JOBSITE SAFETY & HEALTH MANUAL

T&N Van Service

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INJURY & ILLNESS PREVENTION PROGRAM

T&N Van Service

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TAB 1: SAFETY & HEALTH RESPONSIBILITIES, POLICIES, AND PROCEDURES

1.1 INTRODUCTION

T&N Van Service has developed and implemented this written Injury and Illness Prevention Program (IIPP) as part of our health and safety program. The work performed by T&N Van Service personnel is varied, in both nature and location. Under all circumstances, it is the intent of T&N Van Serviceto:

- provide a safe and healthful work environment for employees, and
- comply with the requirements set forth by the Occupational Safety & Health Administration

This IIPP along with the other T&N Van Service written safety & health programs will be readily available to all employees. Hard copies are located the main office. Lancaster Safety Consulting, Inc. also retains electronic copies.

1.2 POLICY STATEMENT

It is T&N Van Service's belief that our employees are our most important asset and the preservation of employee Safety and Health must remain a constant consideration in every phase of our business. We will provide the resources necessary to manage, control, or eliminate all safety and health hazards.

All employees are responsible for working safely and productively, as well as recognizing and being aware of hazards in their work areas. Employees are also responsible for following safe work practices, including the use of Personal Protective Equipment (PPE) where necessary.

It is our belief that any safety and health program must have total employee involvement.

Therefore, this program has management's highest priority, support, and participation.

PRODUCTION IS NOT SO URGENT THAT WE CANNOT TAKE TIME TO PERFORM OUR WORK SAFELY.

Russel Taddei Jr.

T&N Van Service Owner

1.3 EMPLOYEE RESPONSIBILITIES

Although OSHA does not cite employees for violations of their responsibilities, each employee "shall comply with all occupational safety and health standards and all rules, regulations, and orders issued under the OSH Act that are applicable. Employee responsibilities and rights in states with their own occupational safety and health programs are generally the same as for workers in states covered by Federal OSHA. An employee should do the following:

- Read the OSHA Poster at the jobsite.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations, and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the Supervisor.
- Report any job-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

I have read and understand my responsibilities under the OSHA standards and T&N Van Service's policies and procedures and agree to abide by them. I have also had the duties of the position which I have accepted explained to me, and I understand the requirements of the position. I understand that any violation of the above policies is reason for disciplinary action up to and including termination.

Employee Name (Print)	Employee Signature	Date

1.4 GOAL

Safety begins at the top and progresses downward throughout the company. The primary goal of T&N Van Serviceis to continue operating a profitable business while protecting employees from workplace-related injuries, illness or harm. This can be achieved in part by delegating responsibility and accountability to all involved in this company's operation as follows:

- **Responsibility:** Having to answer for activities and results.
- **Accountability:** The actions taken by management to ensure the performance of responsibilities.

In other words, to reach our goal of a safe workplace everyone needs to take responsibility and be held accountable.

Benefits of achieving our goals are:

- Minimizing of injuries and accidents
- Minimizing the loss of property and equipment
- Elimination of potential fatalities
- Elimination of potential permanent disabilities
- Elimination of potential OSHA citations and fines
- Reductions in workers' compensation costs
- Reductions in operating costs
- Having the best Safety and Health conditions possible in the workplace.

1.5 MANAGEMENT COMMITMENT

The management of T&N Van Serviceis committed to the company's safety policy, and providing direction and motivation by:

- Appointing a Safety Coordinator.
- Establishing company safety goals and objectives.
- Developing and implementing written Safety and Health programs.
- Ensuring total commitment to our Safety and Health programs.
- Facilitating employees' safety training.
- Establishing responsibilities for management and employees to follow.
- Ensuring that management and employees are held accountable for performance of their safety responsibilities.
- Establishing and enforcing disciplinary procedures for employees violating safety rules.
- Reviewing the Safety and Health program annually, and revising or updating as needed.

1.6 ASSIGNMENT OF RESPONSIBILITY

SAFETY COORDINATOR

T&N Van Service has designated: _____ as Safety Coordinator. The Safety Coordinator's office and cell phone numbers are:

- **Office:** _____
- **Cell:** _____

It is the duty of the Safety Coordinator to assist the Supervisor and all other levels of Management in the initiation, education, and execution of an effective safety program including the following:

- Introducing the safety program to new employees.
- Following up on recommendations, suggestions, etc., made at safety meetings. All topics of safety concerns must be documented accordingly.
- Assisting personnel in the execution of standard policies.
- Conducting safety inspections on a periodic basis.
- Addressing all hazards or potential hazards as needed.
- Performing accident investigations and preparing accident reports.
- Maintaining adequate stock of first aid supplies and other safety equipment to ensure their immediate availability.
- Making sure there is an adequate number of qualified first aid certified people on the work site.
- Becoming thoroughly familiar with OSHA regulations and local and state safety codes.
- Defining the responsibilities for safety and health of all subordinates and holding each person accountable for their results through the formal appraisal system and where necessary, disciplinary procedures.
- Emphasizing to employees that accidents create unnecessary personal and financial losses.

SUPERVISORS

The supervisors are responsible for establishing an operating atmosphere that ensures that safety and health is managed in the same manner and with the same emphasis as production, cost, and quality control.

- Regularly emphasizing that accident and health hazard exposure prevention are not only moral responsibilities, but also a condition of employment.
- Identifying operational oversights that could contribute to accidents which often result in injuries and property damage.
- Participating in safety and health related activities, including routinely attending safety meetings, reviews of the facility, and correcting employee behavior that can result in accidents and injuries.
- Spending time with each person hired to explain the hazards and safety policies relating to his/her particular work.
- Ensuring that initial orientation of "new hires" is carried out by the Safety Coordinator.

- Making sure that, if a “Competent Person” is required, one is present to oversee operations and instruct employees when necessary.
- Never short-cut safety for expediency, nor allow workers to do so.
- Enforcing safety rules consistently, and following company's discipline and enforcement procedures.
- Conducting a daily, jobsite safety inspection and correcting noted safety violations.

EMPLOYEES

It is the duty of each and every employee to know the safety rules, and conduct his work in compliance with these rules. Disregard of the safety and health rules shall be grounds for disciplinary action up to and including termination. It is also the duty of each employee to make full use of the safeguards provided for their protection. Every employee must receive an orientation when hired and receive a review of the company’s Safety and Health Program. Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures.
- Signing the Policies and Procedures Acknowledgement (see form above).
- Wearing Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury.
- Wearing suitable work clothes as determined by the Supervisor.
- Performing all tasks safely as directed by their Supervisor.
- Reporting ALL injuries, no matter how slight to their Supervisor immediately, and seeking treatment promptly.
- Knowing the location of first aid, firefighting equipment, SDS log, and other safety devices.
- Attending any and all required safety and health meetings.
- Not performing potentially hazardous tasks, or using any hazardous material until properly trained, and following all safety procedures when performing those tasks.
- Stopping and asking questions if ever in doubt about the safety of any operation

1.7 STOP WORK AUTHORITY

As part of the T&N Van Service health & safety policy, it is the responsibility of every employee performing work for T&N Van Serviceto exercise this Stop Work Authority Policy whenever any person in the work area is at risk of injury. T&N Van Service strives to provide a culture where Stop Work Authority is exercised freely.

Key elements of this program include:

- Employees will receive Stop Work Authority training before initial assignment. Training will be documented including the employee's name, the dates of training, and the subject.
- Employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of health & safety may exist.
- Employees are responsible to initiate a Stop Work intervention when warranted and management is responsible to create a culture where Stop Work Authority is exercised freely
- Employees will not face any form of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority.
- This Stop Work Authority policy will be executed in a positive manner.

The following procedure must be initiated whenever an unsafe condition is identified:

- The Stop Work Intervention will be initiated and coordinated through the supervisor
- All affected personnel and supervision will be notified of the Stop Work Issue
- Once work has been stopped, no work may resume until all stop work issues and concerns have been adequately addressed.
- Work may resume only when it has been deemed safe to continue
- After the Stop Work Intervention has been initiated and closed, a follow-up will be completed to assess the effectiveness of the program.

Stop Work Issuance Documentation

- A Stop Work Issuance document will be completed to document the circumstances leading to the Stop Work Intervention.
- Stop Work reports will be reviewed by supervision in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learning

Stop Work Report

Section 1: Stop Work Issuance			
Location Of Operation		Date / Time	
Supervisor		Phone	
Individual Initiating Stop Work			
Individual Performing Work			
Work Operation Or Condition (Include Names Of Individuals Performing Work)			
Hazard (As Stated By Individual Initiating Stop Work)			
Additional Observations			

Section 2: Date / Time Informed			
Supervisor		Directorate ESH Coordinator	
Building / Area Manager		Associate Laboratory Director	
Division / Department Head		Chief Safety Officer	
Facility Manager			

Section 3: Follow-Up Action

Section 4: Restart Concurrence			
Supervisor		Date	
Owner Client		Date	

Section 5: Restart Authorization			
General		Date	

Section 6: Restart Release			
Owner Client		Date	

1.8 OSHA MULTI-EMPLOYER WORKSITE POLICY

On multi-employer worksites, more than one employer may be citable for a hazardous condition that violates an OSHA standard. The following explains how OSHA views multi-employer worksites.

