, or other cold-related factors
- Effects of Non-ionizing radiation (welder's flash or lasers)
- Blood borne Pathogenic diseases
- Microbial Exposure
- Ionizing Radiation

Injury means any wound or damage to the body resulting from an event in the work environment. Examples include:

- Cut/laceration
- Puncture
- Abrasion
- Contusion/bruise
- Fracture
- Chipped tooth
- Amputation
- Insect bite
- Electrocution
- Thermal, chemical, electrical or radiation burn
- And, sprain/strain injuries to muscles, joints and connective tissues when the result from a slip, trip, fall or other similar accident

Medical Treatment means the managing and caring for a patient for the purpose of combating disease or disorder. The following activities are NOT medical treatment:

First aid

- Visits to a doctor solely for observation or counseling
- Diagnostic procedures, including the administering prescription medications that are used solely for diagnostic procedures

Work-related Injury or Illness means an injury or illness resulting from an event or exposure in the work environment causing or contributing to the condition or significantly aggravating a preexisting condition.

Work Environment means includes work sites where one or more employees are present as a condition of their employment.

Procedure

Designated Medical Treatment Facility

B&R Tools and Service management will ensure that readily available medical personnel are available to employees to provide advice and consultation within reason regarding matters of employee occupational health.

Each fixed facility and fixed jobsite must identify and post the location of a designated medical treatment facility and/or emergency care center including name, address, telephone number, and hours of operation. This information should be posted in a conspicuous location at each fixed facility or fixed job site. The designated medical treatment facility or emergency care center should maintain similar hours of operation as the facility and be able to respond to a workplace emergency within a reasonable amount of time.

First Aid

ALL INJURIES, REGARDLESS OF HOW SMALL, MUST BE REPORTED TO THE EMPLOYEE'S IMMEDIATE SUPERVISOR AND TREATED AND DOCUMENTED AS SOON AS POSSIBLE AFTER AN ACCIDENT.

If an employee becomes injured or ill anywhere due to a work-related or non-work-related problem and needs immediate medical aid, it must be reported to his/her Supervisor or the Safety Officer. Failure to report minor injuries or to receive supervised medical treatment may result in serious infections or complications to the employee's health.

In the absence of a clinic or hospital near the workplace, OSHA regulations require that a person or persons be trained to render first aid and that first aid supplies be readily available. Although the term "readily available" has not been defined in the regulations, OSHA has indicated that 3-4 minutes is acceptable as the time frame within which to begin first aid.

Because of the potential for exposure to bloodborne pathogens and significant liability concerns, there is no job in the Company that requires an employee to render First Aid or cardiopulmonary resuscitation (CPR) in the course and scope of their employment, unless such a requirement becomes necessary due to local, State or Federal Safety and Health Regulations.

Transportation of injured persons will be by ambulance unless a volunteer chooses to assist by driving the injured employee to a medical facility. If there is any question as to the best method of transportation an ambulance should be utilized.

Elements of the First Responder Program should include:

Safety Officer must be certified in basic First Aid & CPR obtained from the U.S. Bureau of Mines, the American Red Cross or equivalent training that can be verified by documentary evidence.

Safety Officer will seek employees who wish to volunteer to be trained and certified in basic First Aid & CPR per a recognized certification source as defined by local or State requirements. These employees must maintain "current" First Aid and CPR certification, appropriately documented, in their personnel file.

Basic First Aid & CPR will be administered by First Responders only to stabilize the employee until professional medical attention can be provided.

Employee First Aid / CPR

Employee training in basic First Aid and cardiopulmonary resuscitation (CPR) is encouraged because of its value and benefit to individuals, their families and the community.

The company also supports any employee who, while on the job, chooses to act as a "Good Samaritan" to assist a fellow employee or another person with First Aid or CPR. It is B&R Tools and Service' intent that first aid supplies and basic personal protective equipment against blood borne pathogens be accessible to employees at every work site during all shifts.

If an employee makes the decision to provide first aid to someone, universal precautions shall be followed, and it should be assumed that all blood and bodily fluids are contaminated with blood borne pathogens. In addition, they should wear protective medical gloves found in the First Aid Kit and use any other personal protective equipment (such as protective glasses with side shields or a full-face shield) to help avoid exposure to blood in the eyes or on the face.

First Aid providers should follow the example of emergency medical personnel, doctors and nurses who wear personal protective equipment to prevent exposure to blood borne pathogens.

If blood or potentially contaminated material gets on the skin, it must be washed off immediately using water and a non-abrasive soap. If available, an antiseptic soap or rinse must be used. If blood ever gets in the eyes, lips, mouth or nose, the employee must go to a sink, water fountain, eye wash or body wash station and flush the area with running water as quickly as he/she can.

The supervisor must always be aware of the potential exposure to a blood borne pathogen after the employee has washed or flushed the exposed area. Decontamination of the exposed surfaces, tools and equipment should be conducted. This must be done immediately, and no later than the end of the shift or work period. **Remember that there is a vaccine for Hepatitis B.** This must be discussed with a physician as soon as possible after a potential exposure

First Aid Stations / First Aid Kits

A First Aid Station or First Aid Kit is to be readily available to employees as described previously. For employees working off-premises, a first aid kit should be provided in each company vehicle, signed-out for use when traveling in personal vehicles and rental vehicles, or provided on the jobsite. Each first aid kit will be in a weather-proof container ad will include individua sealed packages of each type of item that will be checked by the employer before being set out on each job and at least weekly on each job to ensure that the expended items are replaced.

Whether within the facility or in a vehicle, each First Aid Kit must be stored in a properly labeled weather-proof container, stocked with the basic supplies specified in the inventory on Attachment B. A physician's approval of the inventory list is not required but may be needed to address unusual exposure situations. If the job hazard analysis determines that specialty items for certain locations are required due to special job site environment concerns, these should be added to the first aid kits at that location.

IMPORTANT: If an employee declines First Aid and/or medical treatment for a reported on-the-job injury after the Supervisor recommends it, that employee should NOT be allowed to continue work. Supervisors should discuss each situation with the Safety Officer or Project Manager before allowing that employee to return to duty.
The Safety Officer, or someone he/she may designate, is responsible for checking and maintaining the First Aid Cabinets. Supervisors on jobsites are responsible for assuring suitable supplies are provided in the first aid kits on-site or in their vehicles. This person will take a weekly inventory of supplies and make sure the station or kit remains adequately stocked.

Emergency Eye / Body Wash Stations

Where the eyes and/or body of any employee may be exposed to injurious chemical / corrosive materials, suitable eye

and/or body drenching and/or flushing facilities shall be provided whether at a facility or at a temporary worksite. Emergency eye and/or body wash stations can be either of temporary or permanent installation.

In areas where the extent of possible exposure to injurious chemical / corrosive materials is very low, a specially designated pressure controlled and identified water hose can be used when proper personal protective equipment also is used (e.g. full-face shield). The hose system must be equipped with a proper face and body wash nozzle and provide copious amounts of low velocity potable water. An appropriate portable eye wash device containing not less than one gallon of potable water, would also be acceptable under these conditions.

Inspection and maintenance of eye wash systems should be provided at least weekly by assuring sanitary conditions and /or following the manufacturer's requirements for maintenance. Plumbed systems should also be provided a water flow test to minimize contaminants in the line. Inspection and maintenance should be properly documented.

Bloodborne Pathogens (Universal) Precautions Training

When an employee comes into direct contact with blood, bodily fluids or body tissues of another person, they are at risk of becoming infected with diseases that may be carried in the other person's body fluids. Accidental exposures can happen on or off the work site, in any number of day-to-day situations.

This is why the company believes that each employee should have a basic understanding and awareness of the dangers of contracting a potentially deadly disease through such exposures. Communicating basic information about these hazards, including information contained in this policy, is part of the company's safety and health program.

Therefore, employees should receive a basic awareness level training concerning "Universal Precautions" such that employees may follow Universal Precautions in the event of potential exposure to blood or other body fluids.

Training Requirements

Training records must be maintained by the Safety Officer containing the date of the training, a summary of the training session, names and qualifications of the instructors conducting the training and the names and job titles of the persons attending the training.

Training records must be maintained for a minimum of three (3) years from the date the training was conducted. Training must be conducted by a qualified and competent person knowledgeable in the subject matter.

First Responder Exposure

If an employee is a First Responder or decides to be a "Good Samaritan" and provides first aid on an injured victim involving blood or bodily fluids, personal protective equipment must be used, and Universal Precautions followed treating all bodily fluids as infectious

First Aid Stations must at least include the following supplies:

- Protective gloves
- one-way valve CPR mask
- biohazard bags
- plastic baggies
- tongs

Steps to be taken in an emergency:

1. Determine seriousness of emergency. Is EMS required? Only approach victim if it is safe to do so.

2. Activate EMS if required. If job site is in a remote location, and the nature of the emergency requires a hospital, victim may be transported by company vehicle ONLY if moving victim will do no further harm, or if more harm is caused not moving victim. In general, the best practice is to wait for EMS to arrive, while providing first aid on-location.
3. If EMS is not immediately required, perform first aid, and take victim to hospital as soon as possible.
4. Notify superiors as soon as possible (EMS should always be notified first).
5. Care should continue to be given until someone more qualified takes over, the caregiver is too exhausted to continue, or the caregiver is at risk of harm to his or herself.

List of items to be included in First Aid kit:

Each first aid kit must be checked on a monthly basis to ensure that these minimum requirements are met.

Attachment B:

Roller bandages Sterile
gauze Scissors Tweezers
Bandages
CPR mask Protective gloves
Antiseptic solution
Antibiotic treatment
Burn treatment and dressing Medical tape
Elastic wraps Eye wash
Triangular bandage Adhesive
bandages
Directions for requesting emergency assistance

Fit for Duty

Purpose

To ensure all employees are physically capable of performing their job function, B&R Tools and Service ensures that pre-employment physicals are included in the hiring process and are also required when changing into certain job functions and different environments.

Scope

All employees of B&R Tools and Service

Training

Before any employees start a new assigned task, the employee must receive specific training. Examples might include:

- Forklift operation
- Heavy equipment operation
- Crane
- Aerial lifts

Training will include safe work practices and procedures in the workplace and on location.

Drug and Alcohol Testing

It is the policy of B&R Tools and Service that drug and alcohol testing for pre-employment, post- accident or random be done at an independent 3rd party certified laboratory.

Testing Procedures

All employees of B&R Tools and Service must pass a pre-employment drug screening. Employment is conditional upon test results. If an employee refuses a drug test, they are subject to disciplinary action, which may include termination of employment.

- **Prescription and Over-the-Counter Medications**
  Employee must notify their supervisor when taking any medication that could impair their ability to work safely.

Employee Monitoring

To determine if an employee should be removed from work site, B&R Tools and Service will monitor employee behaviors based on the Behavior Based Safety Policy.

Employee Responsibility

Employees are responsible for notifying supervisors if they are fatigued to the point of not being able to perform their duties safely. Employees are also responsible for ensuring they are physically and mentally fit to perform their job function safely. They must take responsibility for their own safety as well as their fellow workers.

Forklift/Industrial Truck Safety Policy

Purpose

The Purpose of this Powered Industrial Truck/Forklift safety program is to provide information on their areas of use, maintenance and operation.

Scope

All employees who operate or anticipate operating a powered industrial truck/forklift during their employment must complete Forklift/Industrial Truck training, evaluation and comply with this program.

Responsibilities

The Safety Coordinator is responsible for:

- Providing program oversight
- Ensuring that each powered industrial truck/forklift training program meets the requirements of 29 CFR 1910.178
- Annually reviewing this policy and making any necessary changes

Supervisors are responsible for:

- Designating and identifying employees responsible for operating powered industrial trucks/forklifts
- Ensuring the no employee operate a powered industrial truck/forklift without training and certification
- Ensuring forklifts/industrial trucks are repaired with malfunctioning's

Forklift/Industrial truck operators are responsible for:

- Attending and passing forklift/industrial truck safety training and evaluation before operating one and every three years thereafter
- Operating and maintaining vehicles in a safe manner and according to the training provided
- Reporting all vehicle problems to their supervisor

General Vehicle Requirements

***Junk baskets and any other unapproved personnel lifting devices are not to be used as man baskets under any circumstances. Any B&R Tools and Service personnel caught using a junk basket as a man basket will face disciplinary action and possible termination. ***

- All powered industrial trucks acquired after February 15, 1972 are required to meet the design and construction requirements for powered industrial trucks established in the American National Standards Institute Standard for Powered Industrial Trucks, Part II, ANSI B56.1, except for vehicles intended primarily for earth moving or over the road hauling. Approved trucks are required to bear a label or some other identifying mark indicating approval by the testing laboratory.
- Nameplates and markings must be in place, must not be covered over with paint which may obscure the identification information and the nameplates must be maintained in legible condition.
- Modification and additions which affect capacity and safe operation without the manufacturer's prior written approval are prohibited. Capacity, operation and maintenance instruction plates, tags, or decals should be modified accordingly.

- Power operated industrial trucks shall not be used in atmospheres containing hazardous concentrations of dust or where flammable gases or vapors are, or may be, present in quantities sufficient to produce explosive or ignitable mixtures. If the location is believed to be hazardous or contain any hazardous materials, the safety coordinator should be consulted in advance.
- High lift rider trucks must be equipped with an overhead guard, unless operating conditions do not permit the use of the guard. The overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., but not to withstand the impact of a falling capacity load.

Operator Training and Evaluation

Each powered industrial truck operator must be determined to be competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation described in this section. Personnel who have not yet been trained to operate forklifts under the B&R Tools and Service Forklift/Industrial Truck Safety Program may operate a powered industrial forklift/truck for the purposes of training only under direct supervision of the trainer.

- Training shall consist of a combination of formal instruction (lecture, discussion, interactive computer learning, video, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee) and evaluation of the operator's performance in the workplace.
- Operator training and evaluation will be conducted by Supervisor personnel that have the knowledge, training, and experience to train forklift operators and evaluate their competence.
- All B&R Tools and Service industrial truck/forklift operators shall receive initial training in the following topics:
    - Operating instruction, warning, and precautions for all types of truck the operator will be authorized to use.
    - Truck controls and instrumentation: location, purposes and operation.
    - Differences between a powered industrial truck/forklift and an automobile.
    - Engine or motor operation.
    - Steering and maneuvering.
    - Visibility (including restrictions due to loading)
    - Vehicle capacity
    - Vehicle stability
    - Any vehicle inspection and maintenance that the operator will be required to perform.
    - Refueling and or changing or batteries
    - Operating limitations and any workplace related topics (e.g., surface conditions, narrow aisles, pedestrian traffic, hazardous locations)
- Refresher training in all the above listed topics, and any other relevant topics, will be provided to powered industrial truck/forklift operators:
    - When the operator has been observed to operate the vehicle in an unsafe manner
    - When the operator has been involved in an accident or near-miss incident
    - When the operator has received an evaluation that reveals that the operator is not operating a truck safely
    - When the operator is assigned to drive a different type of truck, or a condition in the workplace changes in a manner that would affect the safe operations of a forklift
    - At least every three years
- Upon completion of the training program, all operators must be evaluated for performance of proper procedures prior to receipt of an operator certificate.

- The training instructor will document/certify the training and evaluation and will include in the documentation the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation

Inspections

A pre-use inspection

- A pre-use inspection identifies potential hazards that may be encountered from a damaged forklift and should be performed at least daily by the operator. If at any time a forklift is found to be in need of repair, defective, or in any way unsafe, the forklift shall be removed from service until it has been restored to safe operating conditions.
- The pre-use inspection process is as follows
    - Inspect the mast for broken or cracked weld points and any other obvious damage
    - Ensure the roller tracks are greased and that chains are free to travel
    - Forks should be equally spaced and free from cracks along the blade and at the heels
    - Check hydraulic fluid levels
    - Check each hydraulic line and fitting for excessive wear and or crimping
    - Check lift and tilt cylinders for damage or leaking fluid
    - Inspect mounting hardware on the cylinders
    - Check tires for excessive wear, splitting or missing tire material
    - Check pneumatic tires for proper pressure indicated on the tire

Power Source Inspection

Battery Power

- Batteries contain acid, so protective gloves, goggles and long sleeves must be worn when working with batteries
- Batteries should be inspected for:
    - Cracks or holes
    - Securely sealed cells
    - Frayed cables
    - Broken insulation
    - Tight connections
    - Clogged vent caps

Propane Power

Before replacement, all LP-gas containers should be examined by the operator for the following defects or damage:

- Dents, scrapes, and gouges of the pressure vessel
- Damage to the various valves and liquid level gauge
- Debris in the relief valve
- Damage to or loss of the relief valve cap
- Indication of leakage at the valves or threaded connections

Fuel Handling and Storage

- Liquid fuels such as gasoline and diesel not stored in underground or aboveground tanks should be stored in approved safety cans.
- The engine should be stopped, and the operator should not be on or inside the truck during refueling
- A soap solution should be used to check for leaks. A match or open flame should not be used.
- Smoking is prohibited in the container refilling area and in the exchange area during the exchange of containers.
- Cylinders for liquidized petroleum gas (LPG) shall be stored in the following manner:
    - Cylinders in storage having individual LPG capacity greater than 1 pound shall be positioned so that the relief valve is in direct communication with the vapor space of the cylinder.
- Cylinders not in use shall be protected by:
    - Screw on type caps
    - Collars
    - Closed, plugged or capped cylinder outlet valves

- Cylinders stored within buildings shall not be located:
    - Near exits, stairwells or in areas normally intended to be used for the safe egress of occupants
    - Near athletic fields or other areas of public gathering
- Cylinders stored within building frequented by the public shall:
    - Not exceed the LPG capacity of 1 pound per cylinder
    - Be limited to a total combined capacity for all cylinders of less than 200 pounds of LPG
- Cylinders storage within buildings not frequented by the public shall be limited to a total maximum quantity of no more than 300 pounds of LPG per storage location. Empty cylinders that have been in LPG service shall be considered as if full for the purposes of determining the maximum permutable quantity of LPG cylinders permitted.
- Cylinders storage locations outside of buildings shall:
    - Be at least 5 feet from any doorway or openings in a building, or, for buildings with only one means of egress cylinders, be no closer than 10 feet from any doorway or opening.
    - Be at least 20 feet from any automotive fuel dispenser
    - Be enclosed with at least a 6-foot-high industrial-type fence, chain link fence or equivalent protection
    - Have at least two means of egress from the enclosure, unless the enclosure is not over 100 square feet in area, the containers are not filled within the enclosure, and the point of transfer is within 3 feet of the gate
    - Have lighting provided to illuminate storage containers, containers being loaded, control valves and other equipment if operations are normally conducted during hours other than daylight.

Battery Handling and Storage

Designated Charging Areas

- Battery charging installations should be located in designed charging areas that provide flushing and neutralizing of spilled electrolyte, fire protection, protection of charging apparatus from damage by trucks, and adequate ventilation for dispersal of battery gassing fumes.
- Facilities for quick drenching or flushing of the eyes and body (approved emergency eyewash and safety shower) must be provided at or near (within 10 seconds) the charging area.
- Smoking and other ignition sources are prohibited in the charging area. “No smoking” signs must be posted. Additional precautions must be taken to prevent open flames, sparks or electric arcs in battery charging areas.

Charging Batteries

- Properly position forklift and apply brakes before attempting to change or charge batteries.
- Rubber gloves must be worn when handling lead/acid batteries. Eye or face protection must also be worn when connecting a charger to a battery.
- Chargers must be turned off when leads are being connected or disconnected.
- All leads and cables must be checked and in good condition.
- When moving batteries, vent caps must be kept firmly in place to avoid electrolyte splashing. When charging batteries, ensure vent caps are functioning and the battery cover(s) are open to dissipate heat. When charging is complete, be sure to replace the vent cap firmly.
- Keep tools and other metallic objects away from the top of uncovered batteries.
- Properly position and secure reinstalled batteries in the forklift.
- Reinstalled batteries or new batteries shall be equivalent to, or shall be rated higher than, the battery type indicated on the truck nameplate.
- Any additional safety requirements or operating procedures specified by the manufacturer of the forklift, battery or charging system must be followed.

Maintenance

- Do not use open flames to check for electrolyte level in batteries or liquid fuel level in tanks.
- Do not conduct repairs to fuel and ignition systems of forklifts in areas where fire hazards exist.
- Disconnect batteries prior to repairing electrical system.
- Use only replacement parts equivalent with those in the original design.
- Do not alter the relative positions of various parts from how they were received from the manufacturer. Do not add any parts not supplied by the manufacturer nor delete any parts supplied by the manufacturer. No additional counterweighting of forklifts is permitted unless approved by the manufacturer.
- Keep forklift mufflers in proper working condition and free of debris.
- Keep forklift in clean condition free of lint, excess oil and grease.
- When antifreeze is used in the engine-cooling system, only glycol-based materials should be used.

Forklift Operating Guidelines

- Only trained and authorized personnel eighteen years old and older are permitted to operate a forklift.
- Do not operate a gasoline-powered or diesel-powered forklift in an inside area.
- Do not stand or pass under elevated portion of any forklift.
- Passengers are prohibited from riding on the forklifts
- Do not place arms or legs between the uprights of the mast or outside the running lines of the truck.
- When mounting or dismounting a forklift:
    - Face the vehicle
    - Never jump off
    - Use a three-point stance (always have both hands and one foot or vice-versa in contact with unit.
    - Wear proper shoes (oil resistant and non-slippery).
    - Wear proper clothing (do not wear loose and dangling jewelry)
    - Restrain long hair.
- After mounting the vehicle, fasten the seat belt, apply the brake, and shift to neutral. Also, check around the forklift for clearance and pedestrians before moving.
- A forklift is considered unattended when the operator is 25 feet or more away from the vehicle and it remains in his view, or whenever the operator leaves the vehicle and it is not in his/her view. When a forklift is left unattended:
    - Fully lower load engaging means
    - Neutralize controls
    - Shut off power
    - Set brakes and
    - Remove the key

- Maintain a safe distance from the edge of ramps or platforms while on any elevated dock or platform.
- Forklifts are not to be used to open or close freight doors
- Forklifts should not be used in areas of poor lighting (less than two lumens per square foot) unless they are equipped with auxiliary directional lighting and the lighting is turned on.
- Fixed jacks may be necessary to support a semitrailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.
- Set brakes and block wheels with wheel chocks to prevent movement of trucks and trailers while loading or unloading when they are boarded by forklifts.
- Check the flooring of trucks and trailers for breaks and weakness before loading or unloading
- Check for sufficient headroom under overhead hazards such as lights, pipes, or sprinkler systems.
- Do not lift personnel or allow personnel to be lifted or work from the forklift without a properly attached lifting carriage.
- Whenever a truck is equipped with a lifting carriage or forks for lifting personnel, take the following precautions:
    - Use safety platform firmly secured to the lifting carriage and/or forks.
    - Provide means whereby personnel on the platform can shut off power to the truck.

- Provide protection from falling objects.
- Keep fire aisles, access to stairways, and fire equipment clear.

Handling and Moving Loads

- **To Pick Up A Load**
  - Only pick up stable and safely arrange loads within the rated capacity of the forklift.
  - Adjust long or high (Including multiple tiered) loads which may affect capacity.
  - Square up on the center of the load and approach it straight with forks in traveling position.
  - Stop when the tips of the forks are about a foot away from the load.
  - Level the forks and slowly drive forward until the load is resting against the backrest.
  - Lift the load high enough to clear whatever is under it.
  - Carefully tilt the mast back to stabilize the load.

- **Driving with A Load**
  - Starts and stops should be gradual.
  - Observe all traffic regulations and keep forklift under control at all times.
  - Reduce speed and sound horn at cross aisle and other locations where vision is obstructed.
  - Pedestrians have the right of way. Always be aware of their presence especially in aisles and doorways
  - Do not drive forklift up to anyone standing in front of a bench or other fixed object.
  - Keep a clear view of the path of travel. Always look in the direction of travel.
  - Always travel with a load tilted slightly back for added stability. Do not lift or lower the load when the forklift is in motion.
  - Travel with the load at a height of four to six inches at the tips and two inches at the heels to clear most uneven surfaces and avoid debris.
  - Horse play is not permitted.
  - Slow down for wet, slippery or uneven floors.
  - Avoid running over loose objects on the roadway surface.
  - Properly secure dock boards and bridge plates before driving over them. Drive over slowly and never exceed their rated capacity.
  - Drive in reverse rather than looking around the load if you are unable to see over it.
  - Travel down inclines in reverse and up inclines going forward. Ascend or descend grades slowly. Drive loaded trucks with the load upgrade when ascending or descending grades in excess of 10%. On all grades, tilt the forks back and raise only as far as necessary to clear the road surface. Use low gear or the slowest speed when descending a grade.

- **Safe Steering**
  - Never make a turn at normal traveling speed, always slow down to maintain balance.
  - Stay wide when turning into an aisle to help clear the sides and square up with the destination.
  - Allow enough room for forks to clear the sides before turning, when backing out of an aisle.
  - When negotiating turns, turn the steering wheel in a smooth sweeping motion. At very low speeds, turning the steering wheel at a moderate, even rate.
  - Never turn forklift with the load lifted higher than the travel height (four to six inches at the tips and two inches at the heels).

- **To Put A Load On an Elevated Surface**
  - Square up and stop about a foot away from the rack on which the load is to be placed.
  - Raise load 5-10 inches above the unloading point (space permitting).
  - Drive forward stopping 3-4 inches in front of deposit point.
  - Tilt mast forward to a right-angle position so load is level.
  - Drive forward until load is aligned with the deposit point. Stop.
  - Stack pallets loaded with cases, cartons straight and square. Stagger the top tier to “tie-in-place”.

- Tilt the forks slightly forward to avoid hooking the load.
- Look over both shoulders and back straight out until the forks clear the rack. Stop.
- Lower the forks to about 2-4 inches above the ground, then continue to back up or turn to proceed to the next location. Do not turn with elevated forks.

- **To Put A Load Down**
  - Square up and stop about a foot away.
  - Level the forks and then drive the rest of the way in.
  - Lower the load.
  - Tilt the forks slightly forward to avoid hooking the load.
  - Look over both shoulders and back straight out until the forks clear the pallet.

Safety Rules for Forklift Operators

1. Only authorized operators will be permitted to operate powered industrial trucks.
2. Unauthorized personnel operating industrial trucks will be subject to discipline and or termination.
3. No person will be allowed to stand or pass under the elevated position of any truck whether loaded or empty.
4. Passengers are not allowed to ride on industrial trucks.
5. Arms and legs must be kept within the running lines of the trucks.
6. When powered industrial truck is left unattended, forks will be lowered fully, controls will be neutralized, power will be shut off and the brakes set. A powered industrial truck is unattended when the operator is 25 feet away from the vehicle which is in view, or whenever the operator leaves the vehicle and it is not in view.
7. Powered trucks must be slowed, and horn sounded when:
    - When entering or leaving any door
    - At all blind corners or other locations where vision is obscured
    - When turning into or crossing main aisle, (one or two short blasts are considered sufficient
8. If the load being carried obstructs forward view, the driver will be required to travel in reverse.
9. Under all travel conditions the truck will be operated at a speed that will permit it to be brought to a stop in a safe manner.
10. Powered trucks must keep to the right when meeting other vehicles.
11. Avoid wet, slippery floors. If, however, they must be used proceed with extreme caution.
12. Do not lift personnel with lift trucks. It is not an elevator.
13. All accidents must be reported to your supervisors immediately.
14. Keep loads as close to the floor as possible. Keep forks down when traveling empty.
15. Always drive several trucks lengths behind other trucks.
16. Always watch for overhead obstructions while lifting.
17. Do not store material, so that is obstructs fire equipment, alarm boxes, emergency equipment, electrical service cabinets or fire exits.
18. Do not overload any truck. Lift only up to the rated capacity of the truck. Know the load limits for extended or tilted masts.
19. Loads that are not safely piled, overloaded or insecure will not be moved.
20. Always look to the rear before backing and always watch for the tail swing.
21. Use caution and reduce speed when traveling up or down ramps and always keep the load on the high side.
22. Pallets must not be stacked more the 15 high.

I have been given a copy of the Safety Procedures for Forklift Operator and will abide by them.

Date Signed_____ Name_____

Forklift/Industrial Truck Daily Checklist

Truck#_____ Inspected By:_____

Date_____ Time_____

	CONDITION			
ITEM	**GOOD**	**Fair**	**Needs Repair**	**N/A**
Wheels and Tires				
Mast				
Tilt Control				
Overhead Cage				
Horn				
Steering				
Gauge(s) condition				
Head and taillight				
Safety Flasher				
Safety Beeper				
Back-up Alarm				
Hydraulic Cylinder				
Battery				
Fuel				
Fire Ext.				
Seat				
Brakes				
Emergency Brake				
Accelerator				
Shift Mechanism				
Capacity Plate				

***Repairs Completed By: _____ Date:_____**

Daily Maintenance Log

Date_____ Shift_____

Truck No.	Make	Model	Description of work performed

Elevated Powered Industrial Truck Body Harness and Lanyard Inspection

This Check is to be conducted before the start of each shift

Equipment_____ Date_____

Employee Name_____

Supervisor_____

ISSUE	YES	NO	N/A	Comments
Is the body harness free from wear, damage, or distortion?				
Are straps cut, broken or scraped?				
Are the buckles, snap hooks, and other hardware free of cracks and sharp edges?				
RE the buckles on the harness working properly?				
Are lanyards free from wear, or show signs of broken fibers, pulled stitches and discoloration?				
Do the snap hooks of the lanyard close and lock tightly?				
Are the lanyard anchors and mountings tight and undamaged?				

1. **Any damaged or defective equipment shall be tagged, removed from service and reported to Supervisor. Repairs shall only be done by qualified personnel using manufacturer's guidelines and replacement equipment. Any equipment that cannot be repaired must be destroyed and removed from facility.**
2. **Any equipment that has been subject to loading shall be inspected by the area supervisor before it can be used again.**

Signature_____Date_____

Powered Industrial Truck Training Checklist

The following must be covered unless the employer can demonstrate that certain topics are unnecessary because they are not applicable to the safe operations of the truck(s) in the workplace:

Truck Related Topics

- ☐ Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate
- ☐ Differences between the truck and the automobile
- ☐ Truck controls and instrumentation: where they are located, what they do, and how they work
- ☐ Engine or motor operation
- ☐ Steering and maneuvering
- ☐ Visibility (including restriction due to unloading)
- ☐ Fork and attachment adaption, operation and use limitations
- ☐ Vehicle capacity
- ☐ Vehicle stability
- ☐ Any vehicle inspection and maintenance that the operator will be required to perform
- ☐ Refueling and/or charging and recharging of batteries
- ☐ Operating limitations
- ☐ Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate

Workplace –Related Topics

- ☐ Surface conditions where the vehicle will be operated
- ☐ Composition of loads to be carried and load stability
- ☐ Load manipulation, stacking and unstacking
- ☐ Pedestrian traffic in areas where vehicle will be operated
- ☐ Narrow aisles and other restricted places where the vehicle will be operated
- ☐ Hazardous locations where the vehicle will be operated
- ☐ Ramps and other sloped surfaces that could affect the vehicle's stability
- ☐ Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust
- ☐ Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation

Powered Industrial Truck/Forklift Certification

Operator Name_____

Operator Signature_____

Date of Training_____

Training Performed By_____

Trainers Signature_____

Date of Evaluation_____

Evaluation Performed By_____

Evaluator's Signature_____

Gas Hazards Safety Policy

Program

It is the intention of B&R Tools and Service to provide gas hazards training and detection equipment that meets or exceeds all federal standards. This program is associated with our Respiratory Protection Program.