- **The Creating Employer:** The employer that caused the hazardous condition that violates an OSHA standard. Employers must not create conditions that violate OSHA standards. Any employer that does so is citable, even if the only employees exposed are those of other employers at the site.
- **The Exposing Employer:** The employer whose own employees are exposed to the hazard. Exposure could be observed by an inspector or unobserved (but determined through witness statements or other evidence). In addition, citations may be issued when the possibility exists that an employee could be exposed to a hazard because of work patterns, past circumstances, or anticipated work requirements.
- **The Correcting Employer:** An employer who is engaged in a common undertaking as the exposing employer, and is responsible for correcting the hazard. This usually occurs where an employer is given the responsibility of installing and/or maintaining particular safety/health equipment or devices. The correcting employer must exercise reasonable care in preventing and discovering violations and meet its obligations of correcting the hazard.
- **The Controlling Employer:** An employer who has general supervisory authority over the worksite, and has the power to correct safety and health violations or require others to correct them. Control can be established by contract or, in the absence of explicit contractual provisions, by the exercise of control in practice. A controlling employer must exercise reasonable care to prevent and detect violations on the site. The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own employees. This means that the controlling employer is not normally required to inspect for hazards as frequently or to have the same level of knowledge of the applicable standards or of trade expertise as the employer it has hired.

If the employer falls into one of these categories, they have obligations with respect to OSHA requirements. OSHA inspectors must determine if employer actions are sufficient to meet those obligations. The extent of the actions required of employers varies based on which category applies. Note that the extent of the measures that a controlling employer must take to satisfy its duty to exercise reasonable care to prevent and detect violations is less than what is required of an employer with respect to protecting their own employees.

1.9 SAFETY RULES AND PROCEDURES

The following safety rules & procedures have been set forth by T&N Van Serviceas minimum guidelines. If a situation arises that there is not a pre-established rule, the employee is expected to take all precautions and measures available to them to act in a safe manner.

- No employee is expected to undertake a job until that person has received adequate training.
- All employees shall be trained on potential hazards that they could be exposed to and how to protect themselves.
- No employee is required to work under conditions which are unsanitary, dangerous or hazardous to their health.
- Only qualified, trained personnel are permitted to operate machinery or equipment.
- All injuries must be reported to your supervisor.
- Manufacturer's specifications /limitations /instructions shall be followed.
- Particular attention should be given to new employees and to employees moving to new jobs or doing non-routine tasks.
- All OSHA posters shall be posted.
- Emergency numbers shall be posted and reviewed with employees
- Employees working in areas where there is a possible danger of head injury, excessive noise exposure, or potential eye and face injury shall be protected by Personal Protection Equipment (PPE).
- All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.
- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.
- Electrical equipment must be free from recognized hazards that are likely to cause death or serious physical harm to employees.
- All places of employment shall be kept clean, the floor of every workroom shall be maintained, so far as practicable, in a dry condition; standing water shall be removed. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats or other dry standing places or appropriate waterproof footgear shall be provided.
- To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, and holes and openings.
- All floor openings, open sided floor and wall openings shall be guarded by standard railings and toe boards or cover.
- The employer shall comply with the manufacturer's specifications and limitations applicable to the operation of any and all cranes and derricks.
- A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more, and no ramp, runway, sloped embankment, or personnel hoist is provided.

1.10 DISCIPLINARY POLICY

T&N Van Service's disciplinary policy is comprised of a corrective action process aimed to document and correct undesirable employee behavior, including violations of safety rules. Under the CBA (collective bargaining agreement) supersedes these policies for the union workers. The safety coordinator, supervisors, and management are responsible for enforcement of this disciplinary policy.

Major elements of this policy include:

- Physical inspections by company officials indicating violations showing overall lack of commitment to company safety goals shall be under the same level of disciplinary actions.
- Constructive criticism/instruction by the supervisor to educate and inform employees of appropriate safety performance and behavior.
- Correcting employee's negative behavior to the extent required.
- Informing the employee that continued violation of company safety policies may result in termination.
- Written documentation of disciplinary warnings and corrective action taken.

Safety violations include, but are not limited to:

- Not following safety procedures, guidelines or rules
- Horse play
- Failure to wear selected PPE
- Abuse of selected PPE

Depending on the facts and circumstances involved with each situation, the company may choose any corrective action including immediate termination. However, in most circumstances the following steps will be followed:

1. ***Verbal Warning*** informally documented (note to project or supervisor file), by a supervisor or safety coordinator for minor infractions of company safety rules. A supervisor or safety coordinator must inform the employee what safety rule or policy was violated and how to correct the problem.
2. ***Written Warning***, documented in employee's file. Repeated minor infractions or a more substantial safety infraction requires issuance of a written warning. Every attempt should be made to re-educate the employee on the desired performance. The employee should acknowledge the warning by signing the document before it is placed in their personnel file.
3. ***Suspension*** for three (3) working days. If employee fails to appropriately respond or management determines the infraction is sufficiently serious.
4. ***Termination*** for repeated or serious safety infractions.

Disciplinary Action Form

Employee Name: _____ Employee Job Title: _____

Supervisor Name: _____ Today's Date: _____

Date/Time of Incident:		**Location:**	
Description of incident:			
Witnesses if any:			
Policy/Policies violated:			
Disciplinary action to be taken:			
Consequence(s) if employee repeats this offense:			
If the employee has offered an explanation of his/her conduct, detail explanation here:			

I have read the above, and I understand the consequences if I repeat my offense.

_____ _____

Signature of Employee Date

_____ _____

Signature of Supervisor Date

1.11 SUBCONTRACTOR MANAGEMENT PLAN

At a minimum, T&N Van Service requires that other employers under their control be pre-qualified. Subcontractors must identify, provide, and/or implement the following for review to include at the company's discretion. A health & safety program, including written procedures for controlling job-related hazardous operations such as cranes, scaffolding, trenches, confined space, hot work, explosives, hazardous materials, leading edges, etc.

- A safety coordinator and competent person
- A project safety analysis for the job
- List of work activities requiring planning, design, inspection, or supervision by an engineer, competent person, or other professional
- Documentation for required health & safety training
- Signed independent contractor agreement
- Hazardous chemicals to which jobsite workers may be exposed to while in the workplace along with SDSs, measures to minimize the possibility of exposure, and procedures to follow if workers are exposed
- An emergency response plan
- Other documentation such as permits, hazard reports, inspections, uncorrected hazards, accident/incident/near miss reports, etc.
- Safety statistics

T&N Van Service will utilize the submitted documents to analyze the subcontractor's safety metrics to determine which subcontractors will be utilized. Subcontractors must submit a signed copy of the subcontractor agreement on the following page to document subcontractor responsibility for OSHA compliance.

Subcontractors are expected to participate in pre-job, tailgate, and safety meetings. They will also be included in job safety analyses, hazard assessments, and job safety inspections. Post-job safety performance reviews will be conducted to analyze the performance.

Subcontractor Prequalification Form

Company Information	
Legal Company Name	
Address:	
City, State, Zip	
Federal ID #	
Contact Person	
Telephone	
Fax	
Email	

Safety Performance Statistics

	Current _____	Last Year _____	2 Years _____	2 Years _____
Experience Modification Rating (EMR)				
Average Number Of Employees				
Hours Worked				
# Of Recordable Cases				
(G) # Of Deaths				
(H) # Of Cases With Days Away From Work				
(I) # Cases With Job Transfer Or Restriction				
(J) # Other Recordable Cases				
(K) # Of Days Away From Work				
(L) # Days On Job Transfer Or Restriction				
3-year Total Recordable Incidence Rate (TRIR)		(Total # of cases for all 3 years) x 200,000 / Total number of employee hours for all 3 years		

Safety Questionnaire	
Does your company have a written safety program? If yes, please attach as PDF or .doc file	☐ Yes ☐No
Does your company perform safety training for all employees? If yes, is documentation available?	☐ Yes ☐No ☐ Yes ☐No
Does your company have a new hire orientation process for all new hires?	☐ Yes ☐No
Do you hold safety meetings? If yes, how frequently?	☐ Yes ☐No _____

OSHA Inspections	
Have you had an OSHA inspection in the past 5 years? If yes, were you issued citations?	☐ Yes ☐No ☐ Yes ☐No
Please provide any additional details regarding citations issued:	

Safety Program Overview
Please provide any additional information that is pertinent to your safety program below or attach additional documentation.

Certification	
Name:	
Signature:	
Title	
Date	

Subcontractor Agreement

_____(Company Name)_____ hereby acknowledges that they are a subcontractor of T&N Van Service, and therefore agrees to comply with all local, state, and federal laws and regulations, along with policies and procedures that have been established by T&N Van Service

It is further understood that in the event of an OSHA site inspection, as related to the work that is being performed, it is the responsibility of _____(Company Name)_____ to immediately correct any safety violations and/or pay any fines that may be levied by OSHA for safety violations.

Agreed By (Print): _____

Signature: _____ Date: _____

1.12 Drug & Alcohol Policy

T&N Van Serviceis dedicated to the health & safety of our employees. Drug and/or alcohol use may pose a serious threat to employee health and safety. Therefore, it is our policy to prevent the use of drugs and abuse of alcohol from having an adverse effect on our employees. Key aspects of our policy include:

- All employees are subject to random and post-accident drug and/or alcohol testing. Random testing is conducted by an approved facility.
- A positive test result will result in immediate termination of employment.
- Any employee who refuses to submit to drug and/or alcohol testing is subject to immediate termination of employment.