Scope

This program applies to all B&R Tools and Service projects and operations.

This program supplements the B&R Tools and Service Respiratory Protection Program that is in place in accordance with 29CFR 1910.134.

Procedures

Gas Hazards Equipment

- Each employee shall use a portable gas monitor as required in all high gas or potentially high hazard areas.
- The gas monitor must be calibrated prior to use per manufacturer's recommendations and contain a current calibration sticker on the monitor providing the date of last calibration.
- Bump test are required to be completed at the beginning of each day the monitor is in use per the requesting Owner Client and manufacturer's guidelines to ensure the monitor is functioning correctly.

Owner Client Contingency Plans Awareness

- B&R Tools and Service shall insure all employees are aware of the Owner Client's contingency plan provisions including evacuation routes and alarms. B&R Tools and Service employees shall participate in emergency evacuation drills and practice rescue procedures.

Use, Maintenance, and Care of Gas Monitors

- Only utilize monitors issued by either B&R Tools and Service or made available by the Owner Client - no personal monitors are allowed.
- Have the gas monitor on the outside of all clothing.
- Check the calibration date prior to bump testing. If the calibration date is expired turn the unit in immediately and do not use.
- Bump test each shift prior to using the monitor.
- Monitors are sensitive equipment - avoid physical damage and immediately report any monitor that does not appear to be performing as expected.

Training

All affected employees will receive gas hazards awareness training before their initial assignment and annually thereafter. This shall be in conjunction with the B&R Tools and Service Respiratory Protection training. Training shall address, as a minimum:

- Locations of alarm stations Gas Monitoring Equipment - Portable and Fixed Detection
- Gas Alarms
- Gas Hazards - Characteristics of gases, to include oxygen deficiency, oxygen or nitrogen enrichment, carbon monoxide and hydrogen sulfide
- Any plant or department specific gases of concern
- Signs and symptoms of overexposure
- Personnel Rescue Procedures
- Use and care of Self-Contained Breathing Apparatus (SCBA) - includes donning and emergency procedures (if applicable)
- Evacuation Procedures
- Staging Areas – Primary and Secondary

Gas Hazard Awareness training shall be documented and available for review.

General Waste Management Policy

Purpose

The purpose of this waste management strategy was developed to provide guidance and requirements necessary for efficient, effective and compliant waste management during construction and operations. It is the policy of B&R Tools and Service to reduce and minimize the amount of waste generated during work-related task.

Scope

This procedure applies to all B&R Tools and Service employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence; however, this document covers B&R Tools and Service employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Procedure

The B&R Tools and Service Safety Coordinator or other designated person in his or her absence is assigned the responsibility for proper waste or scrap materials.

Waste Estimation

Each work site will estimate the waste that will be generated prior to work being performed so the need for containers and waste removal, if necessary, can be determined. If same wastes or scrap materials are generated for every project B&R Tools and Service will have a regularly documented waste management plan for those specific materials.

B&R Tools and Service must coordinate with the project site or owner to ensure proper disposal of wastes or scrap materials.

B&R Tools and Service must ensure the owner client is aware of whether wastes and scrap materials will be taken off site or will be disposed of on the owner client's site.

Waste Segregation

- Do not mix waste streams
- Only place waste in the designated container, satellite accumulation area (SAA), recyclable accumulation area (RSS), universal waste accumulation area (UWAA) or designated dumpster.

Recycling

It is the policy B&R Tools and Service to segregate waste in order to ensure opportunities for reuse and recycling. The collection of recycled material will reduce the total load on the environment. Bins of sufficient size must be lined with a plastic bag and clearly labeled for use. Cardboard will be flattened, staples and excess shipping tape removed. No cardboard shall be placed in the dumpster used for the landfill.

Waste Handling Matrix

Each work site will develop a Waste Handling Matrix that will:

- Address safe practices related to the immediate storage and handling of waste, scrap or leftover material.
- The handling, organization and storage of waste and scrap materials to minimize potential impact to the environment. Waste materials shall be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities receptacles must b4e covered to prevent dispersion of waste materials and to control the potential for runoff.

Storage Requirements

B&R Tools and Service must ensure project related wastes are stored and maintained in an organized fashion to encourage proper disposal and minimize risks to employees. Proper waste receptacles must be provided for trash and materials that may be reused or recycled during a project.

Education and Training

Employees shall be instructed on the proper disposal method of wastes. Examples include:

- General instruction on disposal of non-hazardous wastes, trash or scrap materials
- Minimization methods to reduce waste
- Recycling methods
- If wastes generated are hazardous then employees shall be trained to ensure proper disposal and compliance with regulations.

Hand and Power Tool Safety Policy

Purpose

Tools are manufactured with safety for the user in mind, but they may pose hazards. All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.

Scope

All employees who use hand or powered tools.

Hand Tools

Hand tools are categorized as:

- Non-powered and include axes, crow bars, screw drivers, pry bars, and wrenches
- Power tools are classified by power source: electric, pneumatic, liquid fuel, hydraulic and powder actuated

Hazards

Hazards may result from misuse and improper maintenance.

Cutting Tools

Employers should teach employees the dangers posed by sharps (saw blades, knives) and other tools. It is important to emphasize best practices to include directing blade away from oneself, ensuring the area around you is clear of obstruction and other people, and grasping the knife handle with your entire palm. When using a cutting tool ensure the circle around you is clear by extending your arms out and making a circle with your free hand. This will help to ensure the safety of yourself and others. Never attempt to catch a cutting tool if it is falling, allow it fall to the ground and then retrieve it. Always direct the blade away from you and others. NEVER CUT TOWARDS YOUR HAND OR BODY! While using a cutting tool, it's important to stay focused on the task and not become distracted. This will help prevent injuries.

Snips should be the primary choice when cutting.

Cutting tools must be sharp; dull tools can be more hazardous than sharp ones. These must be stored appropriately, with the blade securely placed in its covered position or a pouch as well as placed in a toolbox.

All cutting tools must not be a fixed blade on handle. They must be able to retract into safe position and be able to close with blade secured. Blade must be able to lock into position when open and in use.

NO POCKET KNIVES ALLOWED.

Recommendations

- The employer is responsible for the safe condition of tools and equipment used by employees.
- The employee is responsible for proper use and maintenance of the equipment.

- Employers should teach employees that sharps (saw blades, knives) and other tools be directed away from aisles and other employees working nearby.
- Knives and scissors must be sharp; dull tools can be more hazardous than sharp ones.
- Floors should be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools.
- Only spark-resistant tools made from brass, plastic, aluminum, or wood should be used around flammable substances.

NEVER ALTER TOOLS OR GROUNDS

Power Tools

Hazards

- Power tools can be hazardous when not used properly.

Recommendations

- Never carry a tool by the cord or hose.
- Never pull the cord or hose to disconnect it form the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools from the power source before servicing or changing accessories.
- Keep all observers at a safe distance away from the work site.
- Use both hands to operate the tool; secure work with clamps or vise.
- Keep finger off the on switch unless operating the tool.
- Follow manufacturer's instructions for lubrication and changing accessories.
- Keep good footing and maintain good balance when using a power tool.
- Wear proper PPE.
- Remove all damaged portable electric tools from use and tag "Do Not Use."

Guards

- Safety guards must never be removed when a power tool is in use.

Safety Switches

- Certain hand-held power tools require either a momentary contact on off control switch, a positive on off controls switch, or a constant pressure switch.

Electric Tools

- Tools must either have a 3-wire cord with ground and be grounded, or be double insulated, or be powered by a low voltage isolation transformer.
- Only operate electric tools within their design limitations
- Wear gloves and safety shoes or boots.
- Store tools in a dry place.
- Do not use power tools in damp or wet sites.
- Light work areas well.
- Powered Abrasive Wheel Tools

- Grinding, cutting, polishing and wire buffing wheels may throw off fragments.
- Always use eye protection.
- Never stand directly in front of the wheel until it reaches full operating speed.
- Before mounting the wheel, inspect it closely and sound or ring test to be sure free from cracks and defects.
- Be sure safety guards are in place.
- Make certain wheel fits freely on the spindle.
- When not using the tool, turn off the power.
- Never clamp a hand-held grinder in a vise.

Pneumatic Tools

- Tools such as chippers, drills, hammers, and sanders are powered by compressed air. Users may get hit by one of the tool's attachments or a fastener.
- Wear eye protection, face guard, and ear protection.
- Check that hose is fastened securely; a short-wire or positive locking device is an added safeguard.
- Install a safety clip or retainer to prevent attachments from being shot from the barrel.
- Set up screens to protect nearby workers from being struck by fragments or fasteners.
- Never point compressed air guns against the user or anyone else.

Powder-Actuated Tools

- Treat powder-actuated tools as loaded guns extremely dangerous. They must only be operated by specially trained employees.

Hydraulic Tools

- Use only approved fire-resistant fluid that will retain its characteristics at the highest temperature to which it will be exposed.
- Do not exceed the manufacturer's recommended operating pressure for any part.

Jacks

- All jacks must have a safety device that stops them from going up too high.
- Manufacturer's load limit must be permanently marked in a prominent place and not be exceeded.
- Immediately block a lifted load once it reaches the proper height.
- Make sure the base rests on a firm, level surface, the jack is correctly center, the jack heads bear against a level surface, and the lift force is applied evenly.
- Lubricate regularly (with adequate antifreeze liquid if exposed to freezing temperatures).
- Inspect before each use.

Recommendations

- To avoid the hazards associated with using power tools, workers must learn to recognize the hazards associated with each type of tool used and the safety precautions necessary to prevent those hazards.
- Instruct employees in the proper use of all tools. Employees should understand the risks and the safety precautions.

- Employees who are exposed to falling, flying, abrasive and splashing objects, or to harms dusts, fumes, mists, vapors, or gasses must be provided with appropriate PPE when using hand or power tools.
- Hazardous situations should immediately be brought to the attention of the appropriate person. The use of any machinery, tool, material or equipment will either be identified as unsafe by tagging or locking the controls to render them inoperable or will be physically removed from its place of operation.

Hazard Communications (HazCom)

Purpose

The purpose of the Hazard Communications safety program is to ensure that all chemicals are classified and that the employees are given the information regarding the classified chemicals. This will be accomplished through appropriate labeling of chemicals, safety data sheets, and employee training that will be updated annually or more often as appropriate.

B&R Tools and Service has adopted this policy and implemented this program to ensure that employees are informed of any chemical hazards and hazardous or toxic substance that are in the workplace/ workplace environment.

B&R Tools and Service will develop, implement, and maintain at each workplace a written hazard communications program that describes, labels, and identifies all hazardous materials that an employee will come into contact with via the work environment. This program will be updated at least annually or more often as needed to reflect current guidelines.

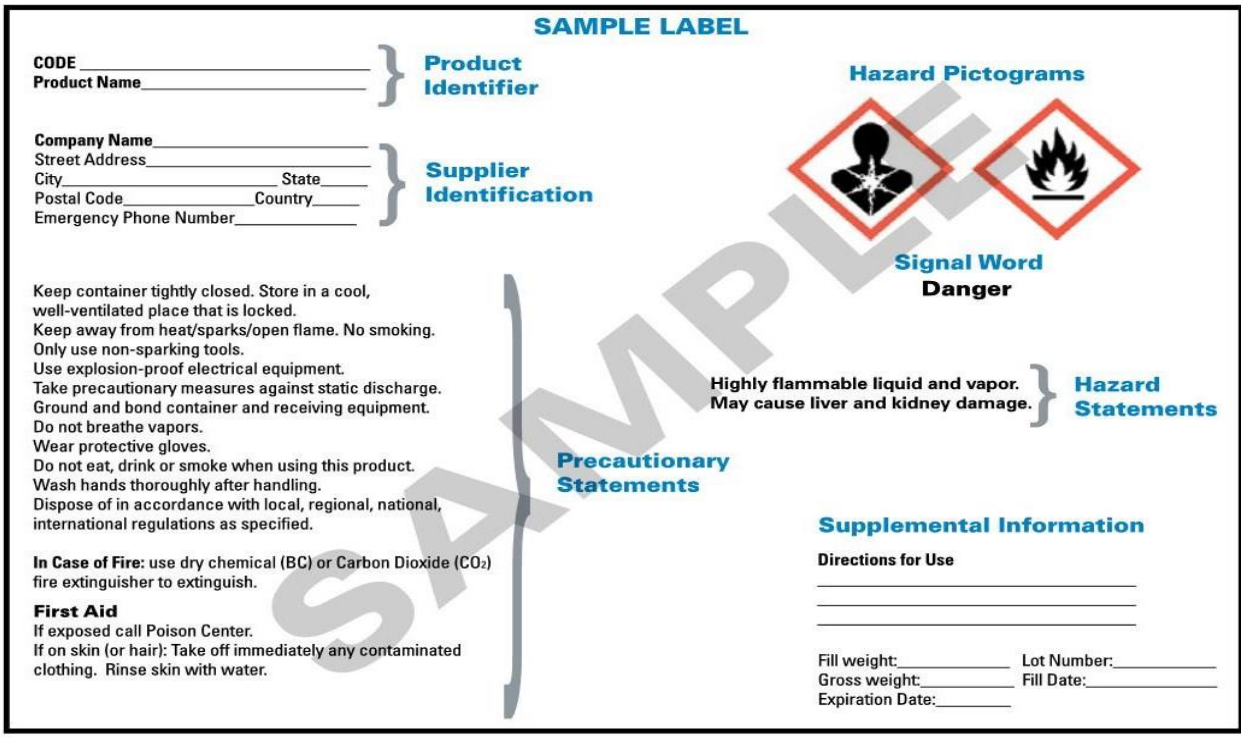
- Employees will be notified of any hazardous substance used by the company, or in the workplace, and SDS will be available to all employees or in a binder if on third party location.
- Non-routine hazard task will be addressed during safety meetings, tailgate meetings, or JSA meetings. Methods will be documented as how and by whom employees will be informed of the hazards of non-routine tasks (i.e., the cleaning of reactor vessels, etc.) & the hazards associated with chemicals contained in unlabeled pipes in their work areas.
- All containers used on any B&R Tools and Service or third-party location will be labeled for content and precautions if substance contained is hazardous.
- Materials will be left in their manufacture's container, or returned to the container immediately after use, or any unused portion disposed of properly
- If labels become illegible for any reasons, a new label will be affixed containing all required precautionary information, or the material disposed of properly.
- A list of all chemicals known to be used at the workplace or third-party location by B&R Tools and Service employees will be available for review.
- SDS for all chemicals used in the workplace, or third-party location will be available for review and will accompany the chemical during transport and to all job locations.
- If an employee must travel between work sites during a work shift, the written program may be kept at a primary job site. If there is no primary, then the program should be sent with the employees.

Multi- Employer work sites

- Employers will provide onsite access to safety data sheets for each hazardous chemical any employees may be exposed to while working. These will be available at all times.
- Tail gate meetings will be used to ensure information from other employers about any precautionary measures that may need to be taken for employee protection during the workplace's normal operating conditions and in foreseeable emergencies is understood. The labeling system will be discussed to ensure employee understanding prior to work starting.
- The safety program will be available to employees and their designated representatives upon request.
- When employees must travel between work sites, the written program will be kept at the primary job site.

The company will ensure that each container of hazardous materials/chemicals in the workplace are tagged, labeled, or marked with the following:

- The identity of the chemical
- Appropriate warning, or alternatively, words, pictures, symbols, or combination thereof, which provides general information regarding the hazards of the chemical or substance
- A signal word
- Hazard and precautionary statement
- Pictogram
- Name and address of the chemical manufacturer, importer, or other responsible party
- Labels will be in English, legible, and prominently displayed, see below for example



Training:

- The company will train all employees before initial exposure to the substance
- The company will train before change of job assignment, or materials used.
- The company will train before a new substance is introduced into the work environment

Training will include:

- Hazardous chemicals present in the workplace
- The written-hazard communication plan, can be found at our office, where it may be reviewed
- Physical and health effects of the hazardous chemicals

- Methods used to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to these hazardous chemicals through use of control/work practices and personal protective equipment
- Steps taken to reduce or prevent exposure to chemicals
- Emergency procedures to follow if an exposure takes place
    - Recognize a chemical release or spill
    - Call 911- or applicable county emergency response
- How to read labels and review safety data sheets

Safety Data Sheets training will include review of the data sheets to include:

- Section 1: Identification
- Section 2: Hazard identification
- Section 3: Composition/ingredients
- Section 4: First aid measures
- Section 5: Firefighting measures
- Section 6: Accidental release measures
- Section 7: Handling and storage
- Section 8: Exposure controls/personal protective equipment
- Section 9: Physical and chemical properties
- Section 10: Stability and reactivity
- Section 11: Toxicological information
  To ensure GHS consistency SDS also include:
    - Section 12: Ecological information
    - Section 13: Disposal considerations
    - Section 14: Transport information
    - Section 15: Regulatory information
    - Section 16: Other information, including date of preparation and last revision

Hazard pictograms training:

The Hazard Communication Standard (HCS) requires pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

There are two sets of pictograms used for GHS (global harmonization system for labelling chemicals): one is used for labelling containers and workplace warnings, the other is used for transportation purposes. Hazard pictograms are included along with identification, a signal word (such as danger or warning), hazard statements, precautionary statements and the identity of the supplier. The purpose of the pictograms is to maintain a standard meant to be easily identifiable and understood.

Health Hazard	Flame	Exclamation Mark
		
• Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	• Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	• Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (Harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder	**Corrosive**	**Exploding Bomb**
		
• Gases Under Pressure	• Skin Corrosion/Burns • Eye Damage • Corrosive to Metals	• Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle	**Environment** (Non-Mandatory)	**Skull and Crossbones**
		
• Oxidizers	• Aquatic Toxicity	• Acute Toxicity (Fatal or Toxic)

Hazardous Material Inventory Spreadsheet

Principal Investigator _____ Inventory Date: _____
Last Name First Name

Building: _____

Person Completing Inventory _____
Last Name First Name

Room: _____

Department _____ Phone: _____

Chemical Name	Manufacturer	Maximum Quantity	CAS Number	SDS on File?
(example) Ethyl Alcohol	*Sigma*	*4 L*	*64175*	*yes*

Hazard Identification and Risk Assessment

Purpose

To inform B&R Tools and Service employees on how to identify a hazard and risk management.

Scope

All employees of B&R Tools and Service

Responsibilities

- Processes are in place to identify potential hazards by the use of JSA's, JHA's, facility wide or area specific analysis/inspections. B&R Tools and Service will utilize a form specific JSA prior to the start of each job. The JSA will then be reviewed and revised each morning at the tail gate meeting prior to the start of the workday, therefore mitigating any new hazards that might occur during the course of work each day.

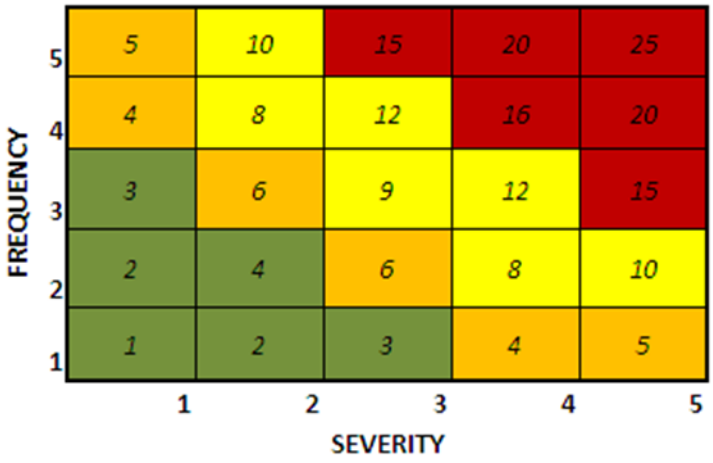
- Provides processes to ensure employees and/or subcontractors are actively involved in the hazard identification process and hazards are reviewed with all employees concerned. B&R Tools and Service utilized a tail gate meeting prior to starting work each day. Attendance is mandatory for each employee on the job site. Any hazards and or risks that employees might encounter during the course of the workday will be reviewed in detail.

- The hazard identification process is used for routine and non-routine activities as well as new processes, changes in operations, products or services as applicable. The hazard identification process, utilized by our JSA, is used for each of these purposes, as well as reviewed and revised daily.

- Identify hazards as classified/prioritized and addressed based on the risk associated with the task. Our JSA lists hazards. Our JSA classifies hazards according to severity, and they are reviewed daily starting with the most severe, then finishing with the least severe.

- Identified hazards are addresses and mitigated. This can be accomplished by dedicated assignment, appropriate documentation of completion, and implemented controls. Field supervisor must document on JSA how each hazard has been mitigated. These must also be reviewed by safety coordinator.

- Employees will be trained in the hazard identification process including the use and care of proper PPE. Proper PPE is required each day, regardless of job. Monthly safety meetings as well as tail gate meetings cover the proper use of PPE and how PPE can mitigate risks associated with our work. New hire orientations are mandatory and go over hazard identification, as well as the mandatory use of proper PPE. Hazard assessment training is required on an annual basis, or more frequently as needed.



SEVERITY		
Verbal	Numeric	Description
Catastrophic	5	Likely to result in death
Critical	4	Potential for severe injury
Moderate	3	Potential for moderate injury
Minor	2	Potential for minor injury
Negligible	1	No significant risk of injury

FREQUENCY		
Verbal	Numeric	Description
Frequent	5	Hazard likely to occur
Probable	4	Hazard will be experienced
Occasional	3	Some manifestations of the hazard are likely to occur
Remote	2	Manifestations of the hazard are possible, but unlikely
Improbable	1	Manifestations of the hazard are very unlikely

Heat Illness Prevention and Cold Weather Protection Plan

Purpose

The purpose of the Heat Illness Prevention and Cold Weather Protection Plan is to establish procedures and provide information which is necessary to ensure that workers are knowledgeable in the prevention and recognition of heat stress and cold weather protection to ensure their own safety and the safety of others.

It is the policy of B&R Tools and Service to prevent heat illnesses and cold weather injuries among all of our employees. To accomplish this objective, B&R Tools and Service has adopted the following policies and procedures:

Water

All employees who work in a hot environment shall be provided with water adequate to prevent dehydration and heat illness. This will be accomplished by assuring that piped, potable drinking water is available in or near all fixed facility work sites. Employees who work away from fixed sites shall take with them a minimum or 1 quart of water per employee per hour for the period they will be working. Water shall be stored in insulated containers filled with enough ice to keep the water at a palatable temperature throughout the work period. Containers will be cleaned and sanitized on a regular basis; damaged containers shall be replaced.

Shade

Any employee who becomes ill due to dehydration or exposure to high heat must be provided a shaded place to rest and recuperate. A vehicle equipped with a working air conditioning system can be used to provide shade for an employee who needs it. All workers subject to this plan shall be provided with a working vehicle equipped with adequate air conditioning and shall be directed to rest in the vehicle when they begin to experience the effects of any heat illness. For serious illness, employees in the field shall call 911 on a cell phone to obtain emergency medical services.

Training

All employees who may be exposed to high heat in their work shall attend annual training covering the dangers of heat illnesses, how to recognize those illnesses, and the proper first aid for each illness. Employees shall also learn the appropriate methods for seeking emergency medical assistance.

Employees shall be trained in the factors that can make them more susceptible to heat illness and methods to protect themselves when working in a hot environment. Procedures will be in place to control the effects of environmental factors (i.e., air temperature, humidity, radiant heat sources and air circulation) that can contribute to heat related illness. Supervisors and management must receive training in the prevention of heat related illnesses before they actually supervise employees in the heat. Also, supervisors will be trained in the B&R Tools and Service heat illness procedures to prevent heal illness and what to do if and when an employee exhibits symptom consistent with a possible heal illness, including emergency response procedures.

Record Keeping

Training records shall be kept for each employee who attends annual heat illness prevention training. Records of any heat-related illness shall be maintained with the employee's medical and/or workers compensation records.

Heat Illness Prevention

Heat related illnesses are avoidable if the employees are trained and the right actions are taken before, during, and after working in either indoor or outdoor hot conditions. High temperatures and humidity can stress the body's ability to cool itself making heat illness a big concern during hot weather months. Physical factors that contribute to heat related illness will be taken into consideration before performing a task. The most common physical factors that can contribute to heat related illness are type of work, level of physical activity and duration, and clothing color, weight and breathability. Every employee whose job duties require them to work in the outdoors during summer months, are exposed to elevated heat conditions and therefore are susceptible to heat illness. Supervisors will ensure personal factors that contribute to heat related illness are taken into consideration before assigning a task where there is the possibility of heat related illness occurring. The most common personal factors that can contribute to heat related illness are age, weight/fitness level, drug/alcohol use and a prior history of heat related illness.

The three major forms of heat illnesses are: heat cramps, heat exhaustion, and heat stroke. Heat stroke can be a life-threatening condition. This document will outline those actions as well as describing the three major forms of heat illness, how to recognize them, and what actions to take to provide first aid before medical care is provided.

Heat Cramps

Description: Heat cramps are the most common type of heat related injury and probably have been experienced by nearly everyone at one time or another. Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. Frequently they do not occur until sometime later after work, at night, or when relaxing. Heat cramps are caused by heavy sweating, especially when water is not replaced quickly enough. Although heat cramps can be quite painful, they usually don't result in permanent damage.

Prevention/First Aid: Drink electrolyte solutions such as Gatorade or plenty of water during the day and try eating more fruits such as bananas to help keep your body hydrated during hot weather. Call 911 or contact immediate supervisor immediately if the person becomes ill.

Heat Exhaustion

Description: Heat exhaustion is more serious than heat cramps. It occurs when the body's internal temperature regulating system is overworked but has not completely shut down. In heat exhaustion, the surface blood vessels and capillaries, which originally enlarged to cool the blood, collapse from loss of body fluids and necessary minerals. This happens when you do not drink enough fluids to replace what you are sweating away.

Symptoms Include: Headache, heavy sweating, intense thirst, dizziness, fatigue, loss of coordination, nausea, impaired judgment, loss of appetite, hyperventilation, tingling in hands or feet, anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood pressure.

Prevention/First Aid: The employee suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Have them lie down with their feet slightly elevated. Loosen their clothing, apply cool, wet clothes or fan them. Have them drink water or electrolyte drinks. Try to cool them down and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day, and they should continue to drink water to replace lost body fluids. Call 911 if the person becomes non-responsive, refuses water, vomits, or loses consciousness

Heat Stroke
(Is a medical emergency and requires IMMEDIATE medical attention)

Description: Heat stroke is a life-threatening illness with a high death rate. It occurs when the body has depleted its supply of water and salt, and the victim's core body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or heat exhaustion before progressing into the heat stroke stage, but this is not always the case. It should be noted that, on the job, heat stroke is sometimes mistaken for a heart attack. It is therefore very important to be able to

recognize the signs and symptoms of heat stroke - and to check for them anytime an employee collapses while working in a hot environment.

Symptoms Include: A high body temperature (103 degrees F); a distinct absence of sweating (usually); hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted pupils; any/all the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting, or confusion, and possibly more severe systems including; bizarre behavior; and high blood pressure. Advance symptoms may be seizure or convulsions, collapse, loss of consciousness, and a body temperature of over 108 degrees F.

Prevention/First Aid: It is vital to lower a heat stroke victim's body temperature. Quick actions can mean the difference between life and death. Pour water on them, fan them, or apply cold packs. Call 911 to get emergency medical aid as soon as possible.

Summon Emergency Medical Assistance

To summon emergency medical assistance

Be prepared to tell the dispatcher your location and the nature of the emergency. Answer any questions and stay on the line until you are told to hang up. An important aspect of this is being able to explain your exact location. Directions to your location should be listed on your JSA.

Call 911

Precautions to prevent heat illness

Condition yourself for working in hot environments. Start slowly then build up to more physical work. Allow your body to adjust over a few days (acclimatization).

Assure that adequate water and shade are available at the job site before work begins.

Drink plenty of liquids. Hydration is a continuous process. Don’t wait until you’re thirsty! By then, there’s a good chance that you’re already on your way to being dehydrated. Electrolyte drinks are good for replacing both water and minerals lost through sweating, particularly when you are not yet acclimated. Never drink alcohol and avoid caffeinated beverages like coffee and soda as these liquids can have the opposite effect and can actually increase the level of dehydration.

Take frequent breaks, especially if you notice you’re getting a headache, or you start feeling overheated.

Wear lightweight, light colored clothing when working out in the sun.

Immediately report all unsafe conditions to your supervisor.

Cold Weather

During cold weather, the environment can directly affect an individual's health and performance. Cold can lower body temperature, resulting in cold injuries and impaired performance. Moreover, cold weather is often accompanied by wind, rain, snow and ice, which can worsen the effects of cold, as well as contribute to injury and performance.
Operational problems often arise in cold weather, including restricted movement due to heavy clothing; equipment malfunctions; travel difficulties, etc. Regularly used walkways will be sanded, salted, or cleared of snow and ice as soon as practicable. All employees will be informed of the dangers and destructive potential caused by unstable snow buildup, sharp icicles, and ice dams and know how to prevent accidents caused by them.

While cold makes daily tasks more difficult, it does not make them impossible. The purpose of this information is to describe how the environmental conditions stress health and performance during cold weather operations, and to explain ways of overcoming that stress. The program will address jobs, tasks or employees who are at risk for cold exposure. Workers exposed to cold will receive initial and annual training regarding the health effects of cold exposure, proper rewarming procedures, recognition and first aid for frostbite and hypothermia, required protective clothing, proper use of warming shelters, the buddy system, vehicle breakdown procedures, and proper eating and drinking habits for working in the cold.

Preventive measures will be taken to avoid injuries. Some preventive measures include drinking plenty of liquids, avoiding caffeine and alcohol. It is easy to become dehydrated in cold weather. If possible, heavy work should be scheduled during the warmer parts of the day. Take breaks out of the cold. Try to work in pairs to keep an eye on each other and watch for signs of cold stress. Avoid fatigue since energy is needed to keep muscles warm. Take frequent breaks and consume warm, high calorie food such as pasta to maintain energy reserves.

All employees who are required to perform work in cold conditions will be knowledgeable on how to administer first aid treatment on cold induced injuries or illnesses.

Nonfreezing cold injuries occur when conditions are cold and wet (air temperature between 32°F and 55°F). The most prominent nonfreezing cold injuries are chilblain, trench foot and immersion foot.

- Chilblain- result from intermittent expose to temperatures above freezing in high humidity.
    - Symptoms - red, swollen skin, which is tender, hot to the touch and may itch. It can develop in only a few hours in skin exposed to the cold.
    - Immersion foot - result from prolonged exposure, usually in excess of 12 hours, in water at temperatures usually below 50°F. It is not limited to the feet but may involve other areas of the body following immersion. Symptoms - see trench foot.

- Trench foot - develops when skin of the feet is exposed to moisture and cold just above freezing to 50°F. The combination of moisture and cold soften skin, causing tissue loss and often infection. Untreated trench foot can eventually require amputation. The average duration of exposure resulting in trench foot is 3 days.
    - Symptoms - itching, numbness or tingling pain; feet may appear swollen, and the skin mildly red, blue or black.

First Aid for Chilblain and Trench Foot

- Prevent Further Exposure
- Remove wet, constrictive clothing
- Wash and dry injury gently
- Elevate, cover with layers of loose, warm clothing and allow to rewarm (pain and blisters may develop)
- Do not pop blisters, apply lotions or creams, massage, expose to extreme heat or allow victim to walk on injury
- Refer for medical treatment

Frostbite

As temperatures drop below freezing, the risk of frostbite increases. Windy conditions magnify this risk. Nose, ears, cheeks, finger and toes are particularly vulnerable. Because of the numbing effects of cold weather, frostbite victims are often unaware of their condition until they return from the cold. Therefore, it is advisable to watch others for signs of frostbite when working in freezing conditions.

At first, frostbite will cause the skin to turn red, then white or gray. As the condition worsens, the skin turns black. To prevent frostbite, jobs need to be planned so that workers have the right clothing, and frequent breaks to warm up. ***Those***

not acclimated to the cold may need additional consideration. Alcohol and nicotine both increase the risk of frostbite and hypothermia.

- **First Aid**

1. **This is a medical emergency!**
2. **Acquire medical attention immediately**.
3. Keep the patient warm.
4. Do not rub the effected skin, and do not apply heat.

Hypothermia

Hypothermia is caused by a reduction of the body's core temperature, even at temperatures above freezing. Symptoms begin with uncontrolled shivering. If conditions persist without treatment, a victim will then experience delirium, dementia unconsciousness and finally death. Jobs should be planned so that workers are prepared for the weather conditions that they could encounter. Unless workplace
hazards prevent it, clothing should be loose fitting and layered to adjust for changing weather conditions and prevent sweating.

- **First Aid**

1. Take affected workers to a warm location.
2. Give warm liquids if victim is alert.
3. Acquire medical attention.

Humans do not acclimatize to cold weather nearly as well as they can acclimatize to hot weather, although repeated cold exposure does produce what is referred to as habituation.

Following habituation, shivering is much less vigorous. This is advantageous because shivering is inefficient, and most of the heat produced is lost. Also, shivering can interfere with sleep causing fatigue, with habituation to repeated cold exposure, humans adjust mentally and emotionally.

Preventing Cold Injury

Cold-weather clothing systems are designed to change with the wearer's needs. Cold-weather clothing protection is based on the principles of insulation, layering and ventilation. By understanding these principles, we can vary the clothing to regulate protection and stay comfortable.

When Using Cold-Weather Clothing,

Remember **C-O-L-D**

keep it -------- **C**lean
avoid ---------- **O**verheating
wear it -------- **L**oose in layers
keep it -------- **D**ry

- Insulation depends on the clothing thickness, properties of the garment material, and the amount of air trapped within the garment. When clothing is dirty, the material tends to be packed down, which compromises insulation.
- Wearing clothing ensembles in multiple layers allows the wearer to remove or add clothes to adjust the insulation to changes in environment or workload as well as to the individual's own needs and preferences.
- Physically active people can sweat even in extremely cold weather. Sweat will be able to evaporate if clothing allows ventilation. Proper clothing will be made of material that water vapor can pass through and will allow the wearer to unzip and open the clothing periodically to increase ventilation. If sweat cannot evaporate, it will accumulate; wet the clothing, compromising insulation. Sweat evaporation will be compromised when clothing is dirty.

Feet, hands and exposed skin must be kept dry

Feet are particularly vulnerable and extra foot care is required for cold-weather operations. Feet should be washed, dried and dusted with a dry, antifungal powder daily. Socks must be changed whenever they become wet from exposure to rain or snow, or from excess sweat. This may require changing into dry socks at least 2-3 times daily. Extra socks can be air dried and then carried in the jacket/coat to warm.

Buddy System

Use the Buddy System to take care of each other. Holding (not rubbing) a warm hand on the blanched area until it returns to normal color will rewarm a buddy's ear, nose, or cheek. Fingers, toes can be rewarmed placing them against a buddy's bare chest or abdomen.

Personal Measures

Wear or carry adequate clothing for the weather to be encountered. Remove excess of clothing before perspiration starts so that the clothing does not become wet.

- Wear clothing in loose layers to permit layers or air to provide good insulation and permit good circulation of blood to all parts of the body.
- Keep hands well protected: mittens are better than gloves. Cover your head, great amount of heat is loss if unprotected. Do not touch metal, snow, or other objects with bare hands.
- Avoid immobilization in the cold. If the situation permits, walk about and exercise to generate and maintain body heat. Move toes, feet, legs, fingers, and arms. Do not sit directly on the ground.
- Remove excess clothing when near a fire or in a warm enclosure, otherwise the body adjust to the warm temperature and excess clothing.
- Regular inspections on cold weather supplies (e.g. hand warmers, jackets, shovels, etc.) will be carried out to ensure that supplies are always in stock.

Use the wind chill chart

Wind Chill Chart*

WIND SPEED (IN MPH)	ACTUAL TEMPERATURE (°F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	EQUIVALENT CHILL TEMPERATURE											
CALM	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	3	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	15	0	-15	-29	-44	-59	-74	-89	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-22	-37	-53	-69	-85	-101	-117	-132	-148
(WIND SPEEDS GREATER THAN 40 MPH HAVE LITTLE ADDITIONAL EFFECT)	LITTLE DANGER (In less than 5 hrs with dry skin. Greatest hazard from false sense of security.)				INCREASING DANGER (Exposed flesh may freeze within 1 minute.)			GREAT DANGER (Exposed flesh may freeze within 30 seconds.)				

*To determine the windchill temperature, enter the chart at the row corresponding to the windspeed and read right until reaching the column corresponding to the actual air temperature.

HYDROGEN SULFIDE (H2S)

Purpose

The purpose of this training is to ensure safety in occupational settings where H2S is present, or is recognized as being potentially present, above the applicable occupational exposure limit. This training is recommended for occupational settings where personnel have the potential to be exposed to concentrations of H2S in excess of the applicable occupational exposure limit. The applicable occupational exposure limit is determined by the employer or facility referencing consensus standards, regulations and health safety and environmental (HSE) professionals.

Training will be required annually; records will be kept for 3 years. The H2S policy is implemented with a respiratory protection plan that conforms to standard 29 CFR 1910.134. The respiratory protection training will be completed annually and more often as needed. Fit tests will be completed in conjunction with training annually.

Where it is found:

Hydrogen Sulfide can be found in drilling operations, tank gauging, and field maintenance in the oil and gas industry. Hydrogen Sulfide is very dangerous due to its toxicity levels and explosive nature. The main concern is inhalation which can paralyze the respiratory center in the brain which can cause immediate death. Hydrogen Sulfide is measured in parts per million. All H2S exposure victims should be treated by a physician before returning to work.

H2S may be present in the following areas:

- Cellars
- Ditches
- Tanks
- Mud pits
- Shale shakers
- Flares
- Drill floors
- Well heads
- Vessels
- Separators
- Piping
- Flares
- Confined spaces
- Manholes
- Trenches
- Vacuum trucks

Properties of H2S:

- Highly toxic, colorless gas
- Concentration measured in parts per million (PPM) or percentages
- Is heavier than air; therefore, it accumulates in low lying areas
- Has an offensive odor like rotten eggs at low concentrations, however; never rely on your sense of smell, because the olfactory nerves become desensitized and can no longer detect the odor.
- Highly explosive

- Highly flammable
- Highly soluble in water
- Burns with a blue flame and produces Sulfur Dioxide, as well as, other toxic gases
- Highly Corrosive

Effects of H2S:

Exposure to H2S is through both inhalation and skin absorption, with inhalation being the primary concern.

The primary effects of H2S are found in the olfactory nerves, lungs, brain, respiratory control center and eyes. The following is a list of symptoms:

- Olfactory paralysis
- Excitement (anxiety)
- Skin irritation
- Headache
- Sneezing
- Dry scratchy nose and throat
- Loos of appetite
- Nausea or diarrhea
- Coughing
- Eye Irritation, use of contact lenses can make this worse.
- Fatigue
- Dizziness
- Confusion
- Irrational Behavior
- Loss of Consciousness
- Death

It should be noted that the presence of alcohol, illicit drugs and prescription medications can result in hypersensitivity to H2S.

Concentration Levels:

- .003-.02~ odor threshold
- 10 ppm~ toxic to personnel, work can be performed at this concentration for 8 hours. This is the industry accepted exposure level.
- 15 ppm~ work can be performed for 15-minute intervals, up to four times during a 24-hour period without respiratory protection. Respiratory protection is recommended for work at this level of toxicity.
- 100 ppm~ Immediately Dangerous to Life and Health (IDHL)

Alarm Levels:

- Low alarm (10 PPM)
  - Non-essential personnel report to safe briefing area, essential personnel locate SCBA and report to emergency duty station
- High alarm (15 PPM)
  - Non-essential personnel don SCBA and report to safe briefing area, essential personnel don SCBA and report to emergency duty station
- High-High alarm (50 PPM) OCS
  - Person in charge considers evacuation of non-essential personnel

When monitor alarm sounds, non-essential personnel are to vacate the area to the nearest muster point and not re-enter without clearance.

In the event you witness a person overcome by H2S follow the following steps:

- Call 911 and other emergency contacts (according the emergency response plan)
- Don your SCBA/rescue pack from the muster area. (never attempt a rescue without first donning a respirator
- If possible, enlist the help of a coworker so the buddy system is still implemented.
- Drag or carry the effected H2S victim to a safe area upwind of the release
- Administer CPR until emergency services arrive
- Anyone overcome by H2S exposure should seek medical attention: due to possible delayed pulmonary edema

Air Monitoring

Air monitoring will be maintained continuously while working in confined spaces. The monitoring will be performed before each job and continuously while workers are in the area.

Precautionary Safeguards and Requirements

- Conducting site specific safety meetings
- Performing a JSA before work is started
- Warning signs and alarms
    - API Condition 1- Low Hazard- less than 10PPM present. Assigned a GREEN flag
    - API Condition 2- Medium Hazard- 10-30PPM present. Assigned a YELLOW flag
    - API Condition 3- High Hazard- greater than 30PPM present. Assigned a RED warning flag with warning signs posted at all entrances and 500 ft from the area.
- Equipment will be determined during Hazard Assessment
    - Colorimetric tube detectors
    - Personal monitors
    - Fixed monitors
    - Self-Contained Breathing Apparatus (SCBAs)
- Employees will be trained in H2S and respiratory protection.
- Employees will be required to wear a personal H2S monitor. It needs to be worn as close to the mouth and nose as possible to measure air from the breathing zone.
- Employees should work in pairs when possible and watch out for coworkers.
- Employees need to recognize access location and identify muster stations (safe areas) before initiating work. Work areas, vents and purge lines will be checked to ensure they are functioning and ventilated before work is begun.
- Employees need to observe wind direction. Windsocks and streamers need to be checked regularly.
- Employees should be aware of site contingency and emergency plans.
- Employees should not rely on their sense of smell to detect the presence of H2S
- Employees will remain clean shaven and free from facial hair that will affect the seal of the respirator.
- Employees will wear supplied air respirator when levels are over 10 parts per million or PEL
- Personnel qualified to perform rescue, first aid and CPR in a timely manner (if workers are exposed to IDLH environment, you shall provide standby rescue personnel and they shall be rigged and ready) shall be provided
- Providing personnel with appropriate supplied air respirators when there is a potential for exposure above the IDLH
- Verifying that proper safety equipment is available, functioning properly, and is used
- Checking and remaining aware of wind conditions and direction (stand on the upwind side whenever possible when working on equipment)
- Performing a thorough check for personnel and ignition sources in the downwind area before starting any potentially hazardous work

- Notifying supervisory personnel, when necessary, before initiating operations that could involve the release of H2S
- Use of Stop Work Authority when needed

Special precautions will be taken during work tasks inside tanks or vessels. Employees will be trained for confined space.

Personal Monitors

Bump tests confirm that the gas monitor sensors and alarms are working. A bump test must be performed before use.

In any area where H2S might be present monitors will be used. Monitors will be bump tested at a minimum as required by manufacturer guidelines and to manufacturer specifications. If a monitor fails a bump test, it will be removed from service and replaced immediately. Monitors will be calibrated every three months or according to manufacturer's recommendations. Personal alarm monitors will be set to alarm initially at 10ppm H2S. Each contractor will wear an H2S personal monitor when working in any potential H2S area.

Respiratory Protection and PPE:

Students shall be made aware of the following site-specific information:

- location of supplied air respirators (SAR)
- location of spare air cylinders, if applicable
- muster locations for varying wind direction
- situations that would require respirators
- medical evaluation requirements
- fit testing requirements
- limitations and capabilities of positive pressure/full face piece respirators
- limitations and capabilities of air supplied and air purifying respirators
- brand/model/size of respirators available

Certification:

Designed for individuals who have the potential to be exposed to any H2S concentrations. Based on the instructor needs assessment, the length of the course may vary, however all of the objectives shall be met. This certification training should be a minimum of 3-4 hours in length. The certification is valid for a period of one year. The training shall be documented and a H2S certification card stating that the program conforms to ANSI/ASSE Z390.1 2017 shall be presented to the attendee. Retraining shall include all of the course material. These personnel, who have received H2S certification and are subject to working under respiratory protection, shall also have successfully completed a respiratory protection training program, to include medical evaluation and fit-testing if they are to wear tight-fitting air supplied respirators in these hazardous atmospheres according to ANSI Z88 and/or OSHA 29 CFR 1910.134 or applicable local regulatory requirements.

Emergency Action Plans:

All facilities are required to have an emergency action plan. Workers will be taught the purpose of the contingency plan is to serve as a logical step-by-step approach to dealing with an emergency. Workers will be made familiar with the contents of the contingency plan, which may include, but is not limited to, the following, as applicable:

- instructions for alerting employees and the public in case of an emergency

- procedure for requesting assistance and follow-up action to remove the public from the area of exposure
- a call list of people to notify in the event of an emergency
- map of area showing location of public areas, evacuation routes and assembly places, safety equipment, telephones and, if required, the radius of exposure
- list of names and telephone numbers of residents within the area of exposure, and the person responsible for any public area
- provision for advance briefing of the public within an area of exposure
- detailed operating procedures to be followed in an emergency, including instruction of specific job assignments for personnel
- detailed remedial procedures to be followed in any emergency
- emergency medical services available, including current names and phone numbers (prior contact should be made with designated medical facilities)
- location of the contingency plan

ANSI Z-390

API RP 49, 54, 55
Texas RR Comm. Rule 36

Incident Investigation and Reporting Policy

Purpose

To set a standard for prompt reporting, investigation and documentation of injuries, illnesses and near misses in the workplace for the purpose of providing:

- Information to determine injury rates, identify trends or problem areas and the satisfy workers compensation requirements.
- Identifying causal factors.
- Identifying deficiencies in the management system.
- Suggesting and implementing corrective action

Scope

All employees, supervisors, contractors and subcontractors are to adhere to the following guidelines for incident investigation and reporting. All incidents will be investigated to the appropriate level with regards to incident severity. All responsibilities for incident reporting must be assigned prior to occurrence of an incident. All personnel will be trained in their responsibilities regarding incident investigation techniques.

Personnel Responsibility

Employee

- All employees, upon hire, must complete and Employee Emergency Medical Profile which provides the company with medical information and emergency contact information.
- Each employee must immediately report all incidents (with or without injuries), regardless of how minor to their supervisor. The supervisor will notify the Safety Coordinator by phone.
- Employees will complete and sign an employee incident report as verification of a job-related injury on a work site.
- Any employee who fails to follow this procedure will be subject to disciplinary action up to and including termination.
- All employees have an obligation to do what they can at all times to keep themselves and others from risk of injury or incident.

Supervisors

- Upon notification by employee, the supervisor must immediately take all steps necessary to provide emergency rescue and or medical help for the injured or ill.
- Ensure employees and supervisors have proper equipment to assist in the investigation (pens, PPE, marking devices, etc.).
- Begin, along with the reporting employee (s) an initial assessment of evidence. This might include a list of people, equipment and materials involved, as well as a recording of environmental factors such as weather, illumination, temperature, noise, ventilation and physical factors such as fatigue, age and medical conditions.
- Refer to the First Aid and CPR safety policy provided in this safety manual.
- Immediately take actions that will prevent or minimize the risk of further injury or property damage.

- Assign persons to secure the scene of the accident as outlined later in this policy.
- Must determine severity of incident and notify appropriate persons accordingly.
- Must ensure that all related reports and logs are completed and turned in to general manager, so they will remain secure.
- Supervisor must collect all names and contact information for witnesses. Interviews will be done by AJT Safety, LLC during their official incident investigation. AJT Safety, LLC is the responsible party to complete all incident investigations. Rey Hernandez- Safety Coordinator (432) 209-2928
- Must provide the safety coordinator will all reports for all injuries or illnesses that require medical attention that are classified as recordable within 24 hours.
- Required incidents must be verbally reported to applicable regulatory agencies within 8 hours of their discovery. Incidents must also be reported to the client as soon as possible, or in a timely manner (within 24 hours of incident).
- All work-related fatalities shall be reported to OSHA within 8 hours and inpatient hospitalizations, amputations, and losses of an eye within 24 hours.

Notification Procedure

The following is a general guideline to determine the severity of incidents and proper notification procedure:

If in doubt activate Emergency Response Plan:

- The following will be classified as **Fatal or Severe:**
    - Fatality, profuse bleeding, difficulty breathing, loss of consciousness, chocking, electrocution, inability to move or any other condition deemed sever.
    - Immediately activate the Emergency Response Plan.
    - Contact the safety coordinator or designated representative.
    - Start preliminary investigation using Accident/Injury Report.
    - Assist and participate in the Safety Departments Accident Investigation.
- The following will be classified as **Moderate:**
    - Broken bones, lacerations that may require stitches, burns, muscle strains or sprains.
    - Immediately contact the Safety Department.
    - Document injury or illness on the weekly injury log.
    - Start preliminary investigation using the Accident/Injury Report.
    - Assist and participate in the Safety Departments Accident Investigation.
- The following will be deemed minor:
    - Any injury or illness, other than listed above, that does not meet the criteria for severe or moderate.
    - Notify Safety Coordinator by end of shift
    - Document injury or illness and complete and Accident/Injury Report.
- Informing Line Management
    - The supervisor is responsible for initiating communication of all accidents to upper management.
    - The Safety Coordinator will determine if an appropriate treatment response has been initiated.

In the event of a fatality, Do Not attempt to contact the family, an authorized company representative will contact the "next of kin".

Securing the Scene

It is the supervisor's responsibility to secure the scene of the accident to ensure a thorough investigation and to prevent exposure to bodily fluids or other hazardous conditions. All efforts must be made to secure the area, equipment, tools, etc.

Utilize one or more of the following to secure the scene:

- Barricade the area.
- Designate an employee(s) to monitor to area.
- Provide for collection of transient or perishable evidence.

Investigation Procedure

AJT Safety, LLC will complete an Accident/Incident Report and cooperate with the Safety Departments investigation.

The procedure will include the 5 Why answer tool, implementing a method of answering one why question to lead to the next why until all parties agree the root cause of the incident is found. Each why question will be followed by the who, what, where, how and how much until the answer is complete.

Incident Reports and Logs

All applicable investigating report forms and logs must be filled our entirely, leaving no blank spaces. Official incident report including pictures, detailed analysis, witness statements will be done by B&R Tools and Service and made available as soon as possible.

Copies of applicable forms must be maintained and available at each work site for the duration of each job.

The following reports and logs must be completed, as applicable for all incidents:

- Employee Incident Report
- Accident/Incident Report
- OSHA 300 log

Causal Factors and Corrective Action

- The purpose of incident investigation and reporting is to identify Causal Factors and eliminate those factors through corrective actions.
- Causal Factors and Corrective Actions will be determined and implemented through a team effort involving supervisor, employees, safety personnel and upper management. Trends can be recognized as a result of accurate reporting and this allows for continuous safety management improvement across the company. All corrective actions must be documented for each incident. This will hopefully ensure that reoccurrence of incidents will be nonexistent or kept to a minimum.

Employee Incident Report

Work site: _____

Manager/Supervisor_____

Employee Name_____

Job Title_____

Incident_____
_____
_____
_____
_____
_____
_____
_____

Action
Taken_____
_____
_____
_____
_____

Code of Conduct

- **Proactive management includes supervisory leadership and control to change unproductive activities. Conformance with safety policies, rules and regulations is a necessary component of our safety program.**
- **Employee safety responsibilities are communicated during initial orientation. Safety rules and regulations are reviewed with employee by their supervisors and are part of the documented Employee Safety Training Process.**
- **Supervisors understand and enforce safety rules as a part of their job. This process many involve coaching, counseling, verbal or written reprimands and discipline in the form of suspension and/or termination. When appropriate, documented verbal warnings and reprimands are issued and carried out by supervisors.**
- **Failure to adhere to any of the safety rules and safe work practices will result in disciplinary action. All discipline will be documented in the employee's folder. Discipline may be more severe depending on the offense.**

Employee Signature_____Date_____

Supervisor Signature_____Date_____

Injury Illness Prevention Plan

Scope

B&R Tools and Service has adopted this policy to ensure a safe and healthful workplace for all its' employees. The IIPP is utilized as an umbrella allowing all HSE policies to fall under to create a safe work environment. This information is meant to help evaluate the safety of the workplace, understand industry hazards and implement worker protections to reduce and eliminate hazards to help prevent future workplace injuries and illnesses.

Goals

- Provide a safe and healthful work environment for all employees
- Reduce risk of disease, illness, injury and potential harmful exposures
- Reduce workers' compensation claims
- Improve employee morale and efficiency
- Comply with all regulatory mandates

Program Elements

- Assigns responsibilities for health and safety
- Establishes mechanisms for Hazard ID and hazard mitigation
- Requires workplace inspections and accident investigations
- Requires communication of health and safety information
- Reaffirms training and documentation mandates

Employees have the following rights:

- A safe workplace free from recognized hazards
- Receive training on hazards associated with your job
- Know how to control hazards of your job
- Report workplace hazards without fear of reprisal

Roles and Responsibilities

HSE

HSE has responsibility for monitoring compliance with the Injury and Illness Prevention Programs to minimize or prevent occupational injuries and illnesses, and to protect the quality of the workplace and surrounding environment. HSE advises B&R Tools and Service of its responsibilities with respect to health and safety issues, recommends appropriate corrective actions and programs and implements new health and safety programs.

HSE training will include:

- Inform employees about specifics of the IIPP
- Provide safety training consistent with employee job duties

- Enforce safety rules and regulations within your area of control
- Provide a means to identify workplace hazards
- Maintain all HSE documentation

Employee

All employees have a responsibility to maintain a safe and healthful work environment. As an employee you should:

- Follow safe work practices
- Be familiar with the IIPP
- Know the potential health and safety hazards of your job and how to protect yourself
- Know how to report unsafe conditions
- Report any work-related injury or illness to your supervisor
- Know what to do in an emergency
- Correct unsafe conditions within your authority

If you are unclear about your responsibilities, ask your supervisor.

Elements of an effective program

The 8 required Injury and Illness Prevention Program elements are:

1. Responsibility
2. Compliance
3. Communication
4. Hazard Assessment
5. Accident/Exposure Investigation
6. Hazard Correction
7. Training and Instruction
8. Recordkeeping

To be effective your IIPP must:

- Fully involve all employees, supervisors, and management
- Identify the specific workplace hazards employees are exposed to
- Correct identified hazards in an appropriate and timely manner
- Provide effective training

Injury & Illness Recordkeeping

Scope

B&R Tools and Service has adopted this policy regarding record keeping of injuries and illnesses. This information is meant to help evaluate the safety of the workplace, understand industry hazards and implement worker protections to reduce and eliminate hazards to help prevent future workplace injuries and illnesses.

Purpose

Employee medical records means a record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel, or technician. Records of any injuries, illness or fatalities will be kept by B&R Tools and Service that are work-related, is a new case and meets one or more of the general recording criteria.

OSHA 300

The OSHA 300 form is a record of work-related injuries and illnesses in a workplace that have occurred during a specified time period, usually within a year.

The 301-incident report is a form with which work-related injuries and illnesses are recorded in accordance with U.S. law (the Occupational Safety and Health Act).

Each recordable injury or illness will be entered on an OSHA 300 Log and 301 Incident Report, or other equivalent form, within seven calendar days of receiving information that a recordable injury or illness has occurred.

Employers must report any worker fatality within 8 hours and any amputation, loss of an eye, or a hospitalization of a worker within 24 hours.

An annual summary, the OSHA 300 Log and 301 Incident Report will be certified by a company executive that he or she has examined the log and he or she reasonably believes, based on his or her knowledge of the process by which the information was recorded, that the annual summary is correct and complete.

A copy of the annual summary will be posted in the main office of B&R Tools and Service, no later than February 1 of the year following the year covered by the records and will remain posted until April 30, in a conspicuous placed where notices to employees are customarily posted. Management will ensure that the posted annual summary is not altered, defaced or covered by other material.

The OSHA 300 Log, the annual summary, the OSHA 301 Incident Report and the privacy case list (if one exists) will be retained for 5 years following the end of the calendar year that covers these records.

Job Competency

Purpose

To ensure all employees have been provided by B&R Tools and Service an organizational chart of job titles previously established for the company.

Scope

All employees of B&R Tools and Service

Training

Before any employees start a new assigned task, the employee must receive specific training. Each role within B&R Tools and Service has minimum qualifications previously established by management and safety personnel that must be met through a combination of education and work experience.

Additional job-specific training will be provided to include safe work practices and procedures in the workplace and on location.

Documentation

All employees of B&R Tools and Service must provide documentation as proof that they are qualified to perform their job duties as established by the company (example: Class C license)

Employee Monitoring

To determine if an employee should be removed from work site, B&R Tools and Service will monitor employee behaviors based on the Behavior Based Safety Policy. Supervisors will verify that an employee is competent to perform their roles and responsibilities before being allowed to work independently.

Employee Responsibility

Employees are responsible for notifying supervisors if they are fatigued to the point of not being able to perform their duties safely. Employees are also responsible for ensuring they are physically and mentally fit to perform their job function safely. They must take responsibility for their own safety as well as their fellow workers.

Job Hazard Safety Analysis

Purpose

The purpose of the Job Hazard Analysis is to provide a method for a supervisor and his/her crew to inspect an upcoming job, identify potential hazards related to that job, and to arrive at agreement on the development of a Safe Work Plan for completing their assignment. The hazard identification process should be used for routine and non-routine activities as well as new processes, changes in operation, products or services as applicable. Every employee will be trained in the hazard identification process at new hire, and annually and/or on an as needed basis.

Policy

Once the client/owner has issued a permit, it is each B&R Tools and Service employees' responsibility to ensure that the JSA for the work he/she is about to do is properly developed. After receiving a valid work permit from the client/owner and before starting a job, each crew shall review the permit requirements and perform a thorough Job Safety Analysis. The Job Analysis process serves as the B&R Tools and Service Safe Work Plan. As such, by completing the process and signing on the back of the form, employees are indicating that they are prepared to accomplish the assigned task efficiently and safely.

In the event conditions change, the Job Safety Analysis Form must be updated. Potential hazards, including those specific to the task and those general to the work area, must be discussed and a plan formulated to eliminate or minimize identified hazards. Hazards will be classified and ranked based on severity. Each person on the crew must understand his/her role relating to the tasks at hand. When a new worker is assigned to a job in progress, the Job Safety Analysis must be reviewed with this person and he/she must sign the form before beginning work.

Procedure

Once the client/owner work permit has been issued, the assigned crew shall conduct a thorough Job Safety Analysis session at the job site, which includes, but is not limited to:

- Walking the job and reviewing all elements of the assignment. The supervisor shall identify all equipment that is to be worked on.
- Identifying existing and/or potential hazards and take appropriate action to eliminate or minimize identified hazards; reaching agreement on the safest plan to complete the assigned task. Each person on the crew must thoroughly understand their role in the upcoming tasks.
- Evaluating PPE requirements and upgrading permit required PPE or providing additional PPE whenever necessary to provide maximum level of employee protection.
- Ensuring that all workers know and are properly trained for their assignment(s).
- Posting the completed form(s) along with the work permit in a conspicuous place in the work area. In the event it is not possible to post the form(s), they shall be kept readily available at the job site. The forms shall be kept in a manner that protects them from weather damage.

Whenever possible the supervisor shall be involved in the Job Safety Analysis Session.

However, there are times when this is not possible. Should the supervisor find that he/she will not be available, he/she shall assign a competent person to lead the session. As soon as practical following the beginning of a job, the supervisor shall review all Job Safety Analysis Forms of crews assigned to him/her and sign the back of the form in the section provided.

General Instructions

- Print and make sure the form is legible/readable. The only place you do not print required information is when you place your signature on the back of the form.
- Involve the entire crew in the process. The more eyes and experience used to identify hazards, the better.
- Whenever possible, the completed Job Safety Analysis should be reviewed for proper completion and signed by the designated lead person, foreman, supervisor or Safety Coordinator **before** the work is started. If this is not possible, the form should be reviewed as soon as practical.
- When the form (s) is completed, it must be posted & readily available at the job site.

Front of Hazard Analysis Form

Description of job: The first step of job safety analysis is to accurately describe the work to be performed. This will provide the basis for the rest of the process. At the top of the form, provide a brief, but specific description of the job you will perform.