Drug & Alcohol Prohibitions:

- Any drug use that could affect the performance of safety-sensitive functions is prohibited. This drug prohibition includes:
    - Being under the influence of any drug while performing functions for T&N Van Service, except when administered by, or under the instructions of, a licensed medical practitioner, who has advised the employee that the substance will not affect the employee's ability to safely perform their job functions
    - Testing positive for drugs
- Any alcohol misuse that could affect performance of safety-sensitive functions is prohibited. This alcohol prohibition includes:
    - Use while performing functions for T&N Van Service
    - Use during the 4 hours before performing safety-sensitive functions for T&N Van Service
    - Reporting for duty or remaining on duty with an alcohol concentration of 0.04 or greater
    - Use of alcohol for up to 8 hours following an accident or until the employee undergoes a post-accident test

All employees will inform their supervisor of any therapeutic drug use prior to performing a safety-sensitive function. He/she may be required to present written evidence from a health care professional which describes the effects such medications may have on the driver's ability to perform his/her tasks.

Definitions:

- Alcohol means the intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol.
- Alcohol use means the consumption of any beverage, liquid mixture, or preparation, including any medication, containing alcohol.
- Controlled substances mean those substances identified in 49 CFR, Section 40.85, and include:
    - Marijuana
    - Cocaine
    - Opiates
    - Amphetamines

    - Phencyclidine (PCP).
- Drug means any substance (other than alcohol) that is a controlled substance as defined in this policy and 49 CFR Part 40.
- Refusal to submit includes:
    - Failing to appear for any test within a pre-determined reasonable time frame after being directed to do so by the company.
    - Failing to cooperate with any part of the testing process
    - Failing to provide adequate breath or urine sample
    - Conducting any activity that obstructs the testing process

1.13 OSHA Inspection Guidelines

Front Desk: (Reception Area)

- Ask to see the OSHA inspector(s) official government identification
- Contact the appropriate Company official immediately
- Name of the authorized Company official: _____
    - Office phone: _____ Extension: _____
    - Cell phone: _____
- Ask the OSHA inspector(s) to wait until the representative above has been reached.

Note: "The inspection shall not be delayed unreasonably to await the arrival of the employer representative. This delay should not exceed one hour." (OSHA Field Inspection Reference Manual, Section 6, Chapter II, A 2.b. (2))

Company Representative:

- Contact Lancaster Safety Consulting Inc. at (888) 403-6026 if you desire. A Lancaster Safety consultant can speak with the OSHA official(s) by phone for the purpose of providing an overview of your occupational health and safety program.
- After meeting the OSHA official(s), an opening conference (sit-down meeting) shall be held. The OSHA official(s) should explain the basis of the inspection, (Accident investigation, complaint, referral, follow-up, or planned local/national emphasis program). You should be advised if the inspection is partial or complete. The opening conference is an important opportunity for the employer to demonstrate the company's "Good Faith" efforts to provide a safe workplace. Discuss safety policies and practices with the compliance officer(s). Present the safety manuals. Emphasize the worker training verification logs, and your new hire training procedures. You should also present OSHA 300 logs, safety committee paperwork, and any other written materials that demonstrate your company's "Good Faith" efforts to comply with the applicable OSHA standards.
- Upon completion of the opening conference, accompany the OSHA inspector(s) on a walk-through inspection of your facility. (Advise the inspector(s) on any areas of your facility that have been predetermined as "trade secret" areas, if applicable). During this walk-through, the inspector(s) will advise you of potential health and safety violations. If possible, take immediate, corrective action to correct hazards while the inspector(s) are present. NOTE: The inspector(s) have the right to interview workers.
- After the walk-through, a closing conference shall be held. The inspector(s) will provide an overview of their findings, and advise you if citations are likely to be issued. (No citations are issued on the same day of an OSHA inspection. OSHA has up to 6-months to issue citations.) The closing conference provides the employer with another opportunity to demonstrate "good faith". Take notes on the inspector(s) closing comments.
- Contact Lancaster Safety Consulting, Inc. at **(888) 403-6026** upon conclusion of the inspection.

TAB 2: INJURY & ILLNESS REPORTING & PREVENTION

2.1 ACCIDENT INVESTIGATION

Thorough accident investigations will help to determine why accidents occur, where they happen, and any trends that might be developing. Such identification is critical to preventing and controlling hazards and potential accidents. All incidents will be investigated to the appropriate level with regards to incident severity using a root cause analysis process or other similar method.

When an incident occurs, the following sequence of reporting events will be followed:

1. If medical attention is required, call 911 or alert the first responder
2. Alert the supervisor on site
3. Alert all personnel necessary to control further loss
4. Report all fatalities to OSHA within 8 hours of the incident.
5. Report all work-related inpatient hospitalizations, amputations, or losses of an eye to OSHA within 24 hours of the incident.
6. If working at another company's location, report all incidents to the owner client within 24 hours of the incident.

After an incident has occurred, proper actions must be taken to prevent further loss. Proper equipment to assist in conducting an incident investigation will be available to persons responsible for conducting the investigation.

Individual responsibilities for incident investigation must be assigned prior to the occurrence of an incident. Personnel are trained in their roles and responsibilities for incident response and investigation techniques. Employees who are assigned the role of first responder must be trained and qualified in first aid techniques to control the degree of loss during the immediate post-incident phase.

SUPERVISORS

- Provide first aid, call for emergency medical care if required.
- If further medical treatment is required, arrange to have an employer representative accompany the injured employee to the medical facility.
- Secure area, equipment and personnel from injury and further damage.
- Contact Safety Coordinator.

SAFETY COORDINATOR

- Investigate, identify, and document all of the evidence involved with the incident. Collect, preserve, and secure all facts, employee and witness statements; take pictures and physical measurements of incident site and equipment involved.
- Complete an incident investigation report form (see following pages), a detailed narrative, and the necessary workers' compensation paperwork within 24 hours whenever possible.
- Ensure that corrective action to prevent a recurrence is taken, assign responsibilities for corrective actions, and track the corrective actions to closure.

- Discuss incident, where appropriate, in safety and other employee meetings with the intent to prevent a recurrence.
- Discuss incident with the supervisor and other management.
- If the injury warrants time away from work, ensure that the absence is authorized by a physician and that you maintain contact with your employee while he/she remains off work.
- Monitor status of employee(s) off work, maintain contact with employee and encourage return to work even if restrictions are imposed by the physician.
- When injured employee(s) return to work they should not be allowed to return to work without "return to work" release forms from the physician. Review the release carefully and ensure that you can accommodate the restrictions, and that the employee follows the restrictions indicated by the physician.

Documentation of the incident is an important step in preventing future occurrences. Gathering facts, witness statements, and taking photos and sketches of the accident site provides a solid base to begin the review process. Once all documentation is gathered and the accident report has been written, management will assess the results, and place any necessary changes to processes into effect to prevent a reoccurrence of similar events. Any lessons learned and changes to processes will be communicated to employees.

Accident/Incident Investigation Form

Date/Time of Incident:		**Jobsite:**	
Injured Person:			
Name:		**Title:**	
Address:		**Hire Date:**	
City, State:		**Length of Time in Current Position:**	
Phone:		**Supervisor:**	

Employee Classification: ❑ Full Time ❑ Part Time ❑ Contract ❑ Temporary

Description of Injury:

Nature of Injury/Injured Part of Body:

❑ Bruising ❑ Dislocation ❑ Strain/Sprain ❑ Scratch/Abrasion ❑ Internal
❑ Fracture ❑Foreign Body ❑ Laceration/Cut ❑ Burn/Scald ❑ Chemical Reaction
❑ Amputation ❑ Death ❑ Other (describe): _____

Treatment Provided:

❑ First Aid - If First Aid was provided, please indicate the treatment performed:

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

❑ Other treatment, please describe:

❑ Emergency Room ❑ Physician's Office ❑ Hospitalization	**Treating Physician/Facility:**	
	Address:	

Description of Incident:
What was the employee doing just before the incident occurred? Describe the activity, as well as the tools, equipment or material the employee was using. Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."
What happened? Tell how the injury occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."
What object or substance directly harmed the employee? Examples: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.
Other Relevant Information (attach photos, sketch of incident scene, etc.)**:**

Root Cause Analysis (Check All That Apply)		
Conditions: ☐ Unsafe Conditions ☐ Poor work area design or layout ☐ Congested work area ☐ Hazardous substances ☐ Fire or explosion hazard ☐ Inadequate ventilation ☐ Slippery conditions ☐ Excessive noise ☐ Improper material storage ☐ Improper loading or placement	**Work Practices:** ☐ Improper work technique ☐ Improper PPE or PPE not used ☐ Hazards not identified ☐ Guards not used ☐ Improper lifting ☐ Poor housekeeping ☐ Servicing machinery in motion ☐ Inadequate workplace inspection ☐ Improper tool or equipment ☐ Improper maintenance ☐ Defective tools/equipment	**Disciplinary Infraction:** ☐ Lack of written procedures or policies ☐ Operating without authority ☐ Safety rules not enforced ☐ Safety rule violation ☐ Operating at improper speeds ☐ Horseplay ☐ Drug or alcohol use ☐ Unsafe act of others ☐ By-passing safety devices ☐ Unsafe Acts
Planning & Training: ☐ PPE unavailable ☐ Failure to warn or secure ☐ Inadequate job planning ☐ Inadequate guarding of hazards ☐ Inadequate equipment ☐ Unsafe design or construction ☐ Insufficient lighting ☐ Inadequate fall protection	☐ Poor process design Insufficient worker training ☐ Insufficient foreman training ☐ Insufficient knowledge of job Management Deficiencies ☐ Inadequate supervision ☐ Inadequate hiring practices Unrealistic scheduling ☐ Unnecessary haste	Other: ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____

Corrective Actions

Contributing Factor	Corrective Action	Responsible Party	Completion Date

Lessons Learned	
Initial Report Completed by:	
Printed Name:	Date:
Signature:	Job Title:
Management Review:	
Printed Name:	Date:
Signature:	Job Title:
Final Review:	
I certify that all Corrective Actions have been completed.	
Printed Name:	Date:
Signature:	Job Title:

2.2 NEAR-MISS REPORTING

A near-miss is similar to an accident; however, a near miss does not result in an injury or property damage. No matter how trivial they are, near misses should be reported to the supervisor in the same manner as accidents are reported. Reporting near misses in a timely manner can help to determine how to prevent a recurrence that could result in a serious injury.

Nothing is learned from unreported near misses. Hazards, causes and contributing factors are lost if not reported. Employees who do not take the time to report near misses they experience may not learn from them and neither will others who were not involved. The fact that many near misses come within inches of being disabling injury accidents makes failing to report them all the more serious.

Reasons that employees typically do not report near misses:

- Fear of supervisor's disapproval
- Production time
- Desire to not have the near miss documented on the employee's records
- Embarrassment from coworkers' ridicule or sarcasm
- Failure to understand the importance of near miss reporting
- Inability to recognize the damage that could have resulted

Important questions to ask when investigating a near miss include:

- What are the circumstances surrounding the near miss?
- Is there a safety rule covering the situation?
- If so, did the person involved know the rule?
- Were any safety devices or PPE/clothing not used or used incorrectly?
- Have there been other near misses of the same type?
- Was the employee aware of the hazard?
- Did the employee know the safe and proper procedure?

Taking the opportunity to report near misses can mean a much safer and healthier work environment for you and your coworkers and can also mean going home as you came in, in one piece! Employees are required as part of their job duties to report all near misses to their supervisor.

Near-Miss Investigation Form

Date/Time:		**Jobsite:**	
Injured Person:			
Name:		**Title:**	
Address:		**Hire Date:**	
		Length of Time in Current Position:	
Phone:		**Supervisor:**	

Employee Classification: ❑ Full Time ❑ Part Time ❑ Contract ❑ Temporary

Description of Incident:

What Happened?

Damaged Property:

Root Cause Analysis (Check All That Apply)

Conditions:

- ☐ Unsafe Conditions
- ☐ Poor work area design or layout
- ☐ Congested work area
- ☐ Hazardous substances
- ☐ Fire or explosion hazard
- ☐ Inadequate ventilation
- ☐ Slippery conditions
- ☐ Excessive noise
- ☐ Improper material storage
- ☐ Improper loading or placement

Work Practices:

- ☐ Improper work technique
- ☐ Improper PPE or PPE not used
- ☐ Hazards not identified
- ☐ Guards not used
- ☐ Improper lifting
- ☐ Poor housekeeping
- ☐ Servicing machinery in motion
- ☐ Inadequate workplace inspection
- ☐ Improper tool or equipment
- ☐ Improper maintenance
- ☐ Defective tools/equipment

Disciplinary Infraction:

- ☐ Lack of written procedures or policies
- ☐ Operating without authority
- ☐ Safety rules not enforced
- ☐ Safety rule violation
- ☐ Operating at improper speeds
- ☐ Horseplay
- ☐ Drug or alcohol use
- ☐ Unsafe act of others
- ☐ By-passing safety devices
- ☐ Unsafe Acts

Planning & Training:

- ☐ PPE unavailable
- ☐ Failure to warn or secure
- ☐ Inadequate job planning
- ☐ Inadequate guarding of hazards
- ☐ Inadequate equipment
- ☐ Unsafe design or construction
- ☐ Insufficient lighting
- ☐ Inadequate fall protection
- ☐ Poor process design
- Insufficient worker training
- ☐ Insufficient foreman training
- ☐ Insufficient knowledge of job
- ☐ Management Deficiencies
- ☐ Inadequate supervision
- ☐ Inadequate hiring practices
- ☐ Unrealistic scheduling
- ☐ Unnecessary haste

Other:

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Corrective Actions

Contributing Factor	Corrective Action	Responsible Party	Completion Date

Lessons Learned	
Initial Report Completed by:	
Printed Name:	Date:
Signature:	Job Title:
Management Review:	
Printed Name:	Date:
Signature:	Job Title:
Final Review:	
I certify that all Corrective Actions have been completed.	
Printed Name:	Date:
Signature:	Job Title:

2.3 EMPLOYEE ACCESS TO MEDICAL RECORDS

The purpose of this program is to provide employees with information of their right to access relevant exposure records to toxic substances or harmful physical agents in their workplace. Under OSHA's standard, Access to Employee Exposure and Medical Records (1910.1020) all employees have the right to obtain these records to prevent or identify potential occupational illnesses. Employees have the right to obtain exposure records as follows:

- A current or former employee who is or may have been exposed to toxic substances or harmful physical agents.
- An employee who was assigned or transferred to work involving toxic substances or harmful physical agents.
- The legal representative of a deceased or legally incapacitated employee who was or may have been exposed to toxic substances or harmful physical agents.
- Designated employee representatives may access employee medical or exposure records and analyses created from those records only in very specific circumstances. Designated employee representatives include any individual or organization to whom an employee has given written authorization to exercise a right of access

TYPES OF EXPOSURES

- Metals and dusts, such as lead, cadmium, and silica.
- Biological agents, such as bacteria, viruses, and fungi.
- Physical stress, such as noise, heat, cold, vibration, repetitive motion, and ionizing and non-ionizing radiation.

DEFINITIONS

Access - The right and opportunity to examine and copy

Designated Representative - Any individual or organization to whom an employee gives written authorization to exercise a right of access. For the purposes of access to employee exposure records and analyses using exposure or medical records, a recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Employee Exposure Record - May contain any of the following:

- Monitoring results of workplace air or measurements of toxic substances or harmful physical agents in the workplace, including personal, area, grab, wipe, or other forms of sampling results.
- Biological monitoring results, such as blood and urine test results.
- Safety data sheets (SDSs) containing information about a substance's hazards to human health.

Medical Records - Records that concern the health status of an employee, and are made or maintained by a physician, nurse, or other health care personnel, or technician.

Employee Medical Record:

- Medical and employment questionnaires or histories.
- Results of medical examinations and laboratory tests.
- Medical opinions, diagnoses, progress notes, and recommendations.
- Descriptions of treatments and prescriptions.
- Employee medical complaints.

EMPLOYER RESPONSIBILITIES

- Preserve and maintain accurate medical and exposure records for each employee.
- Inform workers of the existence, location, and availability of those medical and exposure records.
- Provide information regarding the standard to all employees and where records are available
- Provide records to employees or designated representatives in a reasonable time, place and manner.
- Inform employees of the provision of recordkeeping upon initial assignment and annually thereafter.
- Provide records to employees at no cost.
- Remove personal identifiers (name, address, social security number, payroll number, etc.) from records before access is granted.
- Maintain employee records for the duration of employment, plus 30 years
- Exemptions from keeping records:
    - Physical specimens, such as blood and urine samples
    - Records concerning health insurance claims if they are (1) maintained separately from your medical program and its records, and (2) not accessible by employee name or other personal identifier (e.g., social security number or home address).
    - Records created only for use in litigation that are privileged from discovery.
    - Records created as part of voluntary employee assistance programs, such as records for alcohol and drug abuse or personal counseling, if they are maintained separately from your medical program and its records.
    - Trade secret information involving manufacturing processes or a percentage of a chemical substance in a mixture, as long as you inform health professionals and employees and their designated representatives that you have deleted that information from medical and exposure records. If the exclusion of the trade secret information substantially impairs the evaluation of when and where the exposure occurred, however, you must provide alternative information to the employee consistent with the requirements of 29 CFR Part 1910.1020.
- If the company ceases to do business, then all records all records subject to this section shall be transferred to the successor employer. If there is no successor employer to receive and maintain the records, or intends to dispose of any records required to be preserved for at least thirty (30) years, the company shall notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of the employer's business.

2.4 OSHA Reporting & Recordkeeping

OSHA Emergency Reporting

All incidents must be reported to an appointed company official immediately.

Company Official: _____

Office: _____ Cell: _____

Depending on the nature and severity of the incident, the company official will ensure that the necessary actions are taken (outlined below).

Type of Incident	Reporting/Recordkeeping	Time Frame
Fatality (On-the-Job Death)	Report to OSHA @ 1-800-321-OSHA (6742)	Within 8 hours of the incident.
Work-Related Inpatient Hospitalization Amputations Loss Of An Eye	Report to OSHA @ 1-800-321-OSHA (6742)	Within 24 hours of the incident.
All Incidents	Conduct an accident investigation.	Immediately.
OSHA-Recordable Injuries/Illnesses (As Outlined Below)	Complete OSHA 301 (or equivalent). Enter a log entry on OSHA Form 300.	Within 7 days of the injury or illness.