Date and Time: Enter the date the work will be performed and the time you started the Job Safety Analysis process.

Location: Enter the name of the facility where the work will be performed.

Supervisor: Enter the name of the immediate foreman or supervisor.

Client Contact: Enter the name of the client contact person for that job.

Crew: Clearly **print** the name(s) of each person that will be working on the job. This may include non-B&R Tools and Service employees, such as other contractors or client personnel working with you.

Unit: Enter the name of the unit where the work will be performed.

Equipment: Enter the number or name of the equipment you will be working on. Be as specific as possible. Make sure that you are preparing to work on the right equipment. If there is no number or name for the equipment, enter the number or name of the equipment it is connected to.

Product: Enter the name of the product or material that is present or that was present when the equipment/line was in service. In addition, if the equipment/line was flushed or cleaned before the work is performed, indicate that on the form.

Permit Numbers: Enter the number from the client permit(s) in the appropriate section. Some jobs may have multiple permits.

Location of: (Enter the location of the nearest):

- Telephone – This is the telephone that would be used to report an emergency (*i.e. – operators shack)*. If there is no telephone in the immediate area, indicate how you would report an emergency (*i.e. – radio, cell phone)*.
- Emergency Phone No.(s) – Enter the phone number(s)/radio channel(s) for reporting emergencies at that location
- Fire Extinguisher – Enter the location of the nearest portable fire extinguisher. Be sure to check the extinguisher and verify that it is fully charged, is operational, and has been inspected within the past year. Report any extinguisher that appears to be inoperable, damaged, discharged or in need of service.
- Eyewash/Safety Shower – Enter the location of the nearest eyewash/safety shower. If it is alarmed, check with the unit operator before activating. If it is not connected to an alarm system, verify that it

is operational by activating the control lever/device, until the water flows clear. Once the system is flushed be sure to replace the protective caps on the eyewash applicators.

- Yes, No, N/A Questions - Each one of these questions requires an answer. Carefully consider each question and how it will affect or apply to the work being performed. If the question doesn't apply to the job, mark it "N/A" (Not applicable). Each question is important.

Back of Job Safety Analysis Form

Fall Protection: Answer the first question in this section. If you check "No", then you can move on to the next section. If you check "Yes", then you must complete the entire Fall Protection section. Make sure that workers are properly trained in the use of fall protection equipment.

Scaffold User Inspection: Answer the first question of this section. If you check "No" then you can move on to the next section. If you check "Yes", then you must conduct a thorough inspection of the staging prior to use and complete the entire Scaffold User Inspection section.

If the scaffold is yellow-tagged, identify the hazard(s) that require the yellow tag (*i.e. – hole in deck*, *missing guardrail*, *restricted access*).

Job Steps: Briefly outline or list the steps necessary to safely complete the job from start to finish. For example: Inspect/Prepare job site, obtain permit, complete Hazard Analysis form and review with crew, obtain/inspect tools and PPE, perform job, cleanup, return tools.

Existing Hazards: List hazards that are present at the job site. These will primarily be existing physical hazards. For example: Elevated work, uneven surfaces, confined space, high noise levels, pinch points, conflicting work above/below, weather conditions.

Potential Hazards: List hazardous conditions that may be created/exposed while doing the work. For example: Hot Pipes, product release, exposure to hazardous material(s), sparks/slag, heavy lifting, explosive atmosphere.

Action Taken to Eliminate or Minimize Hazards: List what you are going to do to eliminate or control each of the identified hazards.

Crew/Employee Signatures: Now that you have filled in the blanks and answered the questions, review the Hazard Analysis form with all crewmembers and any other contractor client personnel working on the job. When each crew member understands the hazards present, is properly trained for their assigned task and understands how to complete the work safely, they must sign their name in the same numbered space as they printed their name on the front of the form. Do not sign if you don't understand or aren't properly trained.

Hazard Analysis session lead by: The supervisor or foreman or lead person that conducts the Hazard Analysis review with all crew members and checks the form for proper completion must print and sign their name and indicate the date and time the review was held.

Now you can start the job! Remember, the form is complete, but **the process continues**. Always remain alert for changing conditions. The Job Safety Analysis form must be modified/updated if conditions change or new hazards are found. Any modifications must be communicated with all crewmembers. *Remember to review the Job Safety Analysis with any new crewmembers that are added while the job is in progress. Their name(s) and signature(s) must also be added to the Job Safety Analysis form.

Post all completed forms in a conspicuous and readily available location.

Journey Management

Purpose

B&R Tools and Service has created and implemented the journey management policy to provide and ensure a road transport system that will ensure proper safeguards are in place for all journeys associated within the scope of the criteria.

The Journey Management Plan will be reviewed with road travelers before they perform any driving on company business. A copy of the plan will be readily available at the workplace. Road travelers will carry a copy of the plan.

Road journeys will only be taken when necessary. Try to complete multiple tasks in single trips to reduce the amount of driving for improved safety and efficiency. If the trip is being taken to meet with someone, determine if the meeting can be done over the phone instead. Consider safer methods of travel (air, train, etc.) where practicable.

Driving will be done during daylight hours rather than after dark whenever possible. Reduce speed when driving at night. Be aware of the potential for wildlife to be on the road, especially when driving at dusk or dawn. Before leaving on a trip, ensure that weather conditions are safe for driving. Ensure the vehicle being used is adequate for the weather conditions. Make sure emergency supplies are in the vehicle, and the driver has a cell phone in case of emergency. In particularly harsh conditions, consider canceling or rescheduling the trip. Before taking a trip to an unfamiliar location ensure that you have printed driving directions available. Do not plan to read directions from a smartphone while driving. A GPS device may be used, but printed directions should be kept as a back-up.

Employees will notify their supervisor or another individual who is not traveling with them of their travel plans. This includes where they are going, when they should be getting there, and when they plan to return.

Drivers will always carry a cell phone, especially when traveling in rural areas. When driving long distances, sufficient breaks will be taken to prevent fatigue. When driving alone and having trouble staying awake, pull off the road and get out of the vehicle for fresh air, or take a power nap. If driving late at night, consider getting a hotel room and starting fresh the next day. If two licensed drivers are in the vehicle, take turns driving. Get plenty of rest before beginning your journey.

Roadside emergency kits will be kept in all vehicles used for highway travel. These kits shall include equipment to assist in a roadside emergency such as water, booster cables, first aid supplies, warning triangles, flashlights, etc. If there is a potential for snow and ice, carry sandbags and a shovel.

Journey Plan (Long Distance)

All B&R Tools and Service employees or a designated supervisor is required to fill out a journey management form prior to the journey and the following information must be completed in its entirety, regardless of motor vehicle type leaving the facility:

- Name of the driver
- Vehicle type
- Vehicle registration/fleet number
- Contact telephone names and numbers
- Journey approval name
- Date of plan plus date of journey(s)
- All arrival and departure times
- Route details

- Rest period details

Approval

On completion and receipt of Journey Management Plan the Journey Manager or (JM) will authorize the journey only after the following criteria have been met:

- The vehicle is an approved vehicle
- The vehicle is in safe and roadworthy condition
- The driver has completed a vehicle checklist
- The vehicle has all specified safety equipment items
- The driver is an approved/authorized driver
- The driver appears fit for work and not under the influence of any substance or on medication
- The driver has been briefed on the journey and understands the purpose of the journey, possible hazards of the journey, and the emergency response procedure

Responsibilities and Roles

JM

- Be responsible of criteria and approval of journey after Journey Management Plan has been completed
- The JM will retain a hard copy record of the plan on file
- To confirm that the vehicle has arrived at its destination on time- either through dispatch or a call to the JM personally.
- To take appropriate action if a vehicle has not arrived
- To instruct and train new hires (drivers) in the journey management system
- To ensure that the driver understands the journey management plan and complies with all plans and procedures
- To communicate positive and negative feedback in meetings taken from data of logs, plans, or global tracking systems
- To make random and frequent checks to ensure that the JM procedures are being followed and complied with
- To carry out a check of all vehicle “Daily Vehicle Checklist” and compile a report listing all faults and equipment deficiencies
- To report any equipment deficiencies to the onsite mechanic, or appropriate personnel

Employee/Travel Supervisor

- Accurately fill out a Journey Management Plan
- Follow the Journey Management Plan, and document unexpected road hazards
- When journey is completed, report back to dispatch or JM to confirm completion of journey

Records

- All hard copies of all journey plans shall be filed for a period of three months, (exception: if an accident or incident of any kind occurs on the journey keep the copy to file indefinitely with the accident/incident policy.)
- A Daily Journey Management Log (handwritten) is to be completed and filed

General Journey Requirements

The following criteria will be applied when planning a journey:

- The speed limits are strictly adhered to

- A maximum of ten hours driving is allowed with a twelve-hour shift
- A minimum of eight hours of uninterrupted, off-duty rest will be taken between shifts
- For light and heavy vehicles alike, drivers will take a minimum of (15) fifteen minutes rest after three hours of continuous driving.
- Whenever possible drivers should park so first move is ahead
- All trips during hours of low visibility will be reviewed for necessity and will require formal management approval
- Headlights are required for use unless otherwise restricted by regulation or specific risk

Drivers

All drivers of B&R Tools and Service vehicles are:

- Required to complete a daily vehicle checklist prior to vehicle being used for the first time that day
- Where a written JP is required the driver shall not deviate from the JP.
- All changes in the route or journey times will be reported back to the dispatcher or JM as soon as possible
- The driver is responsible for ensuring that the JP is given to the JM immediately on arrival at the final destination. Drivers in the field will be allowed to submit paperwork, after return to the office or yard.
- All drivers must have appropriate and valid state driver's license

Ladder Safety Policy

Purpose

This program provides B&R Tools and Service employees with the basic information for assuring a safe and healthful workplace free from recognized portable and fixed ladder hazards, which may cause serious injury. Each employee is expected to follow the guideline provided within this section. Supervisors shall be responsible for initiating disciplinary action against employees who do not follow the guidelines within this section.

References

There are numerous safety standards and regulations, which pertain to portable and fixed ladders including, but not limited to:

- American National Standards Institute (ANSI) Standards, ANSI A14.1 - ANSI A14.3, Safety Codes for Ladders
- Occupational Safety and Health Administration (OSHA) Standards
  OSHA 29 CFR 1910, Subpart D – Walking-Working Surfaces

Guidance/Program

Program Responsibilities

Safety Coordinator

The Safety Coordinator has the responsibility to:

- Maintain this written program.
- Provide the Supervisors with the knowledge and information to conduct required training as outlined in this program.
- Support and ensure that all elements of program are implemented completely for the protection of all employees.
- Must make sure each new ladder and all existing ladders have rungs, steps, and cleats that are parallel, level, and uniformly spaced when the ladder is in position for use, meet all spacing and clear width/distance requirements, shaped such that employees' feet cannot slide off the end of the rung, and corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.

Supervisors

The supervisors have the responsibility to:

- Train employees to the requirements outlined in this program.
- Ensure the ladder inspections are being performed.
- Ensure that employees are not using defective or damaged ladders.
- Ensure that defective or damaged ladders are properly fixed or discarded.

Employee Responsibility

Employees have the responsibility to:

- Have good working knowledge of Types of Ladders.

A fixed ladder is a vertical ladder mounted permanently to a structure. These ladders are primarily used to access roofs or other structures for industrial purposes.

Portable ladders are typically manufactured form wood, aluminum, or fiberglass. The portable-ladder classification includes straight ladders, *extension ladders,* trestle ladders, and self- supporting stepladders.

- You probably have most, if not all, of these ladders at your workplace. You may also have ladders specially made for a specific purpose. Familiarize yourself with all of the ladders available to you. This will help you select the proper ladder for the job.

Duty Rating

A ladder duty rating tells you its maximum weight capacity. Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond their manufacturer's rated capacity. Ladders will be sued only for the purpose for which they were designed.

There are four categories of the duty ratings:

1. Type IA – ladders have a duty rating of 300 pounds. Type IA ladders are recommended for extra-heavy-duty industrial use.
2. Type I – These ladders have a duty rating of 250 pounds. Type I ladders are manufactured for heavy-duty use.
3. Type II – These ladders have a duty rating of 225 pounds. Type II ladders are approved for medium-duty use.
4. Type III – These ladders have a duty rating of 200 pounds. Type III ladders are rated for light-duty use.

Comply with all General Services Safety rules and regulations concerning ladder safety.

Perform basic ladder inspections before each use.

Not use damaged or defective ladders.

Contact their supervisor to report damaged or defective ladders.

General Program Management

This section describes the main elements of the ladder safety program.

Inspection and Maintenance

Portable and fixed ladders will be formally inspected **once every six months** to ensure they are in good working condition. The Ladder Inspection Checklist located in Appendix A will be used when performing the inspection. Ladders that are need of repair or appear unsafe shall be tagged "Dangerous Do Not Use." These ladders will be taken out of service until properly repaired, replaced or thrown away.

Portable ladders are to be inspected by the employee prior to each use. The employee shall inspect for:

- Broken or loose rungs
- Rungs free of excess dirt and grease
- Side rail cracks, splits, bruised, dry rot and loose nails
- Hardware and fittings for secure attachment and damage

- Proper operation of locking devices and safety feet
- Damaged or worn non-slip base
- Underwriter's label and proper markings

Fixed ladders are to be inspected by the employee prior to each use. The employee shall inspect for:

- Broken, corroded, or loose rungs.
- Rungs free of excess dirt and grease
- Side rails for corrosion, fractures, and adequate anchoring at the base and top connection.
- All hardware and fittings for secure attachment.

If any defects are discovered during the employee inspection the ladder shall be tagged "Dangerous Do Not Use." The ladder will be taken out of service until properly repaired, replaced or thrown away.

Use

Employees should observe certain rules when placing, ascending, descending, and using ladders:

- Do not use ladders in a horizontal position as runways or as scaffolds.
- Never place a ladder in front of a door unless the door is blocked or guarded.
- Do not place a ladder against a windowpane or sash.
- Place the ladder so that both side rails have secure footing.
- Place the ladder's feet on a level solid base, not on moveable objects.
- Never lean a ladder against unsecured backing, such as loose boxes or barrels.
- When using a ladder for access to high places, secure the ladder to prevent it from slipping.
- Extend the ladder 3 feet above the top of a landing.
- Allow only one person at a time on a ladder.
- Do not overload a ladder. Follow the weight restriction manufacturer's guidelines.
- Use ladders of sufficient length and in proper position so that employees do not have to stretch or reach.
- Do not use metal ladders around energized electrical circuits or equipment, or in places they may come in contact with electrical circuits.
- Hold on with both hands when going up or down. If material must be handled, raise or lower it with a rope either before going down or after climbing to the desired level.
- Carry tools on a tool belt, not in the hand
- Always face a ladder when ascending or descending.
- Never slide down a ladder.
- Be sure shoes are not greasy, muddy, or slippery before climbing.
- Do not climb higher than third rung from the top on a straight ladder or second tread from the top on a stepladder.
- Ladders shall be used for the intended purpose only.
- Use 4:1 ratio (for every four feet of height, you must have one foot of distance).

Storage

- Store ladders where they will not be exposed to the weather and where there is good ventilation.
- Do not store them near radiators, stoves, steam pipes, or in other places with excessive heat or dampness.
- Fiberglass ladders should be protected from direct sunlight or other ultraviolet light sources.
- Ladders should be stored neatly where they will not fall or cause a tripping hazard.
- Keep ladder storage space free of obstructions and accessible at all times.

Training

All employees will be trained on the use of ladders upon initial assignment. The training will consist of the information contained within this procedure. Retraining will be conducted when warranted by an accident or other evidence of the employee's lack of understanding or compliance with the program.

Appendix A

Ladder Inspection Checklist

Items to Be Checked

Portable Ladders	**Needs Repair**	**Condition O.K.**
Broken or loose rungs	❑	❑
Rungs free of excess dirt and grease	❑	❑
Side rails cracked, split, bruised, dry rot and loose nails	❑	❑
Hardware and fittings securely attached	❑	❑
Proper operation of locking device and safety feet	❑	❑
Damaged or worn non-slip base	❑	❑
Underwriter's label and proper markings legible	❑	❑
Fixed Ladders		
Broken, corroded, or loose rungs	❑	❑
Rungs free of excess dirt and grease	❑	❑
Side rails corroded, fractured	❑	❑
Side rails adequately anchored at the base and top connection	❑	❑
All hardware and fittings securely attached	❑	❑

Remarks:

Inspector's Signature

Date

Lead Awareness

Purpose

B&R Tools and Service has adopted this policy for the prevention of employee exposure to lead substance within the work environment. The implementation of this policy will ensure all employees are made aware of the potential hazards and locations of lead. B&R Tools and Service relies on its client to disclose all know hazards present at client facilities. However, B&R Tools and Service employees will not work in situations where there is daily exposure to hazardous heavy metals.

Responsibilities

The safety supervisor for B&R Tools and Service is assigned and responsible for ensuring the following:

- Lead awareness training is implemented to employees whose work activities may contact lead containing materials.
- Lead awareness training will be provided at the time of hire, or prior to the introduction of a new hazard within the work environment.
- Annual refresher training will be given to all employees whose work activities may contact lead containing materials.
- Lead awareness training documentation will provide the following: date of training, employee names, and the person or third-party facility responsible for the training.

Training

B&R Tools and Service employees will demonstrate via a verbal or written exam, that they understand the following:

- Understand the hazards associated with working with lead
- Know the proper procedures for working with lead containing substances
- Know where the material could be present, and under what circumstances the employee risk of exposure could be heightened.
- Know hygiene and decontamination procedures.
- Know the appropriate PPE requirements concerning lead exposure.
- Be familiar with standards that dictate lead exposure and safe practices.

Possible Locations of Lead/ Construction Activities

- Demolition of salvage materials
- Leaded glasses
- Circuit boards
- Leaded paints
- Leaded solders
- Batteries
- Pipes
- Cathode ray tubes
- Demolition of old structures
- Steel-bridge maintenance
- Abrasive blasting or rivet busting of structures with lead paint
- Welding, burning, and torching of old painted metal

Lead and Worker Health

Lead enters the body in several ways:

- Workers can inhale in lead dust, mist, or fumes
- Workers can ingest lead dust that gets on their hands, beards, or clothes, or that gets in or on food, drinks, or anything else they put in their mouths.
- Leaded gasoline can be absorbed through the skin.

Once lead enters the body, it stays there for a long time. Lead can build up in the body to dangerous levels over time.

Health effects and symptoms of acute lead poisoning are:

- Loss of appetite
- Nausea
- Vomiting
- Stomach cramps
- Constipation
- Difficulty in sleeping
- Fatigue
- Moodiness
- Headache
- Joint or muscle ache
- Anemia

Too much lead in the body can damage vital organs, such as, brain, kidneys, nerves, and blood cells. Lead can also affect the ability to conceive and bear a healthy child. Lead exposure, during pregnancy can lead to fetal harm. Lead exposure in men can lead to infertility. Over exposure to lead is a common problem. Often times, when a person has been in a high exposure, they do not feel sick or poisoned; however, their health can be seriously affected. The longer the exposure to lead, the greater the risk of health problems. Often times lead exposure complications and damage can be permanent.

Signs, Labels, & Assessments

All signage will state what heavy metals are present, the fact these metals are poisonous, and the fact that no eating, drinking, or tobacco products are allowed within such areas. Also, if respiratory protection is required, this will be stated on the sign. It is a requirement of B&R Tools and Service that all employees and visitors must abide by any sings, labels, and assessment reports indicating the presence of lead containing materials. Appropriate work practices will be followed to ensure lead containing materials are not disturbed. Visitors will be accompanied by a client employee, and the hazards will be communicated to the visitor.

Containers that contain lead will be labeled as such.

Exposure

No B&R Tools and Service employee will be exposed to lead, chromium, or cadmium at concentrations greater than the PEL: the PEL for lead is fifty micrograms per cubic meter of air averaged over an 8-hour period calculated as an 8-hour TWA. Engineering controls may be implemented in order to ensure that no employee is exposed to more than the permissible limit for more than 30 days per year. Potential engineering controls may include but are not limited to the following:

- Exhaust/Mechanical Ventilation
- Enclosure/Encapsulation

- Substitution of materials
- Component Replacement (if applicable)
- Isolation
- Process/Equipment

Personal Protective Equipment (PPE)

B&R Tools and Service will provide at no cost to the employee, all necessary PPE to employees based on atmosphere and work area monitoring, as well as client input. NIOSH-certified powered, air purifying respirators (PAPRs) will be provided. Each employee will be trained in the proper fit, usage, and limitations of his/her PPE, including respirators. Special PPE to include protective clothing will be issued and proper disposed of and repaired or replaced as necessary. Employees will be required to wear provided protective equipment if the work area requires such protection. Gloves, hats, vented goggles, shoes or disposable shoe covers shall be provided.

Emergency Action Plan

A job-specific Emergency Plan is to be developed, documented and implemented prior to any work being done. Plan shall include provisions for use of PPE, emergency response contact information, and evacuations procedures.

Safe Practices

There is the potential for workers to carry lead dust home on clothes and clothes and shoes, affecting the health of others in the family. Young children are especially sensitive to the effects of lead exposure. There are some things you can do to protect you and your family if you have been exposed to lead:

- Use separate work cloths and boots while at work
- Keep our street clothes in a safe and clean area
- Do not wear your work clothes home
- If possible, shower at work before going home
- Launder your clothes separately
- Wash your hands and face before you eat, drink, smoke, or use any oral tobacco product
- Ensure your work area is well ventilated
- Avoid stirring up lead contaminated dust while dry sweeping or blowing.

Multi-Contractor Worksites

If an employee of B&R Tools and Service is working immediately adjacent to a lead abatement activity are exposed to lead due to the inadequate containment of such job. B&R Tools and Service employees will be either immediately removed from the area until the enclosure breach is repaired or perform and initial exposure assessment.

Lockout/Tagout Program

Purpose

B&R Tools and Service recognizes that during the servicing or maintenance of equipment, our employees have the potential to be involved in a serious or fatal accident caused by unexpected start-up of equipment or the release of stored energy. This policy has been developed to establish procedures for the control of hazardous energy and complies with OSHA standard 29 CFR 1910.147, Control of Hazardous Energy (Lockout/Tagout) and OSHA standards 29 CFR 1910.331; 1910.332; 1910.334; and 1910.335 Electrical Safety-Related Work Practices.

Definitions

Affected Employee: An employee whose job requires him or her to operate or use a system or equipment which requires locking-out or tagging-out during servicing or maintenance, or whose job requires him or her to work in an area in which such servicing maintenance is being performed.

Authorized employee: A person who locks out or tags out a system or equipment in order to repair or maintain that system or equipment. An affected employee becomes an authorized employee when that employee's duties include performing service or maintenance covered under this section.

Lockout: The placement of lockout device on an energy device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout device: A device that utilizes a positive means such as a lock to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

Tagout: The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tagout device: A device used when a lockout device will not isolate and energy source. The tagout device identifies the Authorized Employee and the nature of the work and is attached with a self-locking, non-releasable nylon cable tie substantial enough to prevent inadvertent or accident removal.

Group lockout device: A lockout device that accepts multiple padlocks used when more than one worker needs to lock out a system or equipment energy source.

Normal production operations. The utilization of a machine or equipment to perform its intended production function.

Servicing and/or maintenance: Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and or servicing machines or equipment. These activities include lubrication; cleaning or un-jamming of machines or equipment and adjusting or tool changes where employees may be exposed to the **unexpected** energization or start-up of the equipment or release of hazardous energy.

Cord and Plug Connected Equipment: Equipment where the only energy source is electrical power provided by plug in connection.

Applicability

An operation is regulated by the lockout/tagout policy when:

- Any employees or contractor is required to remove or bypass a guard or other safety device.
- Any employee or contractor is required to place any part of his body into the mechanism of a piece of equipment or path of hazardous energy unless:
    a. The activity is routine, repetitive and integral to the use of the equipment
    b. The operator has been properly trained in the precautionary steps necessary to perform the activity safely or is provided other protection (guarding).

Training

Each employee (or contractor) involved in or affected by lockout will be trained in the following areas before being allowed to work in the area:

1. The recognition of hazardous energy sources (see attached list of energy sources)
2. The type and magnitude of energy located in the workplace
3. The procedures for energy isolation and control including specific procedures developed for equipment and systems.
4. The purpose and use of the energy control (lockout/tagout) procedure
5. The prohibition and penalties for attempts to restart or restart or re-energize equipment which has been locked out or to work on equipment without following the lockout/tagout procedures

Affected employees are those personnel working around equipment or systems that are subject to lockout/tagout but are not directly involved with them. These personnel are not required to be familiar with specific procedures for equipment and systems.

Retraining or refresher training will be conducted whenever one of the following exists:

1. The employee has a change in job assignment
2. There has been a change in the equipment or process
3. There has been a change in the energy control procedure
4. Any time an inspection reveals deviations from the standard procedures; inadequacies in the employee's knowledge or use of the lockout/tagout procedures; or an accident as a result of unexpected energy release

All employees training will be documented and verified by the signing and dating of the Annual Lockout/tagout procedures and updated annually.

B&R Tools and Service will conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and requirements are being followed. The employer will certify that the periodic inspections have been performed.

LOCKOUT/TAGOUT PROCEDURE

Background: This procedure has been developed to establish formal methods, procedures, and equipment to be used to ensure that before any employee (or contractor) performs any servicing or maintenance on a machine or equipment where the unexpected energizing, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated, and rendered inoperative.

It is the stated intent of this program to use locks wherever possible with identification tags to provide positive energy isolation. If, in the judgment of company management, the equipment cannot be locked out, warning tags may be used. In this special case, there will be written justification on file with the specific isolation procedures for this equipment. Should this equipment require upgrade or modification, it will have lockable switches, fittings, or valves added so that it becomes possible to lockout the equipment.

Lockout Procedures:

Equipment will only be locked or tagged out by authorized employees who have been trained in the company's procedure and who are familiar with the specific procedures for the equipment.

- All employees affected by lockout/tagout will be notified of the application of the lockout devices and or tags at the beginning of the lockout procedures.
- Equipment will be shut down following specific procedures developed for the affected equipment.
- All energy sources will be identified from the specific procedures for the affected equipment. Energy sources include electrical, mechanical, hydraulic, pneumatic, thermal, chemical and others. (see attached list)
- All energy sources are to be locked out. Each employee involved with the operation will place his/her lock on each energy-isolating source. The locks must be applied with a warning tag describing why the equipment is locked out, who placed the lock on the equipment, and the date. Locks used for lockout will have two keys. One key will remain in the possession of the individual locking out the equipment. The other key will be in the custody of the Safety Coordinator. All locks used in the facility must be keyed individually.
- Stored or residual energy must be relieved, disconnected, blanketed off, restrained and otherwise rendered safe. Energy sources subject to re-accumulation, such as capacitors, hydraulic reservoirs, air tanks, steam traps, etc., should be controlled by isolation and locking out. If there is a possibility or re-accumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed.
- When all steps involved with shut down listed in the specific procedure for equipment have been completed, make sure that all personnel are clear, and attempt to start or activate the equipment to make sure that all energy sources have been locked out. Return controls to "off position".
- Cord and plug connected equipment do not require lockout/tagout if the following conditions exist:
    a. The authorized individual is within sight of the equipment
    b. Unplugging the equipment isolates the equipment from all energy sources
    c. The equipment has not stored energy

If equipment must be left unattended or if all of the above conditions do not apply then the equipment will be locked and tagged out by attaching a tag to the on/off switch and attaching a lockout device to the plug to prevent it from being plugged in.

TAGOUT PROCEDURES

It is B&R Tools and Service policy not to use tags alone in an energy isolation procedure. The only exceptions to this must be authorized by the Safety Coordinator, with written justification as to why the equipment or process does not lend itself to being physically locked out. Should this equipment be upgraded or modified so that it becomes possible to lock out the equipment, lockable switches, fitting or valves will be added.

1. Tags are to be used with locks to identify the individual, the hazard, and the date.
2. Tags must be durable and able to withstand the environment in which they are used.
3. Tags are to be attached with pull ties and must be securely attached so that it is readily apparent what the tag is warning about. Alternate methods of attaching tags must be used as long as they are not easily removed or reusable and must withstand 50 pounds unlocking strength. (rubber bands, wire ties and string are not permissible means of attachment)

4. Any employee who removes, bypasses, ignores, or otherwise defeats a tag without permission of the authorized person responsible for it or proper management approval, is subject to immediate dismissal. (see procedures for removal of locks and tags)
5. In the employee training the employee must be made aware that tags do not protect against the unexpected energization of the equipment, and they should be extraordinarily alert around tagged out equipment and systems that are not also locked out.

Group Procedures

In the event that that multiple authorized employees must be involved for a single lockout/tagout procedure, the Safety Coordinator will be the single authorized employee with the overall responsibility for controlling hazardous energy for all members of the group while the work is in progress. This authorized employee must implement the energy control procedures, communicate the purpose of the operation to group, coordinate the operation, and ensure that all procedural steps have been properly completed. Each authorized employee involved in the group lockout/tagout activity must be familiar with the type and magnitude of energy that may be present during the servicing and maintenance work. Each employee in the group must affix his/her personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism, before engaging in the servicing and maintenance operation. The authorized employee in the group has removed his/her personal device.

Multi-Work shift Operations

In the event individuals other than those that originally locked or tagged out the equipment must complete that lockout/tagout work during either a shift or other personnel change. The Safety Coordinator will be the single authorized employee with the overall responsibility for controlling hazardous energy for this operation. At each transfer of this type the incoming employees will have an opportunity to verify that the equipment has been de-energized prior to placing his or her lock or tag on the equipment.

Steps for Restoration of Equipment and Removal of Locks and Tags

These procedures are extremely important and must be followed whenever any locked or tagged out equipment will be brought back into service or whenever locks, or tags are to be removed.

The following sequence of actions shall be followed: Clear away tools, remove employees, remove the LOTO device, energize and proceed with testing, de-energize and reapply control measures.

Unauthorized removal of a lock or tag on a property locked out piece of equipment will result in immediate dismissal. To remove locks or tags from a piece of equipment without the individual who locked it out requires the approval of (Unit official) after it has been verified that the individual who locked out the equipment is not at risk and that the equipment has been inspected by (Unit official) and is determined to be safe. This procedure is to be done only after every effort has been made to have the individual who locked out the equipment remove his lock
and tag.

- The work area is to be inspected to ensure that all personnel, tools, loose parts, and nonessential items are clear, and that guarding is in place. If the equipment is to be brought online for set-up or adjustment temporarily without guarding, affected employees must be adequately protected**.**
- All employees who would be affected by the start-up of the equipment must be notified of the removal of the lockout devices before they are removed.
- Prior to start-up the area must be inspected to ensure that all employees, contractor personnel, and others have been safely positioned.