OSHA Recordkeeping

OSHA recordkeeping is required for any employer with 11 or more employees at any time within the year. If an injury or accident should ever occur, it must be reported to the supervisor as soon as possible. An OSHA 300 log entry and summary report (OSHA 301 form or equivalent) must be maintained for every recordable injury and illness. The entry should be completed within 7 days after the injury or illness has occurred.

An OSHA recordable injury or illness is defined as an injury resulting in loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. First Aid includes:

- Tetanus shots
- Applying Band-aids or butterfly bandages
- Cleaning, flushing or soaking wounds
- Applying Ace bandages and wraps
- Taking non-prescription drugs at non-prescription strength (aspirin, Tylenol, etc.)
- Drilling fingernails/toenails
- Eye patches, eye flushing and foreign body removal from eye with Q-tips
- Finger guards
- Hot or cold packs
- Drinking fluids for heat stress
- Removing of a splinter (other than from the eye)

An annual summary of recordable injuries and illnesses (OSHA 300A) must be posted at a conspicuous location in the workplace from February 1 to April 30 and contain the following information: calendar year, company name, establishment name, establishment address, certifying signature of the highest-ranking company official, title, and date. If no injury or illness occurred in the year, zeroes must be entered on the total line.

The OSHA logs should be evaluated by the employer to determine trends or patterns in injuries in order to appropriately address hazards and implement prevention strategies. OSHA recordkeeping forms must be maintained for a period of 5 years.

Note: The OSHA 300 and 301 logs must be kept confidential.

TAB 3: PRE-TASK PLANNING

3.1 JOB HAZARD ANALYSIS

Hazards-analysis can get pretty sophisticated and go into much detail. Where the potential hazards are significant and the possibility for trouble is quite real, such detail may well be essential. However, for many processes and operations — both real and proposed — a solid look at the operation or plans by a variety of affected people may be sufficient. The easiest and possibly most effective method is using the step-by-step process of the Job Hazard Analysis (JHA), which is sometimes referred to as a Job Safety Analysis (JSA).

Job Hazard Analysis (JHA) is based on the following ideas:

- A specific job or work assignment can be separated into a series of relatively simple steps.
- Hazards associated with each step can be identified.
- Solutions can be developed to control each hazard.

Job Hazard Analysis is a relatively simple process that involves the following four basic steps:

- Select the job to be analyzed. In performing JHA, the term "job" is used to describe a single task or operation workers do as part of their occupation; it is a definite sequence of steps or separate activities that lead to the completion of a work goal.
- Separate the job into its basic steps.
- Identify the hazards associated with each step.
- Control each hazard.

Through this process, responsible officials can determine the safest, most efficient manner of performing a given job. JHA systematically carries out the basic strategy of accident prevention: The recognition, evaluation, and control of hazards.

Once a JHA has been developed, it is prepared in chart form, listing the basic job steps and the corresponding hazards and safe procedures for each step. A completed JHA chart can then be used as a training guide for employees; it provides a logical introduction to the work, its associated hazards, and the proper and safe procedures to be followed.

For experienced workers, a JHA chart is reviewed periodically to maintain safety-awareness on the job and to keep abreast of current safety procedures. Review is also useful for employees who have been assigned new or infrequent tasks.

Job Hazard Analysis Form

Job Task: _____ **Date:**

Job Location: _____ **Prepared by:** _____

Supervisor: _____ **Reviewed by:** _____

Approved by:

Required and/or Recommended Personal Protective Equipment:

☐ Hard Hat ☐ Safety Glasses ☐ Steel Toed Boots ☐ High-Vis Vest ☐ Fall Arrest Harness

☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____

Sequence of Basic Job Steps	**Potential Accidents or Hazards**	**Recommended Safe Job Procedure**
Beware of being too detailed. Record only the information needed to describe each job action. Rule of thumb, no more than 10 steps/tasks being evaluated.	*Hazard Classification Categories: struck by/against; caught in/between; slip, trip, or fall; overexertion; ergonomic (awkward Postures, excessive Force, vibration, repetitive motion)*	*Hazard Control Categories: Engineer out (new way to do, change physical conductions or work procedures, adjust/modify/replace work station components/tools, decrease performance frequency); personal protective equipment (PPE); training; improve housekeeping*

Risk Analysis Form

Project #: _____ Client Name: _____ Project Location: _____

Date of Analysis: _____ Contractor: _____ Sub-Contractor: _____

Date of Work: _____ Project Name: _____

Hazard Risk Rating

What are the consequences of this hazard occurring? Consider what the most probable consequence is (below) with respect to this work hazard.	What is the likelihood (below) of the hazard consequence in Step 1 occurring?	1. Take Step 1 rating and select the correct column. 2. Take Step 2 rating and select the correct line. 3. Use the risk score where the two ratings cross on the matrix below. **H = High, S = Serious, M = Medium, L = Low**

Extreme	Multiple fatalities or permanent injuries
Critical	Single fatality or permanent injury
Major	Medical treatment or lost time injury
Minor	First aid treatment
Insignificant	Incident or near miss –no treatment

Almost Certain	Is expected to occur in most circumstances
Likely	Will probably occur at least once
Possible	Event might occur at some time
Unlikely/Rare	Event not expected to occur or only in exceptional circumstances

Likelihood	Insignificant	Minor	Major	Critical	Extreme
Almost Certain	M	S	H	H	H
Likely	M	M	S	H	H
Possible	L	M	M	S	S
Unlikely/ Rare	L	L	M	M	S

Process/Activity	Job/Task Hazard Sub Category	Hazardous Element (List the hazards relating to the work)	Hazard Risk Rating (prior to control)	Controls (List the controls to manage each of the hazards)	Hazard Risk Rating (After Controls)	Comments and/or Assigned to

3.2 PERMIT TO WORK

A permit to work program is a systematic program which specifies the foreseeable hazards and risk control measures related to specific activities that will be carried out in a workplace. These work activities are not permitted to commence before the necessary control measures, procedures, training and documents have been completed. Activities include new construction, general construction, maintenance, repairs, business operations and activities that pose a hazardous health, safety or environmental risk. An effective permit to work program ensures that all activities in the workplace are accounted for, effectively coordinated and safely managed.

Types of activities that may require a work permit include, but are not limited to:

- Confined space entry
- Hot work
- Working with a crane
- Working on energized systems
- Performing lockout/tagout
- Working near water with a drowning potential
- Working in an environment with the potential for H_2S exposure
- Working with explosives or radioactive material
- Any high hazard or high-risk activity

Please refer to T&N Van Service's individual written safety & health programs for topic-specific permits (i.e., confined space, hot work, lockout/tagout). A general work permit is included on the following pages.

General Work Permit

Permit Number: _____

Work Request:

Location of Work: _____

Contact Name: _____

Contact Phone Number: _____

Summary of Work to be Done: _____

Safety Procedures to be Implemented Prior to Commencement of Work:

1. The following processes are to be suspended during the course of the work:

_____

_____

2. The following equipment is to be withdrawn from service during the course of the work:

_____

_____

3. All users have been made aware of this suspension/withdrawal. ☐ Yes ☐ No

4. Safety warning notices have been posted where required. ☐ Yes ☐ No

5. The following steps have been taken to eliminate, control or contain hazards in the area:

_____

_____

6. The following safety measures are recommended:

_____

_____

Approval:

I confirm that I have inspected the work area detailed above and declare that to the best of my knowledge and belief the work can be carried out safely and without serious risk of injury to health.

Signed	Date	Time

CONTROL OF RISKS ARISING FROM THE WORK

1. Isolation of services: (please tick as appropriate)
   ☐ Water ☐ Power ☐ Fuel Lines ☐ Compressed Gases ☐ Others (Specify)
2. Are there safety implications resulting from the isolation? ☐Yes ☐No
3. Lock-off required? ☐Yes ☐No Location: _____
4. Safety signs posted? ☐Yes ☐No
5. Air monitoring required? ☐Yes ☐No
6. Are there hazards associated with the work? ☐Yes ☐No

   If yes, what safety precautions are required to control the risks?

_____

Declaration:

I understand the precautions to be taken under this permit.

_____	_____
Name (Print)	Company / Department

_____	_____	_____
Signed	Date	Time

Permit Validity Period:

From: Date: ___ / ___ / _____ Time: ____ : ____ **To:** Date: ___ / ___ / _____ Time: ____ : ____

If the work is not completed within this timescale a new permit-to-work must be completed.

Completion Of Work:

I confirm that the work has been completed in accordance with this permit. Services have been restored and the work area is ready for re-occupation.

_____	_____	_____
Signed	Date	Time

Reinstatement Of Work Area:

I confirm that all equipment has been returned to service, safety signs have been removed and the users informed that work may resume in this area.

_____	_____	_____
Signed	Date	Time

TAB 4: SAFETY & HEALTH PROCEDURES

4.1 RECOGNIZING HIDDEN DANGERS: 25 STEPS TO A SAFER OFFICE

KEY POINTS

- Falls are the most common source of injury in an office, although workers also are injured by being struck by or against objects, and suffering ergonomic injuries.
- Some simple changes to the workspace can be effective in eliminating hazards and reducing the number of injuries.
- Administrative interventions such as scheduled walk-throughs and the establishment of a formal reporting system can help protect workers in an office environment.

By Lauretta Claussen, associate editor

It is fairly obvious that safety and health hazards can exist on worksites filled with heavy machinery and equipment, where employees often are required to engage in strenuous manual labor.

A job where most of the work tasks are completed while sitting in a chair in a climate-controlled office building would seem less fraught with danger. However, a surprising number of hazards can be present in an office setting.

According to data from the Bureau of Labor Statistics, 80,410 private-industry office and administrative workers suffered on-the-job injuries in 2008. Many of these injuries could have been prevented had workers or supervisors recognized the risks and implemented simple workplace modifications to help mitigate them.

Here are 25 steps you can take to reduce the risk of injury among your office staff.

FALLS

Slips, trips and falls, the most common type of office injury, sidelined 25,790 workers in 2008, according to BLS. The National Safety Council says employees are 2.5 times more likely to suffer a disabling fall in an office setting than anywhere else. Several hazards contribute to these injuries, although most can be significantly reduced, often by raising awareness among employees.

1. **Stay Clutter Free**

   Boxes, files and various items piled in walkways can create a tripping hazard, according to OSHA. Be certain that all materials are safely stored in their proper location to prevent buildup of clutter in walkways. Further, in addition to posing an electrical hazard, stretching cords across walkways or under rugs creates a tripping hazard, so ensure all cords are properly secured and covered.

2. **Step On Up**

   Standing on chairs – particularly rolling office chairs – is a significant fall hazard. Workers who need to reach something at an elevated height should use a stepladder. The Chicago-based American Ladder Institute cautions that stepladders must be fully opened and placed on level, firm ground. Workers should never climb higher than the step indicated as the highest safe standing level.

3. **Maintain A Clear Line Of Vision**

   Workers can collide when making turns in the hallways and around blind corners or cubicle walls. The National Safety Council suggests installing convex mirrors at intersections to help reduce collisions. If workers can see who is coming around the corner, collisions are less likely to occur.

4. **Get A Grip**

   Carpeting and other skid-resistant surfaces can serve to reduce falls. Marble or tile can become very slippery – particularly when wet, according to the National Safety Council. Placing carpets down can be especially helpful at entranceways, where workers are likely to be coming in with shoes wet from rain or snow.

Struck/Caught-By

Another major type of injury in the office setting comes from workers being struck by or caught by an object. Incidents of this nature accounted for 15,680 injuries in 2008, according to BLS.

5. **Shut The Drawer**

   File cabinets with too many fully extended drawers could tip over if they are not secured, the council warns. Additionally, open drawers on desks and file cabinets pose a tripping hazard, so be sure to always completely close drawers when not in use.

6. **Safe Stacking**

   According to the Office of Compliance, which oversees the safety of U.S. congressional workers, proper storage of heavy items can help reduce the number of office injuries. Large stacks of materials and heavy equipment can cause major injuries if they are knocked over. OOC recommends storing heavy objects close to the floor, and warns that the load capacity of shelves or storage units should never be exceeded.

Ergonomics Injuries

Perhaps the most prevalent injuries in an office setting are related to ergonomics. Because office workers spend the bulk of their day seated at a desk and working on a computer, they are prone to strains and other injuries related to posture and repetitive movement. Ergonomics hazards can be difficult to detect. “Most office conditions that can be described as hazardous from an ergonomics perspective would appear quite innocuous to the everyday observer,” said Marc Turina, principal consultant for ErgoSmart Consultants in McKees Rocks, PA.

7. **Provide Adjustable Equipment**

   One size does not fit all in an office workstation. “Adjustability is the key,” Turina said. “Chairs, work surfaces, monitor stands, etc., should all be adjustable in order to accommodate the widest range of employees.” He recommended presenting a variety of options to employees. Although employers may be reluctant to pay for expensive ergonomic equipment, experts insist the equipment is a wise investment. “A good keyboard tray may retail around $300; a good chair may

retail around $500 to $700," said Sonia Paquette, professional ergonomist and doctor of occupational therapy. She points out that the cost of the health claims that stem from not having these devices is much higher. "Some of these hard claims cost many tens of thousands of dollars just of medical treatment, let alone cost of replacement, absenteeism, loss of work production, etc."

8. **Train Workers On How To Use Equipment**

Providing adjustable furniture and equipment is only the first step in creating an ergonomically sound workstation. "A big issue that I have encountered a lot lately is employee inability to properly adjust their own office chairs," Turina said. "Many times, employers can invest $500 in an excellent adjustable chair, but employees still experience a bad workstation fit." The problem often is twofold: Workers do not know how to adjust their equipment, and they do not know the most ergonomically beneficial way to set up their workstation. Train workers on both the ideal setup and how to operate adjustable equipment accordingly.

9. **Keep Your Feet On The Floor**

One of the first questions Paquette asks workers is whether their feet touch the floor when seated at their desk. "It sounds like an incredibly simple question," she said, "but very often workers have their keyboard tray on the desktop, so in order to reach it, they need to jack up their chair so high that their feet can barely touch the floor." She added that unless an employee's feet are on the floor, a chair will not be able to reduce pain and discomfort. She recommended options such as adjustable keyboard trays or rolling tables adjusted to the proper height to eliminate this problem. Although footrests are a "second-best option," their small surface may impede some of the worker's movement.

10. **Provide Document Holders**

Frequently typing from hard copy can lead to neck strain if a worker is forced to repeatedly look down to the desk and back to the computer screen. Turina recommends providing document holders to reduce this strain. "These document holders are reasonably priced, and eliminate excessive cervical motion and help to prevent muscle imbalances," he said. Document holders also are good for the eyes, according to the St. Louis-based American Optometric Association. Keeping reference materials close to the monitor reduces the need for your eyes to change focus as you look from the document to the monitor.

11. **Correct Mouse Placement**

Paquette often sees workstations where the computer keyboard is on a tray, but the mouse remains on the desk. "That spells disaster for the neck and shoulder on the side of that mouse," she said. She recommends that the mouse always be placed beside the keyboard.

VISION PROBLEMS

Although looking at a computer monitor cannot damage your eyes, spending a large portion of your workday at the computer can cause eyestrain, according to Chicago-based Prevent Blindness America. Eyes can become dry and irritated, and workers may begin having trouble focusing. A few work area adjustments can help alleviate some of these issues.

12. **Dim The Lights And Use Task Lamps**

    Florescent lights in office buildings often are too bright for optimal vision. According to the American Optometric Association, light that is at about half-normal office levels is preferred. This can be achieved by removing some bulbs from overhead fixtures. If more light is needed for a particular task, the British Columbia Public Service Employee Relations Commission recommends providing individual task lamps rather than increasing overall lighting. The commission cautions that lightbulbs in task lamps should be fully recessed to avoid the creation of a bright spot in the worker's line of vision.

13. **Correctly Position Monitors**

    Prevent Blindness America recommends workers place their computer monitors slightly below eye level and 20-26 inches from their eyes. Screens that can tilt or swivel are especially beneficial. "Your eyes' resting position is a few degrees below the horizon when you're looking straight ahead," Paquette said.

14. **Minimize Screen Glare**

    The American Optometric Association points to screen glare as a major cause of eyestrain in the office. To minimize strain, avoid positioning monitors opposite open windows, or be sure to always close shades or blinds. A glare reduction filter also can be used.

15. **Wear The Right Glasses**

    Workers should tell their eye doctor if they spend a large portion of the day working on the computer, the association recommends. The doctor can check the efficiency of vision at 20-30 inches – the typical distance a computer monitor should be placed. Glasses are available for computer users that allow the wearer to see the full monitor without having to excessively strain the neck.

16. **Increase Font Size On Computer**

    Small font sizes on the computer can strain both your vision and your neck, as workers tend to pull the head forward to view smaller print. A simple adjustment to the font size on the computer screen can eliminate the need for this. "In many software programs, you can use the CTRL-scroll up or down or CTRL+ or CTRL- to increase or reduce the size of the page you are looking at," Paquette said.

17. **Take A Break**

    Giving your eyes a rest and allowing them to focus on things at varying distances can help reduce strain and fatigue. OSHA recommends workers take a 10-minute break for every hour spent on the computer. These breaks can include working on tasks that require your eyes to focus on objects at a further range.

Fire Safety

Local fire departments responded to approximately 3,830 office fires each year between 2004 and 2008, according to the Quincy, MA-based National Fire Protection Association. On average, these fires caused four civilian deaths and 37 civilian injuries annually. Some routine inspections around the office can help reduce the likelihood of fire causing such devastation.

18. **Maintain Cords In Good Repair**

    According to the Office of Compliance, damaged and ungrounded power cords pose a serious fire hazard and violate safety codes. Cords should be inspected regularly for wear and taken out of service if they are frayed or have exposed wire. Further, cords should never be used if the third prong has been damaged or removed. Make sure cords are not overloading outlets. The most common causes of fires started by extension cords are improper use and overloading. Extension cords should be approved by a certifying laboratory such as Underwriters Laboratories, and only used temporarily to connect one device at a time.