Annual Review

The safety coordinator will conduct an annual audit of each lockout procedure the written program, and training to ensure that the procedures are adequate and that they are being followed. This individual should not be directly involved with the day to day supervision of the lockout/tagout program. The audit must ensure that each procedure is adequate to provide effective protection to the authorized employee during servicing and maintenance operations covered by this standard. If authorized employees are deviating from these procedures, the employees involved must be retrained and the training documented. The person conducting the audits will observe a representative sample of authorized employees performing the servicing and maintenance operations using the lockout/tagout procedures. They will also perform a review with each authorized employee of that employee's responsibilities under the energy control procedure being audited. For tagout procedures, the review of responsibilities also includes the affected employees. The audit should include verification that training has been completed for all authorized and affected employees involved in the lockout/tagout procedure. Authorized and affected employees should know the location of specific written procedures for equipment. Employees must be able to explain the purpose of this procedure and the details of how it works.

Contractors

It is the intent of B&R Tools and Service to protect the outside contractors like any other employee covered by the lockout/tagout program. Contractors must provide a copy of their lockout/tagout program and evidence that their company has trained them about lockout/tagout before they are allowed to work at this facility. If they cannot provide this information, they will be covered under the company's program and undergo lockout/tagout training at this facility like one of our employees. The safety coordinator will oversee all lockout/tagout operations at this facility and will coordinate all operations involving outside contractors to ensure the protection of both the contractors and our employees.

This program is an important part of B&R Tools and Service safety program and is critical to ensuring the safety of our employees and others working in our facility. If you have any questions about applicability of this program to any operation or procedure check with your supervisor.

ANNUAL LOCKOUT/TAGOUT PROGRAM AUDIT REPORT

The undersigned employees of B&R Tools and Service have taken part in training for lockout/tagout procedures. Training included: identification and recognition of hazardous energy sources; energy control procedures; purpose of and use of energy control procedures; procedures to be used for shift changes; contractor operations that may involve lockout/tagout; a review of specific procedural steps developed for equipment at this location; and special procedures and precautions when working with equipment that is subject only to tagout procedures.

Name Date Machine

I have conducted the annual audit/training at (Unit Name) for both authorized and affected employees listed above. The following recommendations/comments are based on the results of this audit:

Follow-up action required:

Signature _____

TITLE _____

Date _____

LOCKOUT/TAGOUT - **SPECIFIC PROCEDURE**

Location_____
The following procedure has been developed to provide specific steps to be used when lockout/tagout is required for the equipment listed below.

(List equipment or system including name, serial numbers, location and other identifier)

_____ Note: Similar equipment having the same energy sources and same procedure may be listed together.

Types and Magnitude(s) of energy and hazards: (examples: 480v three phase; 120v single phase; live steam - 1/2" line; caustic soda - 50% solution; compressed air – 110 psi.)

Name(s)/job titles of employees **authorized** Name(s)/job titles of **affected** employees to lockout or tagout this equipment: and how to notify them:

Types and location of energy isolating means:

Types of stored energy - methods to dissipate or restrain:

Methods selected to lockout/tagout the equipment: (example: locks; hairpins/tongs; valve clamshell; chain with lock; etc.)

Specific Steps to Lockout/Tagout the Equipment

1. Notify all affected employees that this equipment is being locked out.
Procedure for verifying isolation:

Specific Procedures for Bringing the Equipment Back On-Line

1. Replace all guarding and safety devices
2. Notify all affected employees that the equipment is no longer locked out.

Special group lockout/tagout procedures:

Specific procedures for locking and tagging out equipment to isolate unexpected releases of hazardous energy should be developed in cooperation with equipment operators, supervisors, engineers, equipment designers, and others who may have specialized knowledge.

Lone Worker

Purpose

The purposes of this guideline are to ensure that all personnel that are working alone return safely at the end of the workday.

Scope

All employees of B&R Tools and Service

Responsibilities

The following items should be included in all pre-job planning meetings, daily JSAs, and communicated between all employees and supervisors.

Prior to work starting, a hazard assessment will address hazards and identify control measures in order to minimize risk associated with working alone.

The direct supervisor of the lone worker will be responsible for check-in with the lone worker at regular intervals. A backup form of communication in the event cell phone coverage is unavailable will be established in the hazard assessment. Documentation will be kept of communication with lone worker during the duration of the job.

- Cell phones or other communication devices will be in the possession of the lone worker and his direct supervisor. Some areas don't have signal and those areas should be recognized and the lone worker should check in and out of those areas.
- Direct contact will be made between the lone worker and his direct supervisor first thing in the morning or when the lone worker enters the field.
- Direct contact will be made between the lone worker and his direct supervisor in the evening or when the lone worker exits the field.
- Communication about time frames, area working in, and estimated return will be needed in each call. Individuals working alone will be monitored at regular, pre-determined time frames based on the determinations made in the risk assessment.
- If the lone worker does not return at the estimated time the supervisor is responsible for attempting to reach the lone worker, notifying upper management at B&R Tools and Service, the safety coordinator, and placing emergency services on notice. The direct supervisor will be responsible for determining the start of a search if the employee is unable to be reached.

It is the intent of B&R Tools and Service to use the "buddy system" for the majority of our work. If a project or job duty requires a lone worker, then these guidelines need to be followed to ensure the safety of our fellow employee.

Management of Change (MOC)

Purpose

Management of Change, or MOC, is a best practice used to ensure that safety, health and environmental risks are controlled when a company makes changes in the facilities, documentation, personnel or operations.

Management of Change is used to ensure all changes to a process are properly reviewed and any hazards introduced by the change are identified, analyzed and controlled before resuming operation.

MOC can be very effective in the prevention of accidents and can be used as a best practice at worksites where the Process Safety Management rule doesn't apply.

Background

MOC is used when a need arises in the company that requires changes that can affect processes, systems, people or organizational structure. The benefit of MOC is that it helps to avoid the consequences of unforeseen safety and health hazards through planning and coordinating the implementation of change in the facility.

Benefits

- Minimizes unplanned adverse impacts on system integrity, security, stability and reliability for the business process being changed or added.
- It maximizes the productivity and efficiency of staff planning, coordinating, and implementing the changes.
- It helps to provide a more stable working environment.
- Ensures the proper level of completeness, accuracy of modifications and testing of systems before implementation
- Provides an appropriate level of management approval and involvement

Implementation

Managing change begins with a discussion of the types of changes being considered that could affect workplace safety and health.

Procedures for managing these changes should be written and regularly reviewed to reduce the risk associated with changes.

Changes being considered must be thoroughly evaluated for how they affect employee safety and health. If one change should lead to more changes, it must be determined if the changes being considered prompt additional changes to operating procedures.

All employees who will be affected by the change must be informed and trained before the change is implemented.

It is required that any change be evaluated prior to implementation.

Elements of an Effective MOC

Take into consideration when deciding to make a change:

- Basis of the proposed change

- Impact of the change on employee safety and health
- Modifications to operating procedures
- Time needed for the change
- Authorization required for the proposed change
- Steps required to identify hazards before changes are implemented.
- Keys to identifying hazards in changes
- Methods for documenting MOC reviews
- Establish plans to inform and train all workers about the changes prior to implementation.
- Methods for updating procedures to reflect the changes
- Steps for effective implementation
- Procedures for reviewing and revising.

Best Practices

- Compile safety information on the changes being made and write policies and procedures to include the new information. Include information on how to investigate accidents, audit compliance with safety procedures and plan for emergency response.
- Gather employee input on changes, include employee suggestions into the new policies and procedures as applicable
- Instructions for all employees will be written on every process that includes change. Procedures will be clear and will include steps for performing every operation, safety information and what to do in case of emergency. These instructions will be readily available to all employees performing the new procedure.
- All employees will be trained on the changes. Emphasis will be placed on what to do in case of an emergency. Training will take place before an employee is allowed to operate the equipment or perform any job-related tasks to the change.
- Written procedures will be in place to cover what to do when changes occur.

	Management of Change (MOC) Form	**Revision Date:** 01/01/2020
		B&R Tools and Service

- This form must be filled out prior to any changes for every work crew on location.
- This form must be revisited and readdressed if conditions change in the scope of work or environment and discussed at the end of the day.

Site/Location:	Date:

B&R Tools and Service Site Supervisor (Initiator of Change)

Print name and Phone Number: _____ Sign: _____

Description of Change (explain):

Reason for Change (explain):

Describe Alternatives Considered:

Describe any technical changes required to implement Change:

Describe Risks considered for this Change:

Estimate of resources and cost for Change:

Quality implications for Change:

Work Starts Date (mm/dd/year):	Work Ends Date (mm/dd/year):
Work Starts Time:	Work Ends Time:

Approved or Denied: (to be filled out by supervisor)

☐ **Edit operating procedures** ☐ **Permit required** ☐ **Qualifications verified** ☐ **Training verified**

☐ **Comments:** ☐ **Signature: _____**

Manual Lifting

Program

B&R Tools and Service has adopted this policy to ensure each employee fully understands the manual lifting policy of B&R Tools and Service.

Scope

This policy applies to every employee.

General Requirements

B&R Tools and Service expects each employee to conduct a hazard assessment before manual lifting is performed. Supervision will periodically evaluate current workstation configurations and employees' work techniques to assess the potential for and prevention of injuries.

The assessment must include:

- Bulk, weight, and size of the object to be lifted
- If mechanical lifting will be necessary
- If a two-man lift is required
- Will vision be obscured when carrying object?
- Is the path the lifter will take while carrying object clear?

Training

Training will include:

- Principles of ergonomics
- Ability to assess hazards and injury risk
- Procedures to report unsafe conditions

Equipment Used for Manual Lifting

Employees will be provided manual lifting equipment for their use. B&R Tools and Service will provide the following equipment utilized for manual lifting such as:

- Lift assist devices
- Dollies
- Hand trucks
- Jacks
- Carts
- Hoists

Accident Investigation

B&R Tools and Service will investigate any musculoskeletal injuries caused by an employee utilizing incorrect lifting techniques. B&R Tools and Service will then incorporate these findings into our current safety policies to prevent future injuries.

B&R Tools and Service will also record and report all injuries and accidents as required by 29 CFR Part 1904.

Two Man Lifts

If the use of lifting equipment is not possible or impractical, two-man lifts must be utilized.

Mechanical Integrity

Purpose

Mechanical integrity can be defined as the management of critical process equipment to ensure it is designed and installed correctly, and that it operates and is maintained properly (i.e. no leaks and all elements are fit for service). It is one of the elements included in PSM and is driven by the OSHA 1910.119 standard. MI encompasses the activities necessary to ensure that equipment/assets are designed, fabricated, installed, operated and maintained in such a way that they provide the desired performance in a safe, environmentally protected and reliable fashion. MI is a sub-set of an effective reliability program and overall asset management, specific to equipment types, and more tactical in nature including the evaluation of condition requirements through regular monitoring and inspection of the condition of these assets.

Training

To include all employees of B&R Tools and Service. The program will be updated annually with refresher training at least annually or more often as needed per industry guidelines.

The key phases of MI program development include management responsibility, equipment selection, and implementation through inspection, testing and application of proactive maintenance strategies. Properly trained and certified personnel conducting these activities are also a key part of an effective MI program.

Procedure

The Mechanical Integrity Program consists of these basic elements for each equipment category listed in the above scope:

- Identify the affected equipment.
- Establish the design basis/requirements for the equipment.
- Identify the inspection and/or test requirements for the equipment.
    - Establish the basis for the frequency of inspections and/or tests.
    - Establish the acceptance criteria for inspection and/or test results.
    - Establish the inspection and/or test documentation requirements.
    - Establish the basis for procedures to repair or alter equipment.

Equipment Deficiency Plan

Equipment deficiencies (i.e., equipment outside of the safe limits and design specifications) may be discovered through inspection, tests, and preventive maintenance activities as well as through routine operating and maintenance tasks associated with the covered processes. When an equipment deficiency is detected, the person who detects the deficiency corrects the deficiency immediately or with the assistance of management and safety coordinator work to develop a plan for addressing the problem, removing the affected equipment from service, or investigating the situation and weighing the safety risk associated with continued operation until it can be repaired.

Mobile Equipment

Purpose

This program is written to be in compliance with local regulatory requirements and provide directives to managers, supervisors, and employees about their responsibilities in the operations and management of B&R Tools and Service mobile equipment.

Key Responsibilities

HSE Director

The designated Safety Manager is responsible for developing and maintaining the program and related procedures. These procedures are kept in the designated safety manager's office.

Project Superintendent

Responsible for the implementation and maintenance of the program for their site and ensuring all assets are made available for compliance with the plan.

Employees

- All shall be familiar with this procedure and the local workplace vehicle safety program.
- Follow all requirements, report unsafe conditions, and follow all posted requirements.

Mobile Equipment

The following requirements may be applicable on selected B&R Tools and Service projects:

- B&R Tools and Service must develop and implement safe work procedures for the use of powered mobile equipment in the workplace and must train workers in those safe work procedures.
- The equipment operator of mobile equipment shall be directly responsible for the safe operation of that equipment and shall comply with all laws and regulations governing the operation of the equipment.
- Maintenance records for any service, repair or modification which affects the safe performance of the equipment must be maintained and be reasonably available to the operator and maintenance personnel during work hours.
- All mobile equipment shall be maintained in safe operating condition and operation, inspection, repair, maintenance and modification shall be carried out in accordance with manufacturer's instructions or, in the absence of the instructions, in accordance with good engineering practice.
- Servicing, maintenance and repair of mobile equipment shall be done when the equipment is not in operation, except that equipment in operation may be serviced if the continued operation is essential to the process and a safe means is provided.
- Only authorized employees shall be allowed to operate mobile equipment. Authorization to operate mobile equipment will be issued to employees qualifying under appropriate training and proficiency testing. The person must also have in possession of an applicable operator's license and an airbrake certificate where required and be familiar with the operating instructions pertaining to the equipment and be authorized to operate the equipment. Authorization will be issued on after these requirements are met.

- A supervisor must not knowingly operate or permit a worker to operate mobile equipment which is, or could create, an undue hazard to the health or safety of any person or is in violation of any local or federal regulations.
- Mobile equipment in which the operator cannot directly or by mirror or another effective device see immediately behind the machine must have an automatic audible warning device which activates whenever the equipment controls are positioned to move the equipment in reverse, and if practicable, is audible above the ambient noise level.
- Unauthorized personnel shall not be permitted to ride on equipment unless it is equipped to accommodate riders safely.
- At the beginning of each shift, the operator shall inspect and check the assigned equipment, reporting immediately to his/her supervisor any malfunction of the clutch or of the braking system, steering, lighting, or control system and locking/tagging out the equipment if necessary.
- The operator shall immediately report defects and conditions affecting or likely to affect the safe operation of the equipment to his or her immediate supervisor or other authorized person and confirm this by a written report as soon as possible. If an inspection of powered mobile equipment identifies a defect or unsafe condition that is hazardous or may create a risk to the safety or health of a worker B&R Tools and Service must ensure that the powered mobile equipment is not operated until the defect is adjusted, repaired or the unsafe condition is corrected.
- The operator of mobile equipment must not leave the controls unattended unless the equipment has been secured against inadvertent movement such as by setting the parking brake, placing the transmission in the manufacturer 'specified park position and by chocking wheels where necessary.
- No operator shall leave unattended a suspended load, machine or part or extension of it unless it has been immobilized and secured against inadvertent movement.
- Powered equipment shall not be left unattended unless forks, buckets, blades and similar parts are in the lowered position or solidly supported.
- Before a worker starts any powered mobile equipment, B&R Tools and Service shall ensure that the worker makes a complete 360-degree visual inspection of the equipment and the surrounding area to ensure that no worker, including the operator, is endangered by the startup of the equipment. No worker shall start any powered mobile equipment until the inspection is completed.
- All powered mobile equipment is inspected by a competent person for defects and unsafe conditions as often as is necessary to ensure that it is capable of safe operation. A written record of the inspections, repairs and maintenance carried out on the powered mobile equipment is kept at the workplace and made readily available to the operator of the equipment. As soon as is reasonably practicable the defect must be repaired, or the unsafe condition is corrected
- All mobile equipment shall be equipped with a working signal alarm for backing up. The operator shall make sure the warning signal is operating when the equipment is backing up.
- The operator shall use access provided to get on or off of equipment. Do not jump to the ground.
- No operator shall operate mobile equipment without the protection of an enclosed cab or approved eye protection for the type of hazards to the eye.
- Where there is a danger to the operator of a unit of powered mobile equipment or any other worker who is required or permitted to be in or on a unit of powered mobile equipment from a falling object or projectile B&R Tools and Service requires that the powered mobile equipment is equipped with a suitable and adequate cab, screen or guard.
- Every forklift will be equipped with a seat belt for the operator if the forklift is equipped with a seat and the operator of a forklift is required to use the seatbelt. Before starting the engine, the driver shall fasten seat belts and adjust them for a proper fit.
- Each mobile equipment vehicle used for lifting must be provided with a durable and clearly legible load rating chart that is readily available to the operator. The operator shall not load the vehicle/equipment beyond its established load limit and shall not move loads which because of the length, width, or height that have not been centered and secured for safe transportation.
- Mobile equipment used for lifting or hoisting or similar operations shall have a permanently

affixed notation stating the safe working load capacity of the equipment and the notation must be kept legible and clearly visible to the operator.

- The operator shall not use or attempt to use any vehicle in any manner or for any purpose other than for which it is designated.
- The operator's manual for powered mobile equipment must be readily available to a worker who operates the equipment.
- An employer must ensure that a competent person services, inspects, disassembles and reassembles a tire or tire and wheel assembly of powered mobile equipment in accordance with the specifications of both the tire manufacturer and the manufacturer of the powered mobile equipment.
- All mobile equipment must be equipped with (a) an audible warning signal; (b) a means of illuminating the path of travel at any time and tail lights when, because of insufficient light or unfavorable atmospheric conditions, (c) adequate illumination of the cab and instruments; and (d) a mirror providing the operator with an undistorted reflected view to the rear of the mobile equipment.
- Adequate and approved fire suppression equipment shall be provided on mobile equipment.
- The operator of a gasoline or diesel vehicle shall shut off the engine before filling the fuel tank and shall see that the nozzle of the filling hose makes contact with the filling neck of the tank.
- No one shall be on the vehicle during fueling operations except as specifically required by design. There shall be no smoking or open flames in the immediate area during fueling operation.
- When a worker is required to work beneath elevated parts of mobile equipment including trucks, the elevated parts shall be securely blocked.
- Materials and equipment being transported shall be loaded and secured in a manner to prevent movement which could create a hazard to workers or another person. This includes keeping the cab, floor and deck of mobile equipment free of material, tools or other objects which could create a tripping hazard, interfere with the operation of controls or be a hazard to the operator or other occupants in the event of an accident.
- Where the operator of a vehicle, mobile equipment, crane or similar material handling equipment does not have a full view of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment or its load, the vehicle, mobile equipment, crane or similar material handling equipment shall only be operated as directed by a signaler who is a competent person.
- The signaler shall be stationed, in full view of the operator and with a full view of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment and its load; and clear of the intended path of travel of the vehicle, mobile equipment, crane or similar material handling equipment and its load.
- Where a vehicle, crane or similar equipment is operated near a live power line carrying electricity at more than 750 volts, every part of the equipment shall be kept at least the minimum distance from the live power line for the particular voltage as required by local or federal law.
- Under no circumstance will a worker be directed, required or permitted to work under or remain in the range of a swinging load or part of unit of powered mobile equipment due to the inherent danger.

Noise Awareness

Purpose

B&R Tools and Service has established a Noise Awareness Program to ensure workers are aware of the hazards of noise on the job.

Scope

This policy applies to all employees.

Responsibility

The Safety Coordinator is responsible for developing a noise awareness policy and overseeing the training of all employees in the company. The Safety Coordinator is also responsible for the monitoring and administration of this procedure.

Procedures

B&R Tools and Service has taken a conservative approach to noise awareness by establishing this program. The following elements establish the program:

- An employee education and training program
- Monitoring and analysis of workplace noise levels
- Providing suitable engineering controls when appropriate
- Providing hearing protectors when required
- Maintain required records for all of the above

Employee Education and Training

Affected B&R Tools and Service employees must be trained on the use of personal hearing protection equipment before each assignment. Also, each employee must know how to clean and maintain the hearing protection equipment. The training will cover the following:

- The training will be repeated annually for each employee for noise awareness and will be updated with changes in PPE and work processes
- The effects of noise on hearing
- The purpose of hearing protectors, the advantages, disadvantages, and the attenuation of various types and instruction on selection, fitting, use and care
- Employees will be given the opportunity to select their hearing protectors from a variety of hearing protectors provided by B&R Tools and Service.
- Access to information and training materials.
- Hearing protection will be worn by any employee that has been provided hearing protection by B&R Tools and Service. Employees must wear hearing protection in signed areas while at a host facility.

Monitoring and Analysis of Workplace Noise Levels

B&R Tools and Service will periodically or as necessary, conduct noise level surveys of the workplace. The results of these surveys will be made available to employees upon request.

Any job area or company location found to be in excess of the allowable designated noise levels that cannot be brought into compliance with the noise standard will be designated as an area where hearing protectors are to be worn. When signs are posted employees must wear hearing protection. The signs may read as follows:

NOTICE

EAR PROTECTION REQUIRED

IN THIS AREA PROVIDE SUITABLE ENGINEERING CONTROLS

Where appropriate, B&R Tools and Service will provide engineering controls to reduce noise exposure. Due to the complexity of most job sites, it is difficult if possible, to institute effective engineering controls for most noise exposures. Should this be the case, then employees will be required to wear suitable hearing protection.

Provide Hearing Protection When Required

B&R Tools and Service will provide and required employees with hearing protectors if his/her 8-hour TWA is above the 85dB (A). B&R Tools and Service will also make hearing protectors available to all employees exposed to a TWA above 85dB (A) at no cost to the employee. Any employee who may have a significant threshold shift of hearing level will be required to wear hearing protection if they are exposed to noise TWA of 85dB. **If someone is within two feet and cannot be understood; hearing protection is required.**

Responsibilities

The client determines if a unit or work area is classified as a high noise area. After the determination is made, B&R Tools and Service employees will be instructed to wear the appropriate hearing protection.

Recordkeeping

All record-keeping for this program will be maintained in the office. Records will include:

- Audiometric tests
- Noise surveys
- Employee training
- Engineering controls implemented
- Record of purchase of hearing protector

Work Requiring Hearing Protectors

There are many jobs or types of work that generally produces noise level that intermittently or for short durations exceed the permissible TWA. It is the policy of B&R Tools and Service to require all workers who are engaged in these jobs to wear hearing protectors. The attached list is some of those jobs. See Attachment

Hearing Protectors

Employees may choose the type of hearing protection that best suits their particular assignment and personal preference for among those listed below. Each employee required to wear hearing protection is responsible for carrying hearing protection on his/her person. Hearing protection is furnished at no cost to employees.

Ear Plugs – Most ear plugs, when worn properly, have a noise reduction rating (NRR) on the package. Most ear plugs have NRR of about 30.

Earmuffs – Adjustable muffs can be worn in three positions

Noise Exposure and Hearing Conservation

Purpose

B&R Tools and Service has established a Hearing Conservation Program to protect workers from the hazards of noise on the job. It is not hard to exceed this level of noise on many of the job sites. Typically, noise levels exceeding 85 dB are experienced when working with any type of pneumatic chipper or hammer, metal saw, and grinders. See attachment I for list of some common noise levels.

Scope

This policy applies to all employees.

Responsibility

The Safety Coordinator is responsible for developing a written Hearing Conservation Procedure and overseeing the training of all employees in the company. The Safety Coordinator is also responsible for the monitoring and administration of this procedure.

Procedures

B&R Tools and Service has taken a conservative approach to noise hazards by establishing this program. The following elements establish the program:

- An Audiometric Testing Program when required
- An Employee Education and Training Program
- Monitoring and Analysis of Workplace Noise Levels
- Providing Suitable Engineering Controls when appropriate
- Providing Hearing Protectors when required
- Maintain required records for the above.

Audiometric Testing

Each new employee whose work exposes them to noise levels above the “action level” will receive an Audiometric test as part of a pre-screening physical examination to establish a baseline audiogram against which subsequent audiograms can be compared as required by the Standard. Within 6 months of an employee's first exposure at or above the action level, the employer shall establish a valid baseline audiogram against which future audiograms can be compared.

All audiometric testing will be given at no charge to the employee.

Annually, all employees who are exposed to noise levels exceeding the 85 dB standard will be given a follow-up Audiometric examination to monitor for any significant changes in their hearing ability Employees will be formally notified if there is any change in their hearing as the result of the testing. The Standard has defined this shift as a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 200, 3000 and 4000 hz in either ear. In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of

aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Appendix F: "Calculation and Application of Age Correction to Audiograms." When audiometric testing is required, each affected employee must not be exposed to any workplace noise for at least 14 hours prior to his/her test. This requirement may be met by wearing hearing protectors which will reduce the employee's exposure to a sound level of 80 db (A) or below.

Audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometer does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

An audiologist, otolaryngologist or physician will review problem audiograms and shall determine whether there is a need for further evaluation. The company will provide to the person performing this evaluation the following information:

- The baseline audiogram and most recent audiogram of the employee to be evaluated.
- Measurement of background sound pressure in the audiometric test room
- Records of audiometric calibrations as required

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift as defined the employee will be informed of this fact, in writing, by the company within 21 days of determination.

Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the company will ensure that the following steps are tank when a standard threshold shift occurs:

- An employee not using hearing protectors will be fitted with hearing protectors, trained in their use and care, and required to use them
- An employee already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
- Refer the employee for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the company suspect that a medical pathology of the ear is caused or aggravated by the wearing of haring protectors.
- Inform the employee of the need for an otological examination if a medical pathology of the ear which is unrelated to the use of hearing protector is suspected.

If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA average of 90 decibels indicates that a standard threshold shift is not persistent the company:

- Will inform the employee of the new audiometric interpretations
- May stop the required use of hearing protectors for that employee.

Employee Education and Training

Affected B&R Tools and Service employees must be trained on the use of personal hearing protection equipment. Also, each employee must know how to clean and maintain the hearing protection equipment. The training will cover the following:

- Training will be for all employees who are exposed to noise at or above the 8-hour TWA of 85 dB.
- The training will be repeated annually for each employee included in the hearing conservation program.
- The effects of noise on hearing
- The purpose of hearing protectors, the advantages, disadvantages, and the attenuation of various types and instruction on selection, fitting, use and care
- The purpose of audiometric testing, and an explanation of the test procedures.
- Access to information and training materials.

Monitoring and Analysis of Workplace Noise Levels

B&R Tools and Service will periodically or as necessary, conduct noise level surveys of the workplace. The results of these surveys will be made available to employees upon request.

Any job area or company location found to be in excess of the allowable designated noise levels that cannot be brought into compliance with the noise standard will be designated as an area where hearing protectors are to be worn. When signs are posted employees must wear hearing protection. The signs may read as follows:

NOTICE

EAR PROTECTION REQUIRED

IN THIS AREA PROVIDE SUITABLE ENGINEERING CONTROLS

Where appropriate, B&R Tools and Service will provide engineering controls to reduce noise exposure. Due to the complexity of most job sites, it is difficult if possible, to institute effective engineering controls for most noise exposures. Should this be the case, then employees will be required to wear suitable hearing protection.

Provide Hearing Protection When Required

B&R Tools and Service will provide and required employees with hearing protectors if his/her 8-hour TWA is above the 85dB (A). B&R Tools and Service will also make hearing protectors available to all employees exposed to a TWA above 85dB (A) at no cost to the employee. Any employee who may have a significant threshold shift of hearing level will be required to wear hearing protection if they are exposed to noise TWA of 85dB. **If someone is within two feet and cannot be understood; hearing protection is required.**

Responsibilities

The client determines if a unit or work area is classified as a high noise area. After the determination is made, B&R Tools and Service employees will be instructed to wear the appropriate hearing protection.

Recordkeeping

All record-keeping for this program will be maintained in the office. Records will include:

- Audiometric tests

- Noise surveys
- Employee training
- Engineering controls implemented
- Record of purchase of hearing protector

Work Requiring Hearing Protectors

There are many jobs or types of work that generally produces noise level that intermittently or for short durations exceed the permissible TWA. It is the policy of B&R Tools and Service to require all workers who are engaged in these jobs to wear hearing protectors. The attached list is some of those jobs. See Attachment

Hearing Protectors

Employees may choose the type of hearing protection that best suits their particular assignment and personal preference for among those listed below. Each employee required to wear hearing protection is responsible for carrying hearing protection on his/her person. Hearing protection is furnished at no cost to employees.

EAR PLUGS – Most ear plugs, when worn properly, have a noise reduction rating (NRR) on the package. Most ear plugs have NRR of about 30.

EARMUFFS – Adjustable muffs can be worn in three positions: POSITION

NRR

- Over the head 24 (this depends on the NRR of the Earmuff)
- Under the chin 20
- Behind the head 20

The following list represents some work activities and equipment which will require the use of hearing protection:

B&R Tools and Service will evaluate hearing protection for the specific noise environments in which the protector will be used.

ACTIVITIES AND/OR EQUIPMENT RESULTING IN HIGH NOISE LEVEL	**ESTIMATED AVERAGE TYPICALLY NOISE LEVEL dB(A)**
Air Arc Gouging	115
Air compressor	95
Chain saw	107
Electric Disc Grinder	100
Forklift inside a trailer	98
Heavy equipment working	100
Impact tools	108
Pneumatic chipping hammer	110
Abrasive blasting	100
Welding machines	95

HEARING CONSERVATION PROGRAM FOLLOW UP TRAINING RECORD

FROM: _____

Manager or Supervisor

The employee listed below recently was found to have a confirmed significant shift in the hearing threshold (as defined by OSHA). An investigation and additional training is required. When this form is completed and reviewed with the employee, please file in the office.

EMPLOYEE NAME: _____

Print or type First, MI, Last Name

_____ _____

Social Security Number or Employee Number **Reported Date**

JOB CATEGORY _____

(Current Assignment)

The Potential for noise exposure and specific requirements for using hearing protection in their area should be reviewed with this employee within 2 weeks. If hearing protection requirements have not been established in this work area, it must be done as soon as possible. The retraining for this employee should include:

* The temporary and permanent effects of noise on hearing
* Established hearing protection requirements
* Any questions the employee may have on the use of hearing protection
* The proper use of hearing protection
* Comments the employee has on potential off-the-job noise exposure

Comments on discussion held:

_____

I have discussed the above items with this employee:

_____ _____ _____

Manager or Supervisors Name (print) Signature Date of Discussion

Naturally Occurring Radioactive Material Protection Program

Purpose

The purpose of this policy is to protect all employees from naturally occurring radioactive material (NORM) and technology enhanced naturally occurring radioactive materials (TENORM) in the event of exposure during work.