19. **Inspect Space Heaters**

    If employees use space heaters, verify the devices are approved for commercial use and have a switch that automatically shuts off the heater if the heater is tipped over, the Office of Compliance suggests. Further, make sure space heaters are not powered through an extension cord or placed near combustible materials such as paper.

20. **Never Block Fire Sprinklers**

    Furniture and tall stacks of materials can block the range of fire sprinklers, reducing their effectiveness in the event of an emergency. Objects should never be placed higher than 18 inches below sprinkler heads to allow a full range of coverage, according to the Office of Compliance.

21. **Do Not Block Escape Routes Or Prop Open Fire Doors**

    Items never should be stored along an emergency exit route. These paths should remain free of clutter, according to OSHA. Fire doors should not be held open by unapproved means (such as with a garbage can or chair), as this creates a significant fire hazard.

Administrative Controls

In addition to employee training and improved equipment, certain administrative controls can aid hazard recognition and the elimination of potentially dangerous situations.

22. **Conduct Walk-Throughs**

    Periodically walking around the office can help with hazard recognition and maintenance of ergonomic task design. Turina recommended employers conduct an ergonomics screen of every workstation at least once a year. “Employee complaints are invaluable in the process, but yearly reassessments can help to ensure that a good fit is maintained between employee and workstation,” he said.

23. **Monitor Signs Of Musculoskeletal Disorders**

    Recognizing the symptoms of musculoskeletal disorders can alert employees of the need to make an ergonomics alteration to their workstation. But workers need to know what those warning signs are. “Lots of musculoskeletal injuries developing from poor ergonomics start out asymptomatically and can become quite severe by the time an employee starts to experience symptoms,” Turina said. Pay attention to any pain, fatigue, numbness or weakness, as these may be signs of an ergonomics problem and the start of a more serious MSD.

24. **Talk To Employees About Their Concerns**

    Simply asking workers how they are feeling can go a long way toward recognizing hazards. “Employers need to take advantage of the cases where employees are experiencing symptoms like discomfort and fatigue early on, when quick, inexpensive interventions can usually solve the problem,” Turina said. “Ignoring these early warning signs can lead to employee suffering and astronomical cost in some cases.”

25. **Establish Employee Reporting Systems**

    Establishing an employee reporting system can be the best way for organizations to get a handle on potential hazards before they cause injury. Consider creating an anonymous reporting process that encourages workers to come forward with their concerns. “Research shows that early intervention yields the most cost-efficient results in all areas,” Paquette said.

(Taken from the National Safety Council’s Safety + Health Topics.

http://www.nsc.org/safetyhealth/pages/6%2011%2025%20steps%20to%20a%20safer%20office.aspx#.UBbHTLQeNZY)

4.2 Extreme Weather Conditions – Heat & Cold

Heat Related Weather Conditions

When the body is unable to cool itself by sweating, several heat-induced illnesses can occur, and can result in death. Supervisors shall be trained in preventing heat related illnesses and the emergency response procedures prior to supervising employees.

Work factors that can contribute to heat related illnesses should be taken into consideration before performing a task. High temperature and humidity, direct sun or heat, limited air movement, physical exertion, poor physical condition, certain medications, inadequate tolerance for hot workplaces, and insufficient water intake can all lead to heat stress. Supervisors must take personal factors into consideration before assigning a task where there is a possibility of a heat related illness occurring.

The Jobsite Foreman will take the role of the Designate Hydration Monitor in order to observe and ensure that employees are and remain properly hydrated.

Types of Heat Illnesses

Heat Stroke is the most serious heat related disorder and occurs when the body's temperature regulation fails and body temperature rises to critical levels. It is a medical emergency that may result in death. If a person shows signs of possible heat stroke, professional medical treatment should be obtained immediately.

The primary signs and symptoms of heat stroke are:

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or convulsions

Heat Exhaustion is a result of the combination of excessive heat and dehydration. Signs and symptoms of heat exhaustion include:

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting

Heat Cramps are usually caused by performing hard physical labor in a hot environment.

- Thirst cannot be relied on as a guide for the need for water, drink water every 15-20 minutes
- Studies have shown that drinking carbohydrate-electrolyte replacement liquids is effective in recovery

Heat Rashes are the most common problem in hot environments where the skin is persistently wetted by un-evaporated sweat.

Prevention

Water coolers are provided for drinking water only and shall be periodically cleaned and sanitized to eliminate any build-up, prevent growth of bacteria and keep the water safe to drink. Water coolers shall be periodically cleaned with a simple solution of soap and water. Use a sponge to wash it, getting into all of the crevices. After washing, rinse and dry the cooler.

Do not store sodas, drinking bottles, or anything else in the water cooler. Your hands carry germs and bacteria that will be transferred into the drinking water when retrieving bottles and cans from inside the water cooler.

Caution: Employees under doctor orders limiting their intake of fluids and employees on low-salt diets should consult with their doctor before drinking a sports beverage or taking salt tablets.

Tips for preventing heat illness include:

- Adjust work schedules to provide workers with a rest from the heat
- Postpone nonessential tasks
- Provide cool rest areas as well as shade and water for workers
- Wear proper protective clothing
- Ensure workers are drinking enough water to stay hydrated
- Allow workers time to acclimate to the hot environment
- Educate workers and supervisors to recognize heat illness and how to prevent it
- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Allow yourself to become acclimatized to hot weather
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning and rest regularly
- Drink lots of water; ½ your body weight in oz (i.e. – if you weight 150 lbs drink 75 oz of water.)
- Wear lightweight, light colored, loose-fitting clothes (do not remove your shirt).
- Avoid alcohol, caffeinated drinks, or heavy meals

First Aid for Heat Illness

- Call 911 (or local emergency number) at once.
- While waiting for help to arrive:
    - Move the worker to a cool, shaded area.
    - Loosen or remove heavy clothing.
    - Provide cool drinking water.
    - Fan and mist the person with water.

COLD RELATED WEATHER CONDITIONS

Working in any cold environment poses the risk of cold-related illness. In a cold environment, the body must work harder in to maintain its temperature. Whenever temperatures drop below normal and wind speed increases, heat can leave the body more rapidly.

In a cold environment, the body's energy is focused on keeping the internal core temperature warm. Over time, the body will begin to shift blood flow from the extremities (hands, feet, arms, and legs) and outer skin to the core (chest and abdomen). This shift allows the exposed skin and the extremities to cool rapidly and increases the risk of frostbite and hypothermia.

Cold stress occurs when the skin temperature is lowered, thus lowering the internal body temperature (core temperature). Cold exposure may lead to serious health problems and may cause tissue damage, and possibly death.

- Some of the risk factors that contribute to cold stress are:
- Wetness/dampness, dressing improperly, and exhaustion
- Predisposing health conditions such as hypertension, hypothyroidism, and diabetes
- Poor physical conditioning

TYPES OF COLD ILLNESSES

Working in a cold environment poses the risk of cold-related injuries and illnesses such as:

- Hypothermia
- Frostbite
- Trench Foot

Hypothermia is a condition in which the body uses up its stored energy and can no longer produce heat.

A core temperature of the body is less than 95 degrees Fahrenheit. It often occurs after prolonged exposure to cold temperature or if the person becomes chilled from rain, sweat, or submersion in cold water. The primary signs and symptoms of hypothermia are:

- Early symptoms include: shivering, fatigue, loss of coordination, confusion & disorientation.
- Late symptoms include: no shivering, blue skin, dilated pupils, and loss of consciousness

Frost Bite is an injury to the body caused by freezing of the skin and underlying tissues. The primary signs and symptoms of frostbite are:

- Reddened skin develops gray/white patches
- Numbness in the affected part
- Feels firm or hard
- Blisters may occur in the affect part.

What not to do for frostbite:

- Do not rub the affected area to warm it because this action can cause more damage.
- Do not apply snow/water.
- Do not break blisters.
- Do not try to rewarm the frostbitten area before getting medical help; for example, do not place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.

Immersion/Trench Foot is caused by prolonged exposure to wet and cold temperatures, and may occur at temperatures as high as 60 degrees Fahrenheit if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. The primary signs and symptoms of hypothermia:

- Redness of the skin, swelling, numbness, & blisters.

PREVENTION

Preventive measures are implemented to avoid cold induced injuries. An assessment will be conducted to identify the types of jobs or employees who are at risk for cold exposure. The results of the assessment will help us to identify which employees who are at the greatest risk of cold exposure. Measures that may be implemented to prevent cold-induced injuries include:

- Encourage drinking plenty of liquids to avoid dehydration.
- Scheduling heavy work during warmer parts of the day.
- Avoiding fatigue during the coldest parts of the day since energy is needed to keep muscles warm.
- Take frequent breaks outside of the cold.
- Consume warm, high calorie food such as pasta to maintain energy reserves.

Employees who are required to work in cold weather conditions will receive initial and annual training regarding the health effects of cold exposure. Training will address:

- the signs and symptoms of cold weather induced health problems such as hypothermia, frostbite and trench foot,
- proper first aid treatment on cold induced injuries or illnesses
- the dangers associated with working around unstable snow and ice build ups

Proper cold weather protection must be worn by employees when working in cold, wet and windy conditions.