Scope

This program is established and implemented to ensure that safe work procedures and appropriate, specific employee training are provided prior to the assignment of any company employee to perform work where there is an identified potential for NORM or TENORM exposure.

The Safety Coordinator shall be the program coordinator and serve as the administrator over program provisions and requirements.

Each manager, Supervisor and other employees involved in work where such radiation exposure may be present share in the responsibility for maintaining a safety margin by use of site-specific safe work procedures based on hazard analysis and safety planning prior to commencing work.

Program implementation shall include:

- Measure for the identification of NORM and TENORM situations
- Initial and ongoing monitoring of radiation levels during identified situations
- Training of employees about the types of radiation hazards so identified, the location of such hazards in the workplace or job site, and the type of monitoring and identification processes to ensure that appropriate methods of hazard avoidance and protection are utilized as needed.

Procedure

Each site shall have one or more qualified individuals responsible for the implementing radiological protection of employees, members of the public and the environment.

Qualifications and training of these individuals shall be commensurate with the potential radiological hazards.

Written radiological operational procedures shall be developed for activities where there is an identified risk to employees or a threat to the environment from radiological hazards.

Such procedures shall be commensurate with the level of hazard and shall address all the radiological protection program elements necessary for identifying, evaluating and controlling radiological hazards, and ensuring compliance.

The procedures shall provide for the collection and maintenance of information providing a legal record of protection of employees, the public and the environment, such as: instrument calibration and performance checks, contamination monitoring and control, direct radiation monitoring and personnel access control.

Surveys and monitoring to evaluate potential radiological hazards shall be conducted as commensurate with the magnitude of the potential hazard.

The surveys shall include:

- Measurements of radiation levels
- Concentrations or quantities of radioactive material
- Other measurements and evaluations necessary to characterize the potential radiological hazards that could be present

Radiation detection instrumentation shall be provided as appropriate for performing necessary surveys and monitoring. The instrumentation shall be selected based upon the type of radiation detected, minimum detectable activity measurement capability and range in accordance with the radiological hazards present or anticipated for the project.

Appropriate procedures and measures shall be established to control personnel access to radiological controlled areas. The procedures shall provide that only appropriately trained, authorized and qualified personnel are permitted access to the controlled area.

Personal protective equipment (PPE), which may include the use of HEPA respirators, shall be selected based on the contamination levels in the work area and the anticipated work activity, safety and health considerations, and consideration of non-radiological hazardous materials that may be present.

Only respiratory protection devices tested and approved by NIOSH/MSHA are authorized for use in protection against radio nuclides. All personnel who utilize respiratory protection shall do so in accordance with the company's written respiratory protection program.

Hazard communication through posting and labeling shall be in accordance with the cognizant regulatory authority requirements. The standard radiation symbol (ANSI N2.1/12.1) in magenta or black on a yellow background (or alternate as provided by regulations) shall be used to warn individuals of the presence of radiation and/or radioactive material.

Transportation of radioactive material shall be in accordance with DOT requirements in 49 CFR 170 through 180, International Air Transport Association regulations and other Federal, state, and local regulations, as applicable.

The generation, treatment, storage, packaging, and transport of radioactive waste for disposal shall be in accordance with applicable federal, state and local regulatory requirements.

Information and reports regarding any individual's radiation exposure shall be made available to that individual annually and upon request in accordance with the provisions of state privacy laws and federal privacy requirements.

A training program shall be established to provide mandatory training to affected employees at a project site under this radiological program. Radiation protection training shall be provided to each affected employee prior to assignment to work where a NORM or TENORM hazard potential has been identified.

In addition to this initial training, re-training shall be performed at least annually during the length of the project at hand, and whenever workplace situations change, or work procedures are modified in a way that affects radiation protection for personnel.

The objective and goal of the training program shall be to provide a consistent baseline level of knowledge and practical skills for general employees and radiological workers working in or adjacent to restricted or radiological controlled areas.

Specific training and qualification standards shall be as specified in the cognizant regulatory authority requirements or guidance documents, and, as a minimum, shall consist of definitions, sources of radiation, radiological fundamentals, biological effects, ALARA philosophy (as-low-as-reasonably-achievable), radiological

posting and controls, contamination and exposure control, personal protective equipment use and limitations, personal hygiene considerations, emergency procedures, roles and responsibilities, and emergency procedures.

Training shall include instruction in special concepts of personal protection from radiation that explain three basic considerations:

- Limitation of the duration of the exposure;
- Greater protection as distance from the exposure increases; and
- Greater protection as shielding factors (primarily type and amount) between the radiation source and the individual increase.

Site-specific radiological emergency procedures commensurate with the level of hazard shall be developed or client procedures adopted prior to the initiation of work addressing severe weather actions, transportation accidents or spills, medical emergencies, personnel contaminations, and on-site hazmat response and notification requirements involving radioactive materials. All site personnel shall be instructed in their emergency responsibilities and the emergency procedures.

The majority of company contracts under the purview of this procedure are expected to be at construction, pipeline, and maintenance sites involving materials containing low levels of Naturally Occurring Radioactive Materials (NORM) and radioactivity, as well as Technology Enhanced Naturally Occurring Radioactive Materials (TENORM).

For these activities, many of the elements of the radiological protection program will not be fully applicable or will be applied in alternate equivalent ways in the site-specific health and safety plan.

Site-Specific Information

Radium, radon, and their decay products are radioactive elements of concern in petroleum production and gas processing. Exposure may occur when contaminated dusts and sludge are inhaled or ingested (internal exposure) or when radiation from surrounding equipment strikes the body (external exposure).

Radium is found in most oil and gas fields in the world in varying concentrations. There is potential to find radium in significant amounts in almost all types of equipment. Radon is found in most natural gas deposits in the world.

Radon itself does not present a health hazard because it is not easily absorbed into the body and is quickly cleared when absorbed.

Radon's radioactive breakdown products, called radon "daughters," may be hazardous. Radon naturally breaks down into radioactive metals before becoming non-radioactive lead.

Radon daughters may be inhaled or ingested when attached to scale or dust generated during equipment inspection and repair. Radon daughter overexposure has been associated with an increased risk of lung cancer.

Work procedures are recommended when maintaining NORM contaminated equipment such as pipelines, filters, pumps, lines, sludge or wellhead equipment. The exposure risk is highest when grinding, cutting, polishing, or performing other work that may generate dust. These dusts present inhalation hazards that result in internal exposures to radioactive material.

Radiological detection and monitoring equipment shall be selected based on the workplace situation and the type of NORM or TENORM anticipated. The methods for testing should be described; in addition, who will perform the tests and the source of information for exposure to which the levels will be compared should also be addressed.

Detection and monitoring shall be done only by trained and qualified personnel who are familiar with the type(s) of equipment in use and methods/protocols to be followed, as determined in the company's and (as applicable) the host employer's site-specific radiation protection program.

Proper respiratory protection (respirator with the proper HEPA filter) should be worn when performing activities that will result in dust or particle generation.

Locations where NORM or TENORM might be found in concentrations higher than background are entrained in water from oil and gas production, transport and delivery equipment for propane, gas processing equipment, and storage areas for used piping.

Pandemic Response Plan (CoVid-19)

Purpose

The purpose of B&R Tools and Service Pandemic Response Plan is to provide and maintain a safe working environment for all employees. It is the responsibility of the B&R Tools and Service to provide and maintain appropriate engineering controls and personal protective equipment, and to develop and promote safe work practices. It is also expected that employees will practice and follow the guidelines set forth by this plan.

Introduction

Coronavirus Disease 2019 (COVID-19) is a respiratory disease caused by the SARS-CoV-2 virus. It has spread from China to many other countries around the world, including the United States. Depending on the severity of COVID-19's international impacts, outbreak conditions—including those rising to the level of a pandemic—can affect all aspects of daily life, including travel, trade, tourism, food supplies, and financial markets.

To reduce the impact of COVID-19 outbreak conditions on businesses, workers, customers, and the public, it is important for all employers to plan now for COVID-19. For employers who have already planned for influenza pandemics, planning for COVID-19 may involve updating plans to address the specific exposure risks, sources of exposure, routes of transmission, and other unique characteristics of SARS-CoV-2 (i.e., compared to pandemic influenza viruses). Employers who have not prepared for pandemic events should prepare themselves and their workers as far in advance as possible of potentially worsening outbreak conditions. Lack of continuity planning can result in a cascade of failures as employers attempt to address challenges of COVID-19 with insufficient resources and workers who might not be adequately trained for jobs they may have to perform under pandemic conditions. The Occupational Safety and Health Administration (OSHA) developed this COVID-19 planning guidance based on traditional infection prevention and industrial hygiene practices. It focuses on the need for employers to implement engineering, administrative, and work practice controls and personal protective equipment (PPE), as well as considerations for doing so.

This guidance is intended for planning purposes. Employers and workers should use this planning guidance to help identify risk levels in workplace settings and to determine any appropriate control measures to implement. Additional guidance may be needed as COVID-19 outbreak conditions change, including as new information about the virus, its transmission, and impacts, becomes available.

The virus is thought to spread mainly from person-to-person, including:

- Between people who are in close contact with one another (within about 6 feet)
- Through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

People are thought to be most contagious when they are most symptomatic (i.e., experiencing fever, cough, and/or shortness of breath). Some spread might be possible before people show symptoms; there have been reports of this type of asymptomatic transmission with this new coronavirus, but this is also not thought to be the main way the virus spreads.

Steps All Employers Can Take to Reduce Workers' Risk of Exposure to SARS-CoV-2

This section describes basic steps that every employer can take to reduce the risk of worker exposure to SARS-CoV-2, the virus that causes COVID-19, in their workplace. Later sections of this guidance—including those focusing on jobs classified as having low, medium, high, and very high exposure risks—provide specific recommendations for employers and workers within specific risk categories.

Develop an Infectious Disease Preparedness and Response Plan

If one does not already exist, develop an infectious disease preparedness and response plan that can help guide protective actions against COVID-19.

A pandemic disease plan or disease containment plan will be developed for the company and a coordinator appointed. Identify a workplace coordinator who will be responsible for dealing with disease issues and their impact at the workplace. This may include contacting local health department and health care providers in advance and developing and implementing protocols for response to ill individuals.

Stay abreast of guidance from federal, state, local, tribal, and/or territorial health agencies, and consider how to incorporate those recommendations and resources into workplace-specific plans.

Plans should consider and address the level(s) of risk associated with various worksites and job tasks workers perform at those sites. Such considerations may include:

- Where, how and to what sources of SARS-CoV-2 might workers be exposed, including:
    - The general public, customers and coworkers; and
    - Sick individuals or those at particularly high risk of infection
- Non-occupational risk factors at home and in community settings
- Worker's individual risk factors
- Controls necessary to address those risks
- Key contacts, a chain of communications and contact numbers for employees, and processes for tracking business and employee's status will be developed.

Prepare to Implement Basic Infection Prevention Measures

For most employers, protecting workers will depend on emphasizing basic infection prevention measures. As appropriate, all employers should implement good hygiene and infection control practices, including:

- Promote frequent and thorough hand washing, including by providing workers, customers, and worksite visitors with a place to wash their hands. If soap and running water are not immediately available, provide alcohol-based hand rubs containing at least 60% alcohol.
- Encourage workers to stay home if they are sick
- Encourage respiratory etiquette, including covering coughs and sneezes.
- Provide customers and the public with tissues and trash receptacles.
- Employers should explore whether they can establish policies and practices, such as flexible worksites if possible and flexible work hours, to increase the physical distance among employees and between employees and others if state and local health authorities recommend the use of social distancing strategies.
- Discourage workers from using other workers' phones, desks, offices or other work tools and equipment, when possible
- Maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment and other elements of the work environment.
- Workers will be encouraged to obtain appropriate immunizations to help avoid disease. Granting time off work to obtain the vaccine will be considered when vaccines become available in the community.

Develop Policies and Procedures for Prompt Identification and Isolation of Sick People, if Appropriate

Prompt identification and isolation of potentially infectious individuals is a critical step in protecting workers, customers, visitors, and others at a worksite.

Employers should inform and encourage employees to self-monitor for signs and symptoms of COVID-19 if they suspect possible exposure.

Employers should develop policies and procedures for employees to report when they are sick or experiencing symptoms of COVID-19.

Actively encourage sick employees to stay home.

A procedure will be developed to notify key contacts including both customers and suppliers in the event an outbreak has impacted your company's ability to perform services. This procedure will also include notification to customers and suppliers when operations resume.

Implement Workplace Controls

Occupational safety and health professionals use a framework called the "hierarchy of controls" to select ways of controlling workplace hazards. In other words, the best way to control a hazard is to systematically remove it from the workplace, rather than relying on workers to reduce their exposure. During a COVID-19 outbreak, when it may not be possible to eliminate the hazard, the most effective protection measures are (listed from most effective to least effective): engineering controls, administrative controls, safe work practices (a type of administrative control), and PPE. There are advantages and disadvantages to each type of control measure when considering the ease of implementation, effectiveness, and cost. In most cases, a combination of control measures will be necessary to protect workers from exposure to SARS-CoV-2.

Safe Work Practices

Safe work practices are types of administrative controls that include procedures for safe and proper work used to reduce the duration, frequency, or intensity of exposure to a hazard. Examples of safe work practices for SARS-CoV-2 include:

- Providing resources and a work environment that promotes personal hygiene. For example, provide tissues, no touch trash cans, hand soap, alcohol-based hand rubs containing at least 60 percent alcohol, disinfectants, and disposable towels for workers to clean their work surfaces.
- Clean all areas that are likely to have frequent hand contact (like doorknobs, faucets, handrails) periodically and when visibly soiled. Work surfaces will also be cleaned frequently using normal cleaning products.
- Requiring regular hand washing or use of alcohol-based hand rubs. Workers should always wash their hands when they are visibly soiled and after removing and PPE.
- Post handwashing signs in restrooms.
- Social distancing including increasing the space between employee work areas and decreasing the possibility of contact by limiting large or close contact gatherings will be considered.

This plan will include the fundamentals for Bloodborne Pathogen Exposure plan along with the PPE policy.

<u>**Responsibility**</u>

The Safety Coordinator shall manage the Pandemic Response Plan and maintain records pertaining to the plan. Employees will have access to the control plan in a reasonable time, place and manner.

Business continuity plans will be prepared so that if significant absenteeism or changes in business practices are required business operations can be effectively maintained.

Supervisor Responsibility:

- Assure that incidents where exposures are assumed to be present are controlled through the adherence to company procedures.
- Follow all company safe practices and procedures.
- Provide access to employees, copies of this policy.

Employee Responsibility:

- Involve self with situations where there is a possibility of exposure to potentially infectious material or diseases only if properly trained and designated by company to respond.

- Follow all company safe practices and procedures.

Compliance Policy

B&R Tools and Service has the highest regard for the safety of its employees and for the general public. Our goal is to ensure a safe and healthy work environment for all employees. The willful non-adherence to company safe practices and procedures will be immediate cause for disciplinary action, up to and including termination of employment. Non-compliance with this safety policy will be reviewed immediately by management to determine disciplinary action.

Background

OSHA requires employers to identify situations and job classifications in which employees may be exposed to diseases, blood or other potentially infectious materials, and to provide protection to these employees in the form of engineering controls, personal protective equipment, training, and risk reduction.

There is no specific OSHA standard covering COVID-19. However, some OSHA requirements may apply to preventing occupational exposure to COVID-19. Among the most relevant are:

- OSHA's Personal Protective Equipment (PPE) standards (in general industry, 29 CFR 1910 Subpart I), which require using gloves, eye and face protection, and respiratory protection.
  - When respirators are necessary to protect workers, employers must implement a comprehensive respiratory protection program in accordance with the Respiratory Protection standard (29 CFR 1910.134).
- The General Duty Clause, Section 5(a)(1) of the Occupational Safety and Health (OSH) Act of 1970, 29 USC 654(a)(1), which requires employers to furnish to each worker "employment and a place of employment, which are free from recognized hazards that are causing or are likely to cause death or serious physical harm."

OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) applies to occupational exposure to human blood and other potentially infectious materials that typically do not include respiratory secretions that may transmit COVID-19. However, the provisions of the standard offer a framework that may help control some sources of the virus, including exposures to body fluids (e.g., respiratory secretions) not covered by the standard.

Work Practice Controls & Engineering

Personal Protective Equipment

- PPE will be provided by this company at no cost to employees, and when used correctly by employees, will eliminate or minimize direct exposure to potentially infectious or contaminated material by providing an appropriate barrier.
- PPE available in general includes:
  - Disposable latex gloves and rubber industrial gloves
  - Pocket masks
  - Face shields
- Single-use disposable gloves shall be worn when it is reasonably anticipated that hand contact with blood or OPIM will occur. Gloves will be supplied in all company first aid kits.
  - Clean, single-use (disposable) latex gloves are available in various sizes. These are located in each first aid box.
  - Gloves shall be worn when there is anticipated or potential contact with blood or body fluids.
  - Gloves shall be worn when the employee has non-intact skin (cuts, abrasions, dermatitis, etc.).
  - Gloves shall be worn by the persons responsible for the transportation and handling of soiled linen and red bag waste.

  - Gloves shall be worn when cleaning any surface or areas soiled with OPIM
  - Gloves shall be worn when handling surfaces soiled with blood or blood products
  - Gloves shall be changed when visibly soiled or damaged
- Pocket Masks
  - These masks are for use when providing cardiopulmonary resuscitation (CPR).
  - The masks provide a barrier between the user and the victim, protecting against saliva and expired air.
  - The masks will be clean, single-use (disposable) types, with one-way valves.

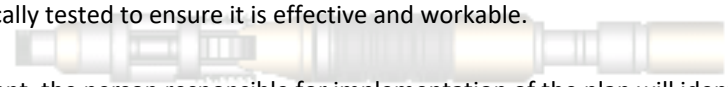
Training Records

B&R Tools and Service shall maintain training records for three years from the date of training. Records shall include:

- the dates of the training sessions;
- an outline describing the material presented;
- the names and qualifications of persons conducting the training; and
- the names and job titles of all persons attending the training sessions.

Evaluation and Review

B&R Tools and Service shall review this Pandemic Response Plan for effectiveness at least annually and as needed to incorporate changes to the standard or changes in the workplace. The plan and emergency communication strategies will be periodically tested to ensure it is effective and workable.



Following a pandemic event, the person responsible for implementation of the plan will identify learning opportunities and take action to implement any corrective actions.

Permit to Work

Purpose

The purpose of this program is to set requirements for Safe Work Permits to be used by B&R Tools and Service to ensure work is planned and executed safely with the proper permission and documentation.

Scope

This program applies to all B&R Tools and Service employees, temporary employees and contractors. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers B&R Tools and Service employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Responsibilities

Safe Work Permit Issuing

A Safe Work Permit is at minimum issued for all high-risk and non-routine tasks. A Safe Work Permit is issued for all high-risk and non-routine tasks. When performing low risk/routine tasks, the authorized permit issuer must be consulted to determine if a safe work permit is needed. Deviations from a work permit may apply in the event of an emergency.

The Safe Work Permit shall be issued and executed before work begins on the task. A Safe Work Permit shall be issued and executed before work on a task begins. In certain situations, it may not be reasonably practical to issue the permit prior to work beginning. Any such exceptions should be authorized by site supervisor.

A risk assessment is conducted, and controls are implemented for the hazards identified. A risk assessment shall be conducted to identify and assess hazards. Proper controls must be implemented to mitigate identified hazards.

Roles, Responsibilities and Signatures of the Personnel Working Under the Permit

Permit Requestor: Individual requesting Safe Work Permit; identifies hazards and proposed controls. The Permit Requestor shall not issue Safe Work Permits to themselves.

Permit Issuer: Individual approving use of Safe Work Permit, ensures site preparations are complete and informs individuals affected by the work.

Permit Holder: Individual responsible for obtaining the Safe Work Permit and ensuring work is carried out in accordance with conditions of the Work Permit.

Permit Actions

Active Safe Work Permits will be reviewed at the beginning of each shift change. Before the beginning of each shift, a thorough review of any active Safe Work Permits shall be completed.

The Safe Work Permit must be reassessed or revised once the work scope changes or new hazards are identified. If the work scope changes, then the current safe work permit must be closed, and a new permit must be issued. In situations where new, previously unidentified hazards arise, the safe work permit will be suspended and reviewed.

Personal Protective Equipment (PPE)

Purpose

In the normal course of work at B&R Tools and Service, personnel may encounter various hazards. Many of these hazards can be avoided by utilizing the proper equipment. The purpose of using personal protective equipment, and implementing the corresponding procedures, is to minimize this risk, and maintain the safety of B&R Tools and Service employees and personnel.

Scope

This policy applies to all employees.

Policy and Procedures

A written hazard [29 CFR 1910.132(d) (2)] analysis must be performed and signed by supervisors for every work area, task, and project. This assessment should determine present, as well as potential, factors which could pose a danger to personnel. The appropriate personal protective equipment must be worn at all times, as deemed necessary by the hazard assessment. Care must be taken to ensure that the necessary equipment is selected and that it fits each employee required to use it. All PPE must meet the following standards (29 CFR 1910.6):

- Eye protection must meet at minimum the following standard: ANSI Z87.1-2003
- Footwear must meet at minimum the following standard: ASTM F-2412-2005.
- Eye protection must meet at minimum the following standard: ANSI Z87.1-2003, for high impact criteria. Eyewear must be marked with "Z87+" designation.
- Head protection must meet at minimum the following standard: ANSI Z89.1-2009 Type I, Class
- Body protection must take into account the NFPA standard 70E

Personal Protective Equipment (including that which is provided by employees) must be inspected monthly by a B&R Tools and Service supervisor or the safety coordinator to ensure that it adequately meets the above safety standards. Any damaged or inadequate equipment must be replaced immediately and may not be used by personnel. Additionally, all PPE must be used, and maintained in a sanitary and reliable condition. (29 CFR 1910.132)

OSHA Standard

1910.132(a)

Application

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

absorption, inhalation or physical contact.

1910.132(b)

Employee-owned equipment

- Where employees provide their own protective equipment, the employer shall be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.

Training

Each B&R Tools and Service employee must be trained in the use of all PPE that is required to be used by each individual employee. Training must be documented and signed by the employee. Training includes:

- When PPE is required
- What PPE should be used
- How to use required PPE
- Limitations of PPE
- Maintenance and care of PPE

This knowledge must be demonstrated post training by the employee required to use PPE. Additionally employees must be retrained whenever there is a change in the workplace rendering previous training obsolete, changes in the type of equipment used, or when an employee displays negligence in the proper use of PPE, leading management to believe that they do not retain adequate knowledge of its implementation. (29 CR 1910.132)
The employer will provide training to each employee who is required to use PPE. Proper training includes at least, when PPE is necessary, what PPE is necessary, how to properly don, doff, adjust & wear PPE, the limitations of PPE, the proper care, maintenance, useful life & disposal of PPE. Retraining of the employee is required when the workplace changes, making the earlier training obsolete, the type of PPE changes, or when the employee demonstrates lack of use, improper use, or insufficient skill or understanding.

If the Personal Protective Equipment that was provided by the company is damaged in the course of work, B&R Tools and Service will replace damaged equipment that meets the following conditions:

- has not been intentionally damaged
- has not been lost (29 CFR 1910.132(h)(5)).

The following PPE has been identified by B&R Tools and Service Rental as being required on a regular basis during company operations. It must be properly fitted to each affected employee.

- Hard hats (on client locations)
- Gloves
- Safety Glasses
- Steel-Toed Work boots
- FRC clothing (on client locations)
- Hearing Protection

Respiratory Specific Protection (when required)

- **H2S Monitors**
- **Respirators (must be clean shaven)**
- **Chemical suits**
- **Foot Protection**
- **Eye Protection**
- **FRC**
- **Hearing Protection**
- **Gloves**
- **Hard Hats**

B&R Tools and Service will provide safety glasses, gloves, H2S monitors, and hard hats (29 CFR 1910.132), as well as any additional specialty safety equipment (i.e. fall protection, harnesses, lanyards, lifelines) required by company operations. It is the policy of B&R Tools and Service to require employees to tuck in their FR shirts, hair must be contained in a manner in which it won't get caught in any rotating machinery, and jewelry cannot be worn on location while working.

Personal Protective Equipment Inspection Checklist

	Yes	No
Are employers assessing the workplace to determine if hazards that require the use of personal protective equipment (for example, head, eye, face, hand, or foot protection) are present or are likely to be present?		
If hazards or the likelihood of hazards are found, are employers selecting and having affected employees use properly fitted personal protective equipment suitable for protection from these hazards?		
Has the employee been trained on PPE procedures, that is, what PPE is necessary for a job task, when they need it, and how to properly adjust it?		
Are protective goggles or face shields provided and worn where there is any danger of flying particles or corrosive materials?		
Are approved safety glasses required to be worn at all times in areas where there is a risk of eye injuries such as punctures, abrasions, contusions or burns?		
Are employees who need corrective lenses (glasses or contacts) in working environments having harmful exposures, required to wear only approved safety glasses, protective goggles, or use other medically approved precautionary procedures?		
Are protective gloves, aprons, shields, or other means provided and required where employees could be cut or where there is reasonably anticipated exposure to corrosive liquids, chemicals, blood, or other potentially infectious materials? See 29 CFR 1910.1030(b) for the definition of "other potentially infectious materials."		
Are hard hats provided and worn where danger of falling objects exists?		
Are hard hats inspected periodically for damage to the shell and suspension system?		
Is appropriate foot protection required where there is the risk of foot injuries from hot, corrosive, or poisonous substances, falling objects, crushing or penetrating actions?		
Are approved respirators provided for regular or emergency use where needed?		
Is all protective equipment maintained in a sanitary condition and ready for use?		
Do you have eye wash facilities and a quick drench shower within the work area where employees are exposed to injurious corrosive materials?		
Where special equipment is needed for electrical workers, is it available?		
Where food or beverages are consumed on the premises, are they consumed in areas where there is no exposure to toxic material, blood, or other potentially infectious materials?		
Is protection against the effects of occupational noise exposure provided when sound levels exceed those of the OSHA noise standard?		
Are adequate work procedures, protective clothing and equipment provided and used when cleaning up spilled toxic or otherwise hazardous materials or liquids?		
Are there appropriate procedures in place for disposing of or decontaminating personal protective equipment contaminated with, or reasonably anticipated to be contaminated with, blood or other potentially infectious materials?		

Preventative Maintenance Policy

Purpose

Preventive maintenance is the routine servicing of equipment, tools and vehicles, including periodic inspections to prevent the development of problems and provide for maximum economy of operation. It includes having necessary adjustments and repairs carried out according to a schedule. Preventive maintenance is essential to having equipment serviceable when it is needed.

All equipment, tools and vehicles used on the work site must be inspected and maintained in adherence to all applicable legislation and as per manufacturer's instructions. In order to ensure that preventative maintenance does occur, an inventory of all equipment, tools and vehicles must be maintained and a maintenance schedule must be developed and followed. The schedule should include a brief description of the servicing and maintenance that did occur along with any corrective actions that were taken.

Supervisors will ensure that all preventative maintenance is carried out by qualified personnel according to established schedules and that records are maintained.

All employees will regularly check equipment, tools and vehicles that they work with and will take out of service any equipment or vehicles that pose a hazard due to a need for repair.

OSHA defines preventive maintenance as a form of hazard control in the workplace to prevent injuries. Employers are required to implement a preventive maintenance system that ensures safety equipment remains effective and prevents new hazards from developing because of malfunctioning equipment. This increases the useful life of equipment and helps to ensure safety of personnel.

Basic Maintenance

Certain activities are basic to implementing a preventative maintenance plan. Regular inspections should be completed, and documentation required stating who inspected it, the date and time as well as the piece of equipment inspected. The system for non-safety related equipment will include inspection of important components to ensure they are working properly. The goal is to identify components in need of maintenance or repair before they fail potentially leading to injury.

Mandatory Procedures

Manufacturers' recommended maintenance must be followed for all equipment, and any malfunctioning or inefficient equipment must be repaired or replaced promptly.

Responsibilities

Employer

- Ensure that equipment preventive maintenance is scheduled and performs
- Recording when maintenance is done with a description of work performed
- Training personnel to perform maintenance

- Ensuring all equipment is kept in good working condition

Employee

- Assisting in preventive maintenance
- Following safe job procedures
- Reporting hazards to supervisor immediately

Application

This policy applies to all employees of B&R Tools and Service. All equipment will be maintained according to the guidelines below.

B&R Tools and Service will maintain and update as necessary an equipment inventory including but not limited to vehicles, shop equipment, trailers, etc.… Any new piece of machinery or equipment will be added to the inventory before it is put into service. This inventory list will provide a brief description of the type of equipment, date of last service and a blank for initials.

The preventative maintenance schedule and inspection schedules for each piece of equipment listed on the inventory will be established according to manufacturer and legislated requirements.

All preventive maintenance performed on equipment will be documented, and all maintenance records will be kept for the life of the machinery or equipment.

Any equipment found to be defective will be removed from service immediately and reported to a supervisor. The equipment will remain out of service until all repairs are complete.

Training

Training will be completed annually or more often as needed to be in compliance with standard industry practices and changes. Documentation will be kept of the training with re-training available as needed. Employees will be trained to operate equipment before use, perform pre-shift inspections and know what to do in the event of equipment breakdown.

Process Safety Management Policy

Purpose

The purpose of Process Safety Management is to prevent or minimize consequences of catastrophic releases of toxic, reactive flammable or explosive chemicals in various industries such as refineries. The requirements of Process Safety Management Program are outlined in 29 CFR 1910.119. B&R Tools and Service employees will perform work at job sites that are covered by this standard. Therefore, the purpose of this written program is to ensure our employees are trained in the practices necessary to conduct their work at PSM covered work sites and to ensure they abide by the safe work practices of the employers that hire us to perform various jobs. All contract employees must respect the confidentiality of trade secret information when the process safety information is released to them.

General

Contractors under the Process Safety Management program are those who are involved in the installation or maintenance of equipment and systems at a facility that has one of the following:

- A process which involves a chemical at or above the specified threshold quantities listed in Appendix A to this section.
- A process which in involves a flammable liquid or gas (as defined in (1910.1200)
    - Hydrocarbon fuels used solely for workplace consumption as a fuel (e.g., propane used for comfort heating, gasoline for vehicle refueling), if such fuels are not a part of a process containing another highly hazardous chemical covered by this standard;
    - Flammable liquids stored in atmospheric tanks or transferred which are kept below their normal boiling point without benefit of chilling or refrigeration.

As contractors covered under the PSM program, we will be providing necessary information concerning the hazardous process, equipment, and procedures of the particular job site our employees are working at.

Specific Requirements

Pre-work review

Prior to allowing B&R Tools and Service employees to commence work in a process covered under PSM, the following requirements must be completed by the PSM Company we will be working for.

- Obtain and evaluate information regarding B&R Tools and Service safety performance and programs (written documentation required).
- Inform site foremen or other designated B&R Tools and Service employee of the known potential fire, explosion, or toxic release hazards related to the work area and processes of the company.
- Explain the applicable provisions of the emergency action plan to B&R Tools and Service employees.
- Provide the site foremen with copies of local safety programs, safety and emergency procedures and a copy of the PSM program.

- Complete all the requirements of the Company Contractors Liability Agreement.
- Inform B&R Tools and Service that a periodic performance evaluation will be conducted to ensure our employees are fulfilling our obligations.
- Inform B&R Tools and Service that a contract employee injury and illness log related to our work in process areas must be maintained on site for the duration of the contract work.

B&R Tools and Service will provide information to the contract employer relating to any unique hazards presented by our employees work or any hazards found by our employees.

Training

Prior to the start of any work at a facility covered under the PSM standard, B&R Tools and Service will assure that each employee is trained in the work practices necessary to safely perform his or her job. B&R Tools and Service will provide the following documentation to each PSM covered facility that we will be performing work at:

- Our safety program information and other documentation required by the Company's Contractor Liability and Safety Agreement.
- Certification that we have informed our employees of potential fire, explosion or toxic release hazards may exist at or near their work area at the facility, and that we have explained the Company's Emergency Action Plan to our employees. Safety Data Sheets will be used to discuss process safety information for the particular site we will be working at.
- Training documentation concerning training provided to our employees to ensure they understand the safe work practices necessary to safely perform tasks.
- Certification that we have explained the Hot Works Permit Program of the Company we are working for and other permits the Company uses that will be needed during their time on company property.
- Agreement to advise the Company we are working for of any unique hazards presented by our work and found during our work.
- Certification that materials, parts and equipment to be installed meet industry and engineering standards for the application used.

B&R Tools and Service will ensure that our employees have been instructed in the known potential fire, explosion, or toxic release hazards related to his / her job. The site foreman will be responsible for ensuring that each employee has received and understood the required training. Training will be documented and will consist of the employee's name the date of training and the means used to verify that the employee understood the training.

Safe Work Practice

B&R Tools and Service employees will be required to abide by PSM employer's safety work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping, and controls over entrance to the facility. Safe work practices will be covered during site specific training courses. Training will be documented.

Hot Work

Before cutting or welding is permitted at a work site, the area must be inspected by the individual responsible for authorizing cutting and welding operations at the Company we are performing work for. B&R Tools and Service employees will not be allowed to perform hot work until a hot work permit is obtained from the employer's

designated representative. The permit shall document that the provisions of CFR 1910.252 (a) have been met. See the Welding, Cutting and Hot Work written policy for more information about safe work practices.

Incident Investigations

Employees must immediately report all accidents, injuries and near misses to their site foreman, who will then notify the correct company individuals. An accident investigation must be initiated within 48 hours. Resolutions and corrective actions must be documented and maintained for five years.

Respiratory Protection

Program

The purpose of this program is to protect B&R Tools and Service employees who may be exposed to hazardous atmospheres while working, and to provide the appropriate protection from these hazards without creating new hazards. This program provides information and guidance for the proper selection, use, and care of respirators, and contains requirements for establishing and maintaining a respirator program. B&R Tools and Service will provide affected employees with appropriate respirators. Determination of respirator use will be established by a B&R Tools and Service supervisor or established by location operators.

Scope

The program applies to all B&R Tools and Service employees who need to wear a respirator to perform assigned duties.

Roles and Responsibilities

Respiratory Administrator (will be the safety representative for B&R Tools and Service):

- Responsible for the Respiratory Protection Program
- Has knowledge about respiratory protection and maintains an awareness of current regulatory requirements and good practices
- Approves job-specific operations that involves the use of respirator
- Approves training, and fit testing procedures for employees

Supervisors

- Must hold refresher safety meetings on respiratory protection issues at the start of each new project that involves respiratory hazards for affected employees.
- Is responsible for enforcing the written Respiratory Protection Program.
- Ensure all respirators are in compliance with the written programs in effect at the jobsite.
- Record any complaints related to respirator usage, or equipment maintenance, and act promptly to investigate complaints or maintenance issues.
- Physically check each respirator prior to assignment
- The employer will ensure that employees perform a user seal check each time they put on the respirator.
- The employer will address appropriate surveillance, and ensure employees leave the area to wash their faces and respirator facepieces, change cartridges, or if they detect vapor or gas breakthrough or breathing resistance.

Employees

- Must use respiratory protection in accordance with the instructions and training provided.
- Immediately report any defects in respiratory protection equipment, and immediately evacuate to a safe area and report malfunction if it occurs during use.
- Promptly report to the supervisor any symptoms of illness that may be related to respirator usage or exposure of hazardous atmospheres.
- Inspect respirator before use
- Clean, and wash assigned respirators at the end of work shift with a disinfectant

- Keep respirator in good working condition and stored properly.
- Be clean-shaven in all facial areas that seal to the respirator face piece.
- Do not allow headpieces, Band-Aids, hair, or other items beneath a respirator seal or head strap assembly
- Glasses, facial hair, or anything that could affect the face piece seal is strictly prohibited.
- Tight-fitting face mask, or mask with a broken seal are not permissible

Permissible Practices

- Respirators will be provided by B&R Tools and Service and worn by exposed employees whenever airborne contamination levels are not otherwise reduced to with the allowable limits.
- Respirators are to be used when engineering control measures are not feasible or during emergency situations with high exposure. Respirators will be provided by B&R Tools and Service or an outsourced safety company at no cost to the employee.
- For all IDLH atmospheres, B&R Tools and Service will ensure that:
    - One employee, or when applicable, more than one employee is located outside the IDLH atmosphere
    - Visual, voice, or signal line communication is maintained between employee(s) in the IDLH atmosphere, and employee outside IDLH atmosphere
    - At least ¼ of crew composition is trained and equipped to provide effective emergency rescue
    - At no time, however briefly, shall a B&R Tools and Service employee be exposed to contaminant levels that are more than three times the allowable 8-hour time weighted average limits without respiratory protection.
    - When SCBAs are worn, at least one standby person, located outside the hazardous atmosphere and equipped with an SCBA, shall be in constant attendance, ready to provide immediate assistance and call for emergency help, if needed. This can be a B&R Tools and Service designated employee or a representative of a third-party host company.

Before Using a Respirator, you must:

- Complete a medical questionnaire
- Be evaluated by a medical practitioner
- Pass a Respirator Fit Test
    - Fit test results will be confidential
    - Fit test will be conducted during working hours
    - Fit test will be conducted at a facility that is reasonably convenient to the employee
    - Employees will be given a chance to discuss their results with a licensed health care professional
    - Respirator Fit Test will be conducted with a quantitative machine by a third-party company

Respirator Types

Hazards must be identified, and NIOSH certified respirators must be selected and provided based on those hazards and factors affecting performance.

Air Purifying Respirator:

- Purifies the air you breathe
- The chemical substance must be known
- Cartridge filters must be changed regularly
- Cannot be used in an oxygen deficient environment
- Cannot be used in IDLH atmospheres
- When using an air purifying respirator, leave the area if:

- You observe a change in your breathing
- Feel your eyes or throat becoming irritated
- Smell or taste something out of the ordinary

Supplied Air Respirator:

- Supplies the air you breathe
- Used in oxygen deficient environments
- Used in IDLH atmospheres

Cleaning and Storing Respirators

- Remove the cartridges or regulator from the mask
- Wash the respirator mask with mild soap and water
- Rinse thoroughly with warm water
- Allow adequate time to air dry
- Respirators should be stored in a dry bag or container. All respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They will be packed or stored to prevent deformation of the facepiece and exhalation valve.

Breathing Air Quality

Workers using supplied breathing air equipment shall be thoroughly trained in its use.

Breathing air is typically supplied from cylinders or via a compressor. Appropriate measures shall be taken to ensure that all compressed breathing air meets at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

1. Oxygen content (v/v) of 19.5-23.5%;
2. Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
3. Carbon monoxide (CO) content of 10 ppm or less;
4. Carbon dioxide content of 1,000 ppm or less; and
5. Lack of noticeable odor.

Suppliers of breathing air cylinders shall provide the company with a certificate of analysis with each delivery certifying that the breathing air meets the requirements for Grade D breathing air; and that the moisture content in the cylinder does not exceed a dew point of -50 deg.F (-45.6 deg.C) at 1 atmosphere pressure. The certificate shall have the name of the breathing air supplier, the testing technician and date of test.

Breathing air cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178).

Breathing Air Compressors

Compressors used to supply breathing air to respirators shall be constructed and situated so as to:

- Prevent entry of contaminated air into the air-supply system;
- Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (-5.56 deg.C) below the ambient temperature;

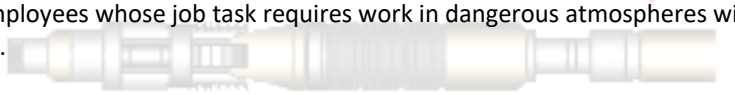
- If required to ensure delivery of Grade D air to the user, provide suitable in-line air-purifying sorbent beds and filters. All filters, cartridges and canisters shall be labeled, and color coded with the NIOSH approval label and the label shall remain legible. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions. A tag containing the most recent change date and the signature of the person authorized by the employer to perform the change shall be attached to the equipment.
- For compressors that are not oil-lubricated, the company shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.
- For oil-lubricated compressors, the company shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.
- The air shall be routinely tested to ensure that it meets Grade D requirements.

In addition, a stand-by attendant shall be on watch anytime workers are using breathing air supplied directly by a compressor.

Breathing air couplings shall be incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.

Training

Training and medical fit testing will be provided before the employee is required to wear a respirator. B&R Tools and Service will ensure employees whose job task requires work in dangerous atmospheres will retrain and re-test those employees annually.



- Employees will understand the need of supplied air respirator in and IDLH or oxygen deficient environment
- Employees will be trained and understand how to don and wear an SCBA appropriately while checking for proper fit
- Employees will understand the differences between an air purifying respirator, and a supplied air respirator
- Employees will be trained how to recognize and sound the alarm in an emergency situation in accordance with this policy
- Employees will be trained to inspect, clean, and store their respirators properly
- Employees will be trained on signs and symptoms to recognize the need for emergency action

All respirators used in routine situations will be inspected before use and during cleaning. Respirators maintained for use in emergency situations will be inspected monthly and will be checked for proper function before and after each use. Emergency escape-only respirators will be inspected before being carried into the workplace for use. Inspections will include a check of respirator function, tightness of connections, and the condition of the various parts.

To verify written program effectiveness the employer will conduct evaluations of the workplace as necessary to ensure implementation. The employer will regularly consult employees about fit, selection, use, maintenance, etc. And overall program effectiveness.

Return to Work (Safe)

Purpose

To ensure all employees who have been injured are provided the opportunity for modified work whenever practicable, B&R Tools and Service ensures that the work is meaningful to the employee and company and consistent with the work restrictions outlined by the treatment provider.

Scope

All employees of B&R Tools and Service are informed of the company Safe Return to Work program as part of the new employee orientation process and it is reviewed as needed.

Training

Before any employees return to work, physical demands are assessed for modified job duties to ensure they can be performed safely by injured employees. Before the start of a new assigned task the employee must be evaluated to ensure prevention of further injury.

Training will include safe work practices and procedures in the workplace and on location. B&R Tools and Service will ensure that modified work being offered is consistent with the medical restrictions listed by the health care provider. Workers must ensure that changes in the scope of modified work must adhere to the medical restrictions. Modified work is temporary and should be managed with a goal to return the individual to full time work as soon as deemed medically fit.

Testing Procedures

All employees of B&R Tools and Service who have been injured will be provided a list of local health providers who have been made aware of B&R Tools and Service modified work policy. These providers have been advised that B&R Tools and Service provides modified work to injured employees whenever practicable. This has been accomplished proactively by making arrangements with clinics that specialize in Occupational Health and recommending injured employees seek treatment there. If and when this is not practicable a standard letter will be drafted that outlines the company's modified work opportunities. Injured employees should take these letters with them when they visit their health care provider.

Employee Monitoring

Supervisors must be made aware of the restrictions to ensure the modified work meets the physician's orders. Medical records will be kept by the employer strictly on a need-to-know basis in a locked file.

Documentation

The employer will maintain written records of incident details. This will help the employer recall information about the circumstances of the incident at a later time and will demonstrate due diligence. Incident investigation records will be maintained according to policy. Records will be kept of communications with the injured employee regarding modified work. Workers Compensation and medical records, where applicable will also be maintained.

Rigging Material Handling

Purpose

The purpose of this policy is to ensure employees who perform rigging understand the general precautions and safe work practices of rigging material.

Scope

This policy applies to all employees who perform rigging.

Procedure

General Precautions/Requirements

When working in the area of crane or rig operations, such as a rigger for the crane or rig crew member, the following precautions shall be practiced:

- The use of cranes and hoists shall always be considered a potentially hazardous job. Avoid working alone. Get adequate help.
- Hardhats must be worn during hoisting activities all personnel in the proximity of the work.
- Never ride the "headache" ball (connected to the fast line).
- Personnel shall be kept clear of, and never walk or stand under loads about to be lifted or suspended loads.
- Rigging equipment shall not be loaded beyond its recommended safe working load and load identification shall be attached to the rigging.
- All loads during transport must be securely fastened.
- All overhead hazards must be surveyed prior to lift occurring and crane or rig properly positioned to avoid contact with overhead hazards such as power lines.
- Lift cables shall not be wrapped around the load. Slings or chokers should be used.
- Sharp corners of the load should be padded where they contact slings.
- Workers must not get any part of their bodies between unsecured objects (pinch points).
- Workers must not put their hands or fingers in the possible path of any heavy machinery or load.
- Workers must not wear loose clothing near rotating machinery or wear rings when handling rope or cables.
- Rigging equipment not in use shall be removed from the immediate work area so as not to present a hazard to employees.
- Employers will not use Chains, Wire ropes, Synthetic or metal Web slings, shackles or any other lifting attachments without permanently affixed and legible identification markings prescribed by the manufacturer.

Safe Work Practices

Slings

Whenever any sling is used, the practices below shall be followed:

- Slings that are damaged or defective shall not be used.
- Slings shall not be shortened with knots or bolts or other makeshift devices.
- Sling legs shall not be kinked.
- Slings shall not be loaded in excess of their rated capacities.
- Slings used in a basket hitch shall have the loads balanced to prevent slippage.
- Slings shall be securely attached to their loads.
- Slings shall be padded or protected from the sharp edges of their loads.
- Suspended loads shall be kept clear of all obstructions.
- All employees shall be kept clear of loads about to be lifted and of suspended loads.
- Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.
- Shock loading is prohibited.
- A sling shall not be pulled from under a load when the load is resting on the sling.
- Each day before use, the sling and all fastenings and attachments shall be inspected for damage or defects.

Lifting Attachments

Lifting padeyes are required on all skid mounted and / or packaged equipment that is too large or too heavy to be placed in a cargo basket. This includes equipment such as but not limited to wire line units, pump skids, and sand hoppers. When padeyes cannot be attached directly to the skid, cages may be used. Lifting cages shall be constructed of carbon steel by a certified welder and shall be rated to handle the load in which it is attached. Lifting Padeyes shall be fabricated from carbon steel plate when attached to carbon steel on the equipment skid. Design of the lifting padeyes shall allow the use of screwed pin safety shackles to attach slings. Design of the padeyes and welds shall incorporate a minimum strength test of two times manufacturer recommendations. All padeye welds shall be done by a certified welder and shall be visually inspected before loading equipment. Lifting padeyes on equipment shall be positioned so slings cannot hang up causing equipment damage. Lifting cage joints not welded (bolted, screwed fittings, etc.) to the skid must be checked for tightness prior to each lift. Joints bolted on lifting cages should have anti-backing devices such as double nut or safety pinned. Screwed fittings should be pinned or locked in place and must be designed and/or rated to handle the load in which it is attached.

Synthetic Fiber Rope Slings

Synthetic web slings shall be identified by marking or coding to show the rated capacities for each type of hitch and type of synthetic web material. Synthetic webbing shall be of uniform thickness and width and selvage edges shall not be split from the webbing's width. Fittings shall be of a minimum breaking strength equal to that of the sling and free from all sharp edges that could in any way damage the webbing. Synthetic web slings shall not be used with loads in excess of the rated capacities specified in 29 CFR 1910.184 – Tables N-184-20 through N-184-22.

Synthetic webbing shall not be exposed to the following conditions:

- Nylon web slings shall not be used where fumes, vapors, sprays, mists or liquids or acids or phenolics (a derivative of a caustic, poisonous white crystalline compound derived from benzene and used in various resins, plastics, and disinfectants) are present.
- Polyester and polypropylene web slings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

- Nylon absorbs moisture and loses approximately 10% of its strength when wet. Full strength is regained when dry.
- Nylon slings should be stored away from heat and protected from direct exposure to sunlight.
- Safe operating temperatures for synthetic web slings of polyester and nylon shall not be in excess of 180°
- Polypropylene web slings shall not be used at temperatures in excess of 200° F.

Repairs of synthetic web slings shall be by a sling manufacturer or an equivalent entity. Each repaired sling shall be proof tested by the manufacture or equivalent entity to twice the rated capacity prior to its return to service. A certificate of the proof test shall be retained and made available for examination. Any webbing or fitting repaired in a temporary manner shall not be used.

Synthetic web slings shall immediately be removed from service if any of the following conditions are present:

- Acid or caustic burns
- Melting or charring of any part of the sling surface
- Snags, punctures, tears or cuts
- Broken or worn stitches or
- Distortion of fittings.

Alloy Steel Chains

Alloy steel chain slings shall have permanently affixed durable identification stating size, grade, rated capacity, and reach. 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 or rods or other such attachments shall not be used. Refer to 29 CFR 1910.184 for more information on alloy steel chains.

Wire Rope Slings

Wire rope slings shall not be used with loads in excess of the rated capacities show in 29 CFR 1910.184 Tables N-184-3 through N-184-14. Slings not included in these tables shall be used only in accordance with the manufacturer's recommendations. Welding of end attachments, except covers to thimbles, shall be performed prior to the assembly of the sling. All welded end attachments shall not be used unless proof tested by the manufacturer or equivalent entity at twice their rated capacity prior to initial use. A certificate of the proof test shall be retained and made available for examination.

Slings shall be removed from service if any of the following are present:

- 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 nesting or any other damage resulting in distortion of the wire rope structure.
- Evidence of heat damage.
- End attachments that are cracked, deformed or worn.
- Hooks that have been opened more than 15% 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.

Tag Lines

Tag lines shall be used to control a load unless their use creates an unsafe condition. Before the hook is moved, personnel using tag lines must be sure the lines are free with no knots. Tag lines must not be wrapped around the hand or wrist. The operator, signal person, and load handlers are responsible for ensuring that the load is never over any person.

Hooks

The hook should be positioned directly over the load to avoid a side thrust on the boom and to prevent the load from swinging. All hooks shall be of the approved safety hook type. Hooks shall be regularly inspected for cracks, wear, bends, twists, proper throat opening, and correct operation of the latch mechanisms. Hooks on overhaul ball assemblies, lower load blocks, or other attachment assemblies shall be of a type that can be closed and locked, eliminating the hook throat opening. Alternatively, an alloy anchor type shackle with a bolt, nut and retaining pin may be used.

Inspections

Rigging equipment for material handling (ropes, slings, etc.) shall be inspected before each use on each shift and as necessary during its use to ensure that it is safe. All rigging equipment must be inspected at least monthly by a qualified person. All ropes (including running ropes), which have been idle for a period of a month or more due to shut down or storage of a crane on which it is installed, shall be given a thorough inspection before it is used. Defective rigging equipment shall not be used and must be removed from service immediately to be repaired or destroyed. All inspections shall be performed by an appointed or authorized person. Any deterioration resulting in appreciable loss of original strength shall be carefully observed and determination made as to whether further use of the rope would constitute a safety hazard.

Frequent Inspections – Daily to Monthly as well as observations during operation of equipment to identify any defects in between regular inspections:

- All control mechanisms for maladjustment interfering with proper operation: Daily
- All control mechanisms for excessive wear of components and contamination by lubricants or other foreign matter.
- All safety devices for malfunction.
- Deterioration or leakage in air or hydraulic systems: Daily
- Crane hooks with deformations or cracks. For hooks with cracks or having more than 15 percent in excess of normal throat opening or more than 10 deg. twist from the plane of the unbent hook.
- Hoist chains, including end connections, for excessive wear, twist, distorted links interfering with proper function, or stretch beyond manufacturer's recommendations.
- Rope reeving for noncompliance with manufacturer's recommendations.
- Electrical apparatus for malfunctioning, signs of excessive deterioration, dirt, and moisture accumulation.

Periodic Inspections – One to Twelve-month intervals

- Deformed, cracked, or corroded members in the crane structure and boom.
- Loose bolts or rivets.
- Cracked or worn sheaves and drums.
- Worn, cracked, or distorted parts such as pins, bearings, shafts, gears, rollers and locking devices.
- Excessive wear on brake and clutch system parts, linings, pawls, and ratchets.
- Load, boom angle, and other indicators over their full range, for any significant inaccuracies.
- Gasoline, diesel, electric, or other power plants for improper performance or noncompliance with safety requirements.
- Excessive wear of chain-drive sprockets and excessive chain stretch.
- Travel steering, braking, and locking devices, for malfunction.
- Load, wind, and other indicators over their full range, for any significant inaccuracies.
- Electrical apparatus, for signs of pitting or any deterioration of controller contactors, limit switches and pushbutton stations.
- Excessively worn or damaged tires.
- Cranes or rigs not in regular use:
- Crane or rigs which have been idle for a period of one month or more, but less than 6 months, shall be given an inspection conforming with requirements of frequent and
- periodic inspection as described above before placing in service.
- Crane or rig which has been idle for a period of six months shall be given a complete inspection conforming with requirements of frequent and periodic inspection as described above before placing in service. Rigging Material Handling
- Standby cranes or rigs shall be inspected at least semiannually in accordance with requirements of frequent and periodic inspection as described above. Such cranes/rigs which are exposed to adverse environments should be inspected more frequently.

Preventative Maintenance

A preventive maintenance program based upon the crane and rig manufacturer's recommendations shall be established and documented at the time maintenance occurs. A designated employee will be responsible for ensuring the preventative maintenance occurs. Prior to maintenance or repairs occurring, a lock out / tag out procedure must be implemented to prevent injury to employee performing maintenance.

Responsibilities

Planning for safe rigging and lifting must begin at the design stage and lifting procedures must be developed for assembly and installation. The lifting procedure should be developed and discussed with the rigging crew fore person.

The Supervisor is responsible for:

- Defining and requesting the move;
- Providing technical information on relevant characteristics of the apparatus, including special lifting fixtures when required;
- Providing suggestions on rigging and moving;

- Assigning someone to spot the load while the job is being carried out.
- The supervisor must make certain that personnel know how to move objects safety by hand or with mechanical devices in the operations normal to the area and must permit only those employees who are formally qualified by training and certification to operate a crane or hoist.
- The supervisor must enforce the use of safe lifting techniques and maintain lifting equipment in good mechanical condition.

The Riggers are responsible for:

A rigger is anyone who attaches or detaches lifting equipment to loads or lifting devices. In order to be considered a qualified rigger, the person will be qualified by his employer to perform specific rigging tasks and possesses a recognized degree, certificate or professional standing, or has extensive knowledge, training and experience and can successfully demonstrate the ability to solve problems related to rigging loads.

Rigging Material Handling

- Final rigging
- Carrying out whatever moves have been designated.

Signal Persons

A qualified signal person(s) must work with the hoist or crane operator when:

- Personnel assisting with the load are out of the range of the operator's vision,
- The moving load is out of the range of the operator's visions, or
- The person in charge of the lift determines it to be necessary.
- Standard hand signals should be used.
- Normally, the signal person should give all signals; however, the operator should obey an emergency stop signal given by anyone.
- Cones shall be placed 10 feet from the crane or rig to serve as a warning to personnel in the area to stay clear of the crane boom.
- A red flag shall be placed on the steering column of the crane or rig whenever the operator leaves the crane cab. This reminds the operator to check all around the crane before leaving the area.

Before any movement takes place each the rigger, crane operator and Supervisor must approve the rigging and other procedures associated with the intended move. Each must respect the responsibility and authority of the other to prevent or terminate any action he or she judges to be unsafe or otherwise improper. Employees are required to observe all established safety regulations relating to safe lifting techniques.

Training

All personnel who rig any loads (attach or detach lifting equipment to loads or lifting loads) must have completed a rigging course and be certified by their employer. Personnel authorized to rig must have Rigging Material Handling training, experience and complete a rigger training program. This includes crane operators and inspectors.

Training should incorporate:

- Familiarization with rigging, hardware, slings and safety issues associated with rigging, lifting loads and lift planning.
- Training should include classroom, hands-on training and exams.
- Hands-on should include proper inspection, use, selection and maintenance of loose gear (slings, shackles, hooks, etc.).

Documentation

Certified Records shall be maintained for rigging inspections which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the ropes shall be prepared and kept on file where readily available.

Inspection records - Certification records which include the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, of the crane or rig which was inspected shall be made monthly on critical items in use such as brakes, crane hooks, and ropes. This certification record shall be kept readily available.

Load Tests - written reports on rated load tests showing the test procedures and confirming the adequacy of any repairs or alterations shall be kept and maintained.

Scaffold Safety Program

Purpose

The purpose of this safety policy is to establish guidelines for the protection of B&R Tools and Service employee who work on scaffold work surfaces.

Policy

Scaffolds shall be erected, moved, dismantled or altered only under the supervision of an engineer and will have guardrails, handrails and toe boards installed. When scaffolding hazards exist that cannot be eliminated, then engineering practices, administrative practices, safe work practices, personal protective equipment, and proper training regarding scaffolds will be implemented. These measures will be implemented to minimize those hazards to ensure the safety of employees and the public.

Responsibilities

It is the responsibility of each supervisor and employee to ensure implementation of this Scaffold Safety Program and procedures on scaffolds. It is also the responsibility of each employee to report immediately any unsafe act or condition to his or her supervisor.

Procedures

This section provides applicable definitions, establishes general provisions and identifies specific responsibilities required by B&R Tools and Service safety policy and procedure on scaffolds.

Definitions

Brace: A tie that holds one scaffold member in a fixed position with respect to another member. Brace also means a rigid type of connection holding a scaffold to a building or structure.

Coupler: A device for locking together the component tubes of a tube and coupler scaffold.

Harness: A design of straps which is secured about the employee in a manner to distribute the arresting forces over at least the thighs, shoulders and pelvis with provisions for attaching a lanyard, lifeline or deceleration device.

Hoist: A mechanical device to raise or lower a suspended scaffold. It can be mechanically powered and or manually operated.

Maximum Intended Load: The total load of all employee, equipment, tool, materials, transmitted, wind and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time.

Mechanically Powered Hoist: A hoist which is powered by other than human energy.

Outriggers: The structural member of a supported scaffold used to increase the base width of a scaffold in order to provide greater stability for the scaffold.

Platform: The horizontal working surface of a scaffold.

Safety Belt: A strap with means for securing about the waist or body and for attaching to a lanyard, lifeline, or deceleration device.

Scaffold: Any temporary elevated or suspended platform and its supporting structure used for supporting employees or materials or both, except this term does not include crane or derrick suspended personnel platforms.

Training

Affected employees will receive instruction on the particular types of scaffolds which they are to use. Training should focus on proper erection, handling, use, inspection, and care of the scaffolds. Training will address hazards (electrical, falling objects), scaffold use, and load capacity. Training must also include the installation of fall protection, guardrails and the proper use and care of fall arrest equipment.

This training should be done upon initial job assignment. Retraining shall be done when job conditions change. Periodic refresher training shall be done at the discretion of the supervisor.

Safe Scaffold Erection and Use

Safe scaffold erection and use is important in minimizing and controlling the hazards associated with their use. Scaffold work practices and rules should be based on:

- Sound design
- Selecting the right scaffold for the job
- Assigning personnel
- Fall protection
- Guidelines for proper erection
- Guidelines for use
- Guidelines for alterations and dismantling
- Inspections
- Maintenance and storage

Types of Scaffolds

There are many different types of scaffolds:

- Self-supporting scaffolds
- Suspension scaffolds
- Special use scaffolds

Self-supporting scaffolds are one or more working platforms supported from below by outriggers, brackets, poles, legs, uprights, posts, frames, or similar supports. The types of self-supporting scaffolds include:

- Fabricated frame
- Tube and coupler
- Mobile
- Pole

Suspension scaffolds are one or more working platforms suspended by ropes or other means from an overhead structure(s). The types of suspension include:

- Single point adjustable
- Two point adjustable
- Multiple point adjustable
- Multi-lend
- Category
- Float
- Interior hung
- Needle beam

Special use Scaffolds and assemblies are capable of supporting their own weight and at least 4 times the maximum load. The types of special use scaffolds include:

- Form and Carpenter Bracket
- Roof Bracket
- Outrigger
- Pump jack
- Ladder jack
- Window jack
- Horse
- Crawling boards
- Steps, platforms and trestle ladder

Responsibilities

Safety Coordinator

Will identify employees affected by this safety policy. They will coordinate the required training for the affected employees. They will also ensure compliance with this policy through their auditing policy.

Supervisors

Supervisors will not allow any employee who has not received the required training to perform any of the tasks or activities related to scaffold erection and or dismantling. Supervisors will communicate appropriate needs to management and or the safety coordinator. Supervisors will ensure that employees are provided with PPE as necessary for their job. Supervisors will ensure that a competent person is in charge of scaffold erection according to the manufacturer's specifications and will inspect periodically throughout the shift.

Competent Persons/Engineer

The competent person will oversee the scaffold selection, erection, use, movement, alteration, dismantling, maintenance and inspection. The person will be knowledgeable about proper selection, care and use fall protection equipment. They shall also assess hazards and report any concerns to the supervisor.

Employees

Employees shall comply with all applicable guidelines contained in this safety policy and procedure. Employees will report damaged scaffolds, accessories, and missing or lost components and tag them accordingly. Employees will assist with the inspections as requested.

Owner

The Owner is responsible for ensuring that purchased scaffolds and related material and equipment meet or exceed current safety regulations.

Safety Requirements for Scaffolds

- The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrel, boxes, loose brick or concrete blocks shall not be used to support scaffolds or planks.
- No scaffolds shall be erected, moved, dismantled, or altered except under the supervision of competent persons.
- **Guardrails, handrails, and toe boards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor, except needle beam scaffolds and floats.** Scaffolds 4 feet to 10 feet in height having a minimum horizontal dimension in either direction of less than 45 inches shall have standard guardrails installed on all open sides and ends of the platform.
- Guardrails must be 2 x 4 inches or the equivalent, not less than 36 inches or more than approximately 42 inches high, with a mid-rail, when required, of 1 x 4-inch lumber, or the equivalent. Supports must be at intervals not to exceed 8 feet. Toe board and the guardrail shall extend along the entire opening.
- **Scaffolds and their components must be capable of supporting without failure at least 4 times the maximum intended load.**
- Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, couplers, etc., damaged or weakened from any cause must be repaired or replaced immediately, and shall not be used until repairs have been completed.
- Scaffolds and their components must be capable of supporting without failure at least 4 times the maximum intended load.
- All load-carrying timber members of scaffold framing shall be a minimum of 1,500 fiber (Stress Grade) construction grade lumber.
- All planking must be scaffold grades, or equivalent as recognized by approved grading rules for the species of wood used. The maximum permissible span for 2 x 9 inch or wider planks is shown in the following.
- The maximum permissible span for 1-1/4 x 9 inch or wider plank of full thickness shall be 4 feet with medium duty loading of 50 p.s.i.
- All planking or platforms must be overlapped (minimum 12 inches) or secured from movement.
- An access ladder or equivalent safe access must be provided.
- Scaffold plank must extend over their end supports not less than 6 inches or more than 18 inches.
- The poles, legs, or uprights of scaffolds must be plumb and securely and rigidly braced to prevent swaying and displacement.
- Overhead protection must be provided for men on a scaffold exposed to overhead hazards.
- Slippery conditions on scaffolds shall be eliminated immediately after they occur.
- No welding, burning, riveting or open flame work shall be performed on any staging suspended by means of fiber or synthetic rope. Only treated or protective fiber or synthetic ropes shall be used for or near any work involving the use of corrosive substances or chemicals.
- Wire, synthetic, or fiber rope used for scaffold suspension shall be capable of supporting at least 6 times the intended load.

- Scaffolds shall be provided with a screen between the toe board and guardrail, extending along the entire opening, consisting of no. 18 gauge U.S. Standard wire one-half inch mesh or the equivalent, when personnel are required to work or pass underneath the scaffolds.
- A safe distance from energized power lines shall be maintained.
- Tag lines shall be used to hoist materials to prevent contact.
- Suspension ropes shall be protected from contact with the heat sources (welding, cutting, etc.) and from acids or other corrosive substances.
- Scaffolds shall not be used during high wind and storms.
- Ladders and other devices shall not be used to increase working heights on scaffold platforms.
- Scaffolds shall not be moved while employees are on them.
- Loose materials, debris, and or tools shall not be accumulated to cause a hazard.
- **Employees working on scaffolds shall employ a fall-arrest system.**
- Scaffold components shall not be mixed or forced to fit which may reduce design strength.
- Scaffolds and components shall be inspected at the erection location. Scaffolds shall be inspected before each work shift, after changing weather conditions, or after prolonged work interruptions.
- Casters and wheel stems shall be pinned or otherwise secured in scaffold legs. Casters and wheels must be positively locked if in a stationary position.
- Tube and coupler scaffolds shall be tied to and securely braced against the building at intervals not to exceed 30 feet horizontally and 26 feet vertically.

Short Service Employee Program (SSE)

B&R Tools and Service identifies short service employees as any employee who is new to his position and has not been released from the SSE program by his mentor or supervisor.

Identification

All B&R Tools and Service SSE's will be visibly identified with a sticker on the front of their hard hat that reads SSE to clearly identify the SSE on any job location or site.

Crew Composition:

When crew size is comprised of five or less employees, it is the policy of B&R Tools and Service that there will not be more than one SSE per crew. An SSE may not work alone.

In all cases SSE's will not exceed 20% of the total crew make-up.

Mentor Requirements

- Mentor has attended and is aware of basic safety orientation material
- Will show the ability to recognize hazards/and unsafe acts
- Be familiar with all site policies, procedures, and any required specialized actions with the work to be done.
- Are able and willing to challenge their personnel on the job if they do not meet site procedures, policies, or other requirements and will see that the stop work authority is enforced.
- Actively participates in the Behavioral Based Safety program

Monitoring the SSE

The supervisor/mentor will monitor their employees, which includes the SSE personnel for Health, Environment and Safety (HES) awareness. Also, the immediate supervisor of the SSE is required to notify the host facility when an SSE will be working at their site.

The identifier marking the SSE may be removed from the SSE program at the discretion of the Supervisor/mentor at the end of the required three-month period if he/she:

- Has demonstrated safe work practices and behavior
- No recordable incidents have been attributed to him/her
- Demonstrates an understanding and knowledge of all field task and work procedures (see SSE Checklist). Subcontractors must adhere to the requirements of the Short Service Employee program.
- Any SSE who had a recordable incident attributed to them within the SSE period, must continue in the SSE program for a full six months before being signed- off by the mentor

Conclusion

Short Service Employees should know their responsibilities and strictly adhere to the B&R Tools and Service SSE policy, following the guidance of their supervisors/mentor. This program has been adopted by the company in order to prevent possible accidents such as personal injury, injury to others, environmental damage, and/or property damage caused by the short service employees.

Documentation

The mentor's SSE checklist, completed with mentor, and SSE signature will be filed and documented in the employee's file, at the completion of the SEE program for the stated SSE employee.

COMPANY SHORT SERVICE EMPLOYEE

NOTIFICATION FORM
Short Service Employee Information

Employee Name (Print)	
Employee Hire Date	**Change Date:**
Current Job Title	
Time in Present Position	
Years of Oilfield Experience	
Types of Oilfield Experience	

SSE Mentor Information (completed by Supervisor/Mentor)

Employee Name (Print)	
Employee Hire Date	
Current Job Title	
Time in Present Position	
Years of Oilfield Experience	
Types of Oilfield Experience	

Supervisor Sign-Off

Print Name:	**Print Job Title:**	**Signature:**

Employee has received the required Safety Orientation	Yes		No	
Employee has received all required Safety Training *	Yes		No	
Employee has received the required safety training except (Attach list of any exceptions)	Yes		No	

SHORT SERVICE EMPLOYEE CHECK LIST

Mentor's Initials as Completed	SSE Initials as Completed	**Short Service Employee sets clear expectations and consequences for safe behaviors.**
		Does not take unnecessary risks.
		Asks for help when needed.
		Does not try to lift or handle too heavy of a load. Gets mechanical help when needed.
		Raises awareness of possible hazards.
		Intervenes with unsafe behaviors.
		Understands his/her "stop work" authority and responsibility
		New Employee is able to identify the following at the work site:
		Struck by hazards
		Crushed by hazards
		Trip hazards and precautions
		Electrical hazards and precautions
		Fall hazards and precautions
		Hot and / or cold surfaces, piping and equipment
		Chemical hazards and precautions
		Emergency procedures
		Emergency communications
		Respiratory hazards and precautions
		Toxic substance hazards and precautions (ex. Hydrogen Sulfide)
		Damaged equipment and makes repairs or mark it out of service. Ex) damaged pipes, hoses, clamps, air vents, fittings, pumps
		Short Service Employee exhibits compliance to:
		General safety rules and policies
		Safety rules and policies specific to the job being performed
		Housekeeping policies
		PPE requirements
		Short Service Employee shows competency on following equipment:
		f. Equipment Name:

______________________________ ____

Mentor New Employee

____________________ ________________________

Date Hire Date

Spill Prevention and Emergency Response

B&R Tools and Service employees will be "awareness only" personnel; therefore, will be considered non-qualified employees in spill clean-up. All B&R Tools and Service employees will be able to recognize and identify a release or spill and will initiate the proper emergency response plan. The contact numbers provide with this plan will be the list used for all Emergency Response Plans.

Purpose

B&R Tools and Service Spill Response/Prevention program is primarily designed to detail the policies and procedures to eliminate spills of hazardous and non-hazardous materials during the course of B&R Tools and Service operations and work, on company property, client property, as well as any other premises. Furthermore, this policy describes the actions that need to be taken in the event a spill does occur.

Scope

This policy applies to all B&R Tools and Service employees.

Policy

General Policy

All chemicals (i.e. gasoline, diesel) must be stored in appropriate containers. The following locations have been identified by B&R Tools and Service as having potential spill risk.

- Tank trucks used for the transportation of wastewater to saltwater disposal injection wells (SWD). All tank trucks owned by B&R Tools and Service must be regularly inspected in order to ensure that equipment is in appropriate condition
- Portable diesel tanks on company vehicles and equipment. All fuel tanks or fuel containers used in the course of operations must be sealed with leak proof cap and must be of non-corrosive material.

All employees who respond to a spill must have prior training in spill response and spill prevention. Employees whose job responsibilities may be reasonably anticipated to expose them to the probability of encountering a spill will be trained in proper spill response and preventative measures.

All work locations that possess a high probability of encountering a spill, must be equipped with spill response kits. These kits must be adequate for any skills that may be anticipated to occur at that jobsite.

The vast majority of spills can be prevented with simple good housekeeping practices. These involve:

- Storing chemicals in appropriate containers. Areas where chemicals or materials may be used or stored must be maintained using good housekeeping practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary. If possible, chemicals should be kept in a closed container and stored so they are not exposed to stormwater.
- Keeping workplaces clean and orderly.
- Inspecting and repairing containers and equipment on a regular basis.

- Planning ahead.
- Identify standard operating procedures for fueling equipment and other routine tasks to eliminate spills.

Put maintenance and inspection procedures in place for material storage areas, equipment, tanks, hydraulic hoses, vibro hammers, etc.

For more information on storage and labeling, consult B&R Tools and Service Company hazardous material communications policy.

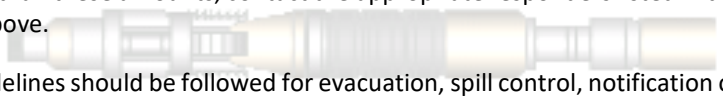
Spill Response

In the event a spill does occur, communication procedures must be initiated immediately. Spills of any hazardous, or unknown substances, must be reported to management immediately, who will contact appropriate response personnel.

Contact information for emergency personnel (HAZMAT, Police, Fire Department etc.) will be listed at any work site where this is a reasonably anticipated risk of the release of hazardous materials.

Further details of reporting spills are outlined below under “Spill Response and Cleanup.”

Spilled chemicals should be effectively and quickly contained and cleaned up. Employees should clean up spills themselves only if properly trained and protected. Employees who are not trained in spill cleanup procedures should report the spill to the Responsible Person(s) listed above, warn other employees, and leave the area. In the event of spills greater than these amounts, contact the appropriate responders listed in the Emergency Contact Numbers listed above.



The following general guidelines should be followed for evacuation, spill control, notification of proper authorities, and general emergency procedures in the event of a chemical incident in which there is potential for a significant release of hazardous materials.

Evacuation

Persons in the immediate vicinity of a spill should immediately evacuate the premises (except for employees with training in spill response in circumstances described below). If the spill is of “medium” or “large” size, or if the spill seems hazardous, immediately notify emergency response personnel.

Spill Control Techniques

Once a spill has occurred, the employee needs to decide whether the spill is small enough to handle without outside assistance. Only employees with training in spill response should attempt to contain or clean up a spill.

NOTE: If you are cleaning up a spill yourself, make sure you are aware of the hazards associated with the materials spilled, have adequate ventilation, and proper personal protective equipment. Treat all residual chemical and cleanup materials as hazardous waste. Spill control equipment should be located wherever significant quantities of hazardous materials are received or stored. SDSs, absorbents, over-pack containers, container patch kits, spill dams, shovels, floor dry, acid/base neutralizers, and “caution-keep out” signs are common spill response items.

Spill Response and Cleanup

In case of a spill, Chemical spills are divided into three categories: Small, Medium and Large. Response and cleanup procedures vary depending on the size of the spill.

Small Spills: Any spill where the major dimension is less than 18 inches in diameter. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source. This could be as simple as up righting a container and using floor-dry or absorbent pads to soak up spilled material. Wear gloves and protective clothing, if necessary.
- Put spill material and absorbents in secure containers if any are available.
- Consult with the Facility Responsible Person and the SDS for spill and waste disposal procedures.
- In some instances, the area of the spill should not be washed with water. Use Dry
- Cleanup Methods and never wash spills down the drain, onto a storm drain or onto the driveway or parking lot.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

Medium Spills: Spills where the major dimension exceeds 18 inches but is less than 6 feet.

Outside emergency response personnel (police and fire department HAZMAT teams) should usually be called for medium spills. Common sense, however, will dictate when it is necessary to call them.

- Immediately try to help contain the spill at its source by simple measures only. This means quickly up righting a container, or putting a lid on a container, if possible. Do not use absorbents unless they are immediately available. Once you have made a quick attempt to contain the spill, or once you have quickly determined you cannot take any brief containment measures, leave the area and alert Emergency Responders at 911. Closing doors behind you while leaving helps contain fumes from spills. Give police accurate information as to the location, chemical, and estimated amount of the spill.
- Evaluate the area outside the spill. Engines and electrical equipment near the spill area must be turned off. This eliminates various sources of ignition in the area. Advise Emergency Responders on how to turn off engines or electrical sources. Do not go back into the spill area once you have left. Help emergency responders by trying to determine how to shut off heating, air conditioning equipment, or air circulating equipment, if necessary.
- If emergency responders evacuate the spill area, follow their instructions in leaving the area.
- After emergency responders have contained the spill, be prepared to assist them with any other information that may be necessary, such as SDSs and questions about the facility. Emergency responders or trained personnel with proper personal protective equipment will then clean up the spill residue. Do not re-enter the area until the responder in charge gives the all clear. Be prepared to assist these persons from outside
- the spill area with SDSs, absorbents, and containers.
- Reports must be filed with proper authorities. It is the responsibility of the spiller to inform both his/her supervisor and the emergency responders as to what caused the spill. The response for large spills is similar to the procedures for medium spills, except that the exposure danger is greater.

Large Spills: Any spill involving flammable liquid where the major dimension exceeds 6 feet in diameter; and any "running" spill, where the source of the spill has not been contained or flow has not been stopped.

- Leave the area and notify Emergency Responders (911). Give the operator the spill location, chemical spilled and approximate amount.
- From a safe area, attempt to get SDS information for the spilled chemical for the emergency responders to use. Also, be prepared to advise responders as to any ignition sources, engines, electrical power, or air conditioning/ventilation systems that may need to be shut off. Advise responders of any absorbents, containers, or spill control equipment that may be available. This may need to be done from a remote area, because an evacuation that would place the spiller far from the scene may be needed. Use radio or phone to assist from a distance, if necessary.

- Only emergency response personnel, in accordance with their own established procedures, should handle spills greater than 6 feet in any dimension or that are continuous. Remember, once the emergency responders or HAZMAT team is on the job cleaning up spills or putting out fires, the area is under their control and no one may reenter the area until the responder in charge gives the all clear.
- Provide information for reports to supervisors and responders, just as in medium spills.

In the event, that 911 is disabled:

West Texas Area
EMERGENCY RESPONSE INFORMATION

	MEDICAL	IRE DEPARTMENT	SPILL RESPONSE	POLICE DEPARTMENT	TOW SERVICE
MIDLAND	(432) 685-1111 Midland Memorial	(432) 685-7332 Midland Fire Dept.	(432) 563-2200 Etech Enviro	(432) 688-4640 Sheriff's Dept. Patrol	(432) 570-0865 B&B Wrecker
PECOS	(432) 447-3551 Reeves County Hospital	432-445-3519 Pecos Fire Dept.	(432) 563-2200 Etech Enviro	(432) 445-4901 Reeves Co. Sheriff	(432) 445-3246 B&B Wrecker
HOWARD COUNTY	(432) 263-1211 Scenic Mountain Medical Center	(432) 264-2304 Big Spring Fire Dept.	(432) 563-2200 Etech Enviro	(915) 264-2244 County Sheriff	(432) 267-3747 Mitchem Wrecker Service
MARTIN COUNTY	(432) 607-3200 Martin County EMS, and (432) 756-3345 Hospital	(325) 378-2419 County	(432) 563-2200 Etech Enviro	(432) 756-3336 Martin Co. Sheriff	
CROCKETT COUNTY	(325) 392-3404 Crockett Co. EMS	325-392-2626 Volunteer	(432) 563-2200 Etech Enviro	(325)-392-2661 County Sheriff	
REAGAN COUNTY	(325) 884-2561 Reagan Memorial Hospital	(325) 884-3650 Volunteer	(432) 563-2200 Etech Enviro	(325) 884-2424	
GLASSCOCK COUNTY		432-354-2512 Volunteer	(432) 563-2200 Etech Enviro	(432) 354-2404 Sheriffs Dept.	
STERLING COUNTY		(325) 378-2419 Volunteer	(432) 563-2200 Etech Enviro	(325) 378-4771 Sheriffs Dept.	
Odessa			(432) 367-0211 Etech Enviro		
CHEMTREC			24 hour emergency Response 1-800-424-9300		

Stop Work Authority

Purpose

The purpose of this policy and procedure is to ensure that all employees are given the responsibility and authority to stop work when they believe that a situation exists that places them coworker, or the public at risk or in danger.

We believe that it is the responsibility of each employee to prevent workplace injuries by recognizing hazards and making corrections as needed and to ensure the safe execution of all duties in support of our safety culture.

This procedure extends the authority to Stop Work to situations where an employee believes there is a need to clarify work instructions, or to propose additional controls. All B&R Tools and Service employees will be trained on Stop Work Authority prior to initial assignment.

Scope

This procedure is applicable to all staff, contractors and subcontract personnel working for B&R Tools and Service.

Responsibilities

The responsibility and authority to initiate a Stop Work order immediately or decline to perform an assigned task without fear of reprisal, when the employee believes a situation exists which places himself/herself, a coworker(s), or the environment in danger or at risk.

The Stop Work may include discussions with co-workers, supervisors, or the Safety Coordinator to resolve work related issues, address potential unsafe conditions, clarify work instructions, or propose additional controls etc.

The responsibility to report any activity or condition the employee believes is unsafe or for which they have initiated Stop Work order. Notification should be made to the affected worker9s) and to the supervisor or their supervisor's designee at the location where the activity or condition exists.

The employee can contact their Safety Coordinator with a concern or to initiate a stop work, if the employee prefers to remain anonymous. The Safety Coordinator will ensure all Stop Work Interventions will be documented.

Management/Supervisor/Team Leader

Management and supervision are committed to promptly resolving issues resulting from an employee-raised Stop Work Order. Management responsibilities are to:

Resolve any issues that have resulted in an individual stopping a specific task(s) or activity.

Provide feedback to individual /s and the affected work group who have exercised their Stop Work responsibility on the resolution of their concern prior to resuming work.

Ensure no actions are taken as reprisal or retribution against individuals who raise safety concerns or stop an activity, they believe is unsafe.

All Stop Work reports will be reviewed by a supervisor/manager.

Implementation

Effective Immediately

Process

Employee

- Stop Work training is conducted before the initial assignment is given. All training is documented to include employee name, date and subject of training.
- Stop Work if an activity or condition is believed to be unsafe, such as:
    - A situation exists that places them, their coworker(s), contracted personnel, or the public at risk or in danger.
    - A situation could adversely affect the safe operation or cause damage to the facility.
- Notify supervisor and affected workers when you stop work or decline to perform an activity.
- Work with management to resolve any work stoppage.

Manager/Supervisor/Team Lead

- Resolve any issues that have resulted in an employee stop work order.
- Involve the individuals who initiated the Stop Work order when possible.
- Be sure the necessary corrective actions are taken before resuming an activity.
- If a Stop Work has not been resolved to the mutual agreement of supervisor and employee, then the Stop Work remains in place and the supervisor will notify the appropriate manager.
- Final resolution of any Stop Work not resolved with the employee supervisor will reside with the General Manager or Owner.
- After a Stop Work Intervention has been closed, follow up will take place by the supervisor/manager to ensure that the proper procedures are in place to resolve the initial safety concerns brought to light by the Stop Work Intervention.

Subcontractor Management

Policy

B&R Tools and Service has adopted this policy for Subcontractor Management Plans from industry standards and best practices.

Scope

This policy applies to all subcontractors working through B&R Tools and Service.

Qualification and Selection

Management will ensure that all subcontractors be qualified to work for B&R Tools and Service. The owners will review the safety programs, safety statistics such as TRIR and EMR, and policies of the prospective subcontractor. After these have been reviewed and accepted, the owners of B&R Tools and Service will then select subcontractors based on considerations such as their prior working relationships, audits of current jobs, and availability.

After Selection

The subcontractor will be required to meet all Job Safety Analysis requirements and request any safe work permits as required by this plan. The subcontractor will be included in the audits and on-site inspections as well as any pre-job meetings or safety orientations. Subcontractors are required to be at tail gate meetings each morning to go over the JSA, as well as any other safety and/or necessary information. They are expected to immediately correct any at risk behaviors or hazards identified that are within the subcontractor's scope of work and ability to correct. Employees of subcontractors have the ability to "Stop Work" at any time. Also, post job safety performance reviews are conducted after each and every job.

Welding, Cutting, Hot Work

Purpose

Welding and hot work are used to join together metal by heating the surfaces to the point of melting and uniting them to form a different shape. Welders will be trained and qualified before being allowed to complete any welding or hot work. The training will include known hazards associated with the types of metals they will be working with and the hazards associated with each.

Scope

Welding and hot work are only permitted in authorized areas. These areas are NOT included:

1. Any location not authorized by management
2. Buildings with sprinklers that are damaged or out of service
3. Any location with explosive atmospheres
4. Any location near where large amounts of exposed or readily ignitable materials are stored.

Fire Watchers

Before any welding or cutting work begins, all fire watchers will have the proper fire extinguishing equipment readily available and will also have the proper training. They will be familiar with the facilities they are working in or around and know where the alarms are and evacuation plans. They will watch for fires in all exposed areas, try to extinguish them only when obviously within the capacity of the equipment available, or otherwise sound the alarm. The fire watch shall be maintained for at least a half hour after completion of welding or cutting operations to detect and extinguish possible smoldering fires. All welders and their supervisors will be suitably trained in the safe operation of their equipment and the safe use of the process. If there is an object to be welded on or cut and cannot be readily moved, then all fire hazards in the vicinity shall be taken to a safe place. If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shall be used to confine the heat, sparks, and slag, and to protect the immovable fire hazards. If none of these conditions can be met, then the welding and cutting shall not be performed.

***Fire watchers* shall be required and designated while hot work is being completed, and for at least half an hour after welding or cutting operation has been completed, whenever welding or cutting is performed in locations where other than a minor fire might develop, or any of the following conditions exist:**

- Appreciable combustible material, in building construction or contents, closer than 35 feet to the point of operation.
- Appreciable combustibles are more than 35 feet away but are easily ignited by sparks.
- Wall or floor openings within a 35-foot radius expose combustible material in adjacent areas including concealed spaces in walls or floors.
- Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.

A person assigned to fire watch must remain on duty for 30 minutes after work is completed to extinguish any fire that may start after the work is over. When assigned to fire watch duty, the employee will have no other job assigned.

Hot Work Permit

Before cutting or welding is permitted, the area shall be inspected by the individual responsible for authorizing cutting and welding operations. He shall designate precautions to be followed in granting authorization to proceed in the form of a hot work permit.

Hot work permits must be issued when normal fire prevention methods cannot protect workers and additional workers must be assigned to guard against fires.

Upon completion of the hot work, welders must mark the hot metal or provide some way to warn workers of the hazard.

Types of Welding

Oxygen- fuel gas welding

Oxygen- fuel gas welding uses heat from a fuel gas and oxygen flame to weld or cut metals. Any worker assigned will be properly trained in the rules and instructions for use and maintenance of the oxygen or fuel gas supply equipment. This will include generators and oxygen or fuel gas destruction piping systems. The introduction of pressurized oxygen into regulators or hoses that contain fuel can cause a fire or explosion. There are different connections for fuel and oxygen. Fuel hoses are usually red and oxygen hoses are normally green- it's very important to NOT MIX fuel and oxygen equipment.

Keep valves closed except when in use. Oxygen equipment increase the potential for ignition- look for signs of oil or hydrocarbons on oxygen equipment and remove them. Do not handle oxygen equipment with oily hands or gloves. NEVER use oxygen to blow dust from clothing or equipment.

Trained workers will inspect welding equipment before use to include checking hoses and regulators for leaks, ensuring equipment that cannot be repaired will be thrown away and replaced. Only trained workers may repair equipment.

Keep walkways clear of hoses and welding leads. Hoses must have flashback arrestors to prevent flashback. Flashback is the shift of a flame upstream of the mixer, usually in the torch or hoses. A flashback arrestor is a device to prevent the spread of a flame upstream. Hoses must be purged individually before lighting the torch for the first time each day and after each cylinder change. Hoses with leaks, burns, worn places or other damage must be repaired or replaced. Cylinders must be equipped with a pressure-reducing regulator. Before a regulator is connected to a cylinder valve, the valve is opened slightly and closed immediately. This is called cracking the valve and is done to clear dirt or dust that may have entered the regulator. The cylinder valve should always be opened slowly to prevent damage to the regulator. If a special wrench in required to close a valve- leave it in position on the stem while the cylinder is in use so the gas flow can be shut off quickly if needed. Pressure reducing regulator must be set to the proper pressure- acetylene regulators must never be set above 15psi. Gas cylinders should NOT be brought into a confined space.

Any welding, cutting or hot work completed in confined spaces require additional precautions. Ventilation, securing cylinders, lifelines, electrode removal, gas cylinders shutoff and warning signs will be addressed before starting hot work.

Before starting hot work:

- Clean the confined space to get rid of leftover chemicals
- Torch valves must be closed
- The fuel gas oxygen supply must be positively shut off at a point outside the confined space when not in use
- Hose must not be left unattended in confined spaces

Never stand in front of the outlet and do NOT place anything on top of a fuel gas cylinder when in use because you can cause damage to the safety device and interfere with the quick closing valve.

Because of the explosiveness of cylinders and their contents cylinders must be kept far enough away from the actual welding or cutting so that sparks or flames cannot reach them. If this is not possible fire-resistant shields must be used.

Arc welding

Arc welding joins metals using heat created by an electric arc. Workers MUST be trained, qualified and authorized before doing any arc welding. Arc welding equipment must be maintained to factory specifications ensuring covers and guards are in place, ensuring dust and debris do not build up, systems are not modified with manufacturer approval and arc welding machines are properly grounded.

Training will be used to ensure arc welding is completed safely and not done in wet areas.

If electrode holders need to be left unattended- remove the electrodes and place or protect the holders so they cannot make electrical contact with workers or object that could conduct electricity.

DO NOT dip hot electrode holders in water- this exposes the arc welder to electric shock.

The equipment of machine's output must be turned off or de-energized when the arc welder or cutter leaves their work or stops for any amount of time or if the machine needs to be moved.

Any faulty or defective equipment will be reported to the supervisor as soon as possible with the equipment removed from service.

Resistance welding

Resistance welding joins together metal using pressure and heat from an electric current. This work becomes part of the electric circuit. Workers completing this work will be properly trained, qualified and authorized before starting.

Inspect the welding cables before use. Cables may not be wrapped around any part of the body, cannot be spliced within 10 feet of the holder and any damaged insulation must be repaired or replaced.

Cables will be joined together using connections specifically designed for that purpose. If cables are damaged, they must be repaired or replaced.

Grounding

The frame or case of a welding machine must be grounded according to OSHA's electrical standard expect in the case of engine driven machines. All ground connections must be in good condition.

Grinding can be hazardous if proper safety precautions are not followed. When grinding the proper PPE must be worn, you may not wear loose clothing and do not throw sparks or grindings at other workers.

Inspect the grinder prior to use to ensure all parts are present and in good condition with insulation intact on the power cord.

Contamination

The requirements have been established on the basis of the following three factors in arc and gas welding which govern the amount of contamination to which welders may be exposed:

- Dimensions of space in which welding is to be done (with special regard to height of ceiling).
- Number of welders
- Possible evolution of hazardous fumes, gases, or dust according to the metals involved.
    - When the evolution of gasses, fumes, or dust occurs. Then exhaust or general ventilating systems shall be provided and arranged to keep the amount of toxic fumes, gasses, or dusts to a minimum. Also, proper PPE is required respiratory protection is required when hot work is being completed on the following: lead base metals, zinc, cadmium, mercury, beryllium, or exotic metals or paints not listed here.

Operation and maintenance of the equipment is the responsibility of the operator. Before any operations all connections to the machine shall be checked to make certain they are properly made. The work lead shall be firmly attached to the work; magnetic work clamps shall be freed from adherent metal particles of spatter on contact surfaces. Coiled welding cables shall be spread out before use to avoid serious overheating and damage to insulation.

Grounding of the equipment shall be checked. Special attention shall be given to safety ground connections of portable machines.

There shall be no leaks of cooling water, shielding gas or engine fuel.

It shall be determined that proper switching equipment for shutting down the machine is provided.

All equipment operators shall follow manufactures instructions and printed rules.

The operator should report any equipment defect or safety hazard to his supervisor and the use of the equipment shall be discontinued until safety has been assured. Repairs shall be made only by qualified personnel. Any machine which may have become wet shall be thoroughly dried and tested before being used.

PPE

Any worker doing welding or hot work should wear heavy cotton long sleeve shirt and pants, leather gloves and a cotton welding cap. Arc welding requires an ANSI-approved welding hood with proper tinted filter glass in place.

All PPE must be free of holes and flammable liquids. Specialized gloves will be worn by welders and helpers specifically designed for hot work. Specialized, protected ANSI-approved eyewear must be worn at all times. Eyewear is specific to the type of hot work being completed.

Natural ventilation is used to protect workers welding outdoors but a competent person must determine if mechanical ventilation is needed before work begins indoors to protect workers from breathing welding fumes from metals such as lead, cadmium, mercury or nickel. The toxic fumes from welding and cutting can be harmful and cause serious health problems Heavy metal fumes can be fatal. Oxygen is NEVER used for ventilation. Different types of respirators are used depending on the work and materials involved.

First Aid

First aid kits and eyewash stations must be readily available. Washing eyes with sterile eyewash during and at the end of each shift will help with small particles that may stay in the eye.

Someone on site must be trained in first aid and CPR.

Good personal hygiene will be practiced while doing hot work. No eating or drinking near hot work operations and showering as soon as possible after the job is finished.