- Choose fabric that retain their insulation when wet such as wool, silk, or synthetic materials.
- Layer loose-fitting clothing to provide better insulation. At least 3 layers is recommended.
    - Innermost layer: wool, silk or synthetic to keep moisture away from the body.
    - Middle layer: wool or synthetic to provide insulation even when wet.
    - Outer layer: wind and rain protection layer with some ventilation to prevent overheating
- Wear a hat or hood to reduce the amount of heat that escapes, thus keeping your entire body warmer.

- Consider using a knit mask that covers the face and mouth.
- Wear insulated gloves protect the hands.
- Wear insulated and waterproof boots.

Effects on the Worksite

During cold weather conditions, preventive measures are implemented to avoid cold induced injuries. The following practices will be followed:

- Time is allotted throughout the day, every day, to walk through the jobsite and look for hazards created by snow and ice. Regularly used walkways and travelways shall be sanded, salted, or cleared of snow and ice as soon as practicable
- Ensure to take time snow-clearing equipment, de-icing equipment, heating systems, winterized vehicles and cold-weather clothing
- Carefully remove icicles, especially if temperatures are beginning to warm. If this isn't possible, rope off the area under the icicles until they are no longer a hazard.
- Cold weather supplies will be regularly inspected and restocked when necessary
- Workers will be under in constant communication or observation by a co-worker or supervisor.

4.3 DRIVING SAFETY

According to the Bureau of Labor Statistics' National Census of Fatal Occupational Injuries in 2006, more than 2,400 deaths a year result from occupational motor vehicle incidents. That number is more than 42 percent of the annual number of fatalities from occupational injuries. While fatal highway incidents remained the most frequent type of fatal work-related event, accounting for nearly one out of four fatal work injuries, the number of highway incidents fell 8 percent in 2006. The following Driving Safety rules and procedures have been established.

SAFETY RULES:

- Only authorized employees may drive a motor vehicle in the course and scope of work or operate a company-owned vehicle.
- Drivers must have a valid and current license to operate the vehicle.
- Operating a vehicle while under the influence of alcohol, illegal drugs, or certain medications that may impair driving skills is prohibited.
- Seatbelts must be worn by all vehicle occupants at all times whenever a vehicle is in motion.
- Authorized drivers must follow safe driving practices including, but not limited to:
    - Practice defensive driving techniques
    - Do not use any electronic equipment that my cause distraction
    - Obey all posted traffic and speed limit signs
    - Maintain a safe distance between vehicles at all times
    - Report all traffic violations and accidents to supervisors
- All collisions and traffic violations that have occurred while driving on company duties must be reported.
- All vehicles used for company business must be fit for purpose and maintained in a safe working order.
- Loads must be secure and shall not exceed the manufacturer's specifications and legal limits for the vehicle.

DEFENSIVE DRIVING TECHNIQUES

Following the rules of the road can help you concentrate on what you should be doing…driving. Stay out of the other vehicle's blind spot and avoid tailgating. Instead, keep a safe distance from other drivers by maintaining a safety cushion of driving space between your vehicle and those around you. As an extra precaution, know the condition of the weather and road and drive only as fast as those conditions allow.

Be cautious by staying alert and expecting the unexpected. Watch out for and anticipate other drivers, pedestrians or children on or near the road. Safe drivers scan constantly for hazards, predicting how they may be affected by a hazard and pre-determining how to avoid or reduce them.

The ever-changing variable of the road and other vehicles can make drivers instantly vulnerable to accidents. If drivers don't practice these safe practices on the road, they might personally discover why vehicle deaths and serious injuries now total more than all the wartime wounded and fatalities since 1776.

Be aware of the following items while driving:

- Know and observe all traffic rules and regulations
- Constantly be alert for the illegal acts and driving errors of other drivers. Make timely adjustments in your own driving so that these illegal acts and errors will not involve you in an accident.
- Know your vehicle and be aware of special hazards presented by abnormal, unusual, or changing conditions.
- Be aware of the rules of right-of-way, and be willing to yield to the right of way of the other driver, when necessary.

The following outlines general principles of defensive driving:

- **See the hazard**—when driving, think about what is going to happen or what might happen as far ahead of encountering a situation as possible. You should never assume everything will be "all right."
- **Understand the defense**—specific situations require specific ways of handling. Become familiar with the unusual conditions which you may face and learn them well so that you can apply them when the need arises.
- **Act in time**—once you've noted a hazard and understand the defense against it, act! Never take a "wait and see" attitude.

Parking Safety - First Move Forward

A large amount of driving accidents occur while vehicles are in reverse. Driving in a parking lot presents a lot of distractions, including crowded, tight areas, with plenty of vehicles moving in various directions. The National Highway Traffic Safety Administration (NHTSA) estimates that “267 people are killed and 15,000 injured each year by drivers not parking forward first, usually in driveways or parking lots. The First Move Forward parking technique takes only a bit of planning and reduces the number of vehicles reversing into a flow of traffic, improves visibility, and improve safety of everyone in the parking area.

- When selecting a parking spot, choose one with open-ended stalls and pull through, so your vehicle is facing out and does not need to reverse to exit the space.
- If such a spot is not available, back into the spot, so your vehicle is facing out.

While forward parking is usually the safest option, there are certain situations where this may not be possible, or allowed:

- When you have to load or unload large or numerous items from the back of your vehicle
- When signage states that you cannot park forward-facing
- In Diagonal Parking spaces

When parking, use the following strategies:

- Be alert. Scan the area all around your vehicle using mirrors or rear-view cameras.
- Watch for pedestrians.
- Obey posted speed limits. Drive slowly.
- Wear your seat belt.
- Keep distance between your vehicle and others

Taking these three steps and keeping good driving techniques in mind, you'll learn to "give in" a little; to tailor your driving behavior to the unexpected actions of other drivers and pedestrians; the unpredictable and ever-changing factors of light, weather, road, and traffic conditions; and the mechanical condition of your vehicle.

4.4 Electronic Device Use While Driving Policy

It has become an increasing concern in the workplace to inform and educate employees on the dangers of distracted working and driving. All employees must review the company policies and safe work practices listed below and sign/date at the bottom. If employees have any questions or concerns regarding this policy, they can contact their supervisor.

Deadly crashes resulting from distracted driving has become a growing danger on the roads. Numerous studies have demonstrated how the use of hand-held cell phones, music devices, tablets, etc. while driving, pose a significant safety risk to motorists, their passengers, and others on the road.

Key Aspects of This Policy Include:

- Ban of answering or making phone calls, engaging in phone conversations, reading or responding to e-mails and text messages.
- All cell phones, music devices, tablets, radios, pagers, etc. are strictly prohibited from being used while operating a company vehicle.
- The use of a company-issued cell phone is also prohibited from being used while operating a company or personal vehicle.
- The use of any electronic device is prohibited while refueling vehicles and unloading/loading operations.
- Hands-free devices are not an alternative.

Safe Work Practices to Follow:

- Before starting the vehicle, turn cell phones on vibrate, silent or off.
- Pull over to a safe place if a call must be made or received while on the road.
- Consider modifying the voicemail greeting to indicate that you are unavailable to answer calls or return text messages while driving.
- Inform clients, associates, and business partners of this policy as an explanation of why calls may not be returned immediately.

Violations of this policy will lead to disciplinary actions that could result in an employee being terminated.

Signature of Employee	Date

4.5 TOOLS AND EQUIPMENT

Hand and power tools are a common part of our everyday lives and are present in nearly every industry. These tools help us to easily perform tasks that otherwise would be difficult or impossible. However, these simple tools can be hazardous and have the potential for causing severe injuries when used or maintained improperly. Special attention toward hand and power tool safety is necessary in order to reduce or eliminate these hazards.

Hand and power tools are addressed in specific standards for the construction industry. General OSHA requirements state that all hand and power tools and similar equipment, whether furnished by the employer or the employee, be maintained in a safe condition. They establish standards for guarding, personal protective equipment, and switches. Specific standards apply to hand tools; power-operated hand tools; abrasive wheels and tools; woodworking tools; jacks; air receivers; and mechanical power-transmission apparatuses. The items below summarize safe practices for use of hand and power tools.

- Maintain all hand tools and equipment in a safe condition and check them regularly for defects. Identify broken or damaged tools and equipment by tagging or locking the controls until they can be repaired or disposed of.
- Follow the manufacturer's requirements for safe use of all tools.
- Use double insulated tools, or ensure that the tools are grounded.
- Equip all power saws (circular, skill, table, etc.) with blade guards.
- Make sure guards are in place before using power saws. Don't use power saws with the guard tied or wedged open.
- Turn off saws before leaving them unattended.
- Raise or lower tools by their handles, not by their cords.
- Don't use wrenches when the jaws are sprung to the point of slippage. Replace them.
- Don't use impact tools with mushroomed heads. Replace them.
- Keep wooden handles free of splinters or cracks and be sure the handles stay tight in the tool.
- Workers using powder-activated tools must receive proper training prior to using the tools.
- Always be sure that hose connections are secure when using pneumatic tools.
- Never leave cartridges for pneumatic or powder-actuated tools unattended. Keep equipment in a safe place, according to the manufacturer's instructions.
- Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases will be provided with particular PPE necessary to protect them from the hazard.

HAND TOOLS

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

Some examples of misused hand tools:

- Using a screwdriver as a chisel may cause the tip of the screwdriver to break and fly, hitting the user or other employees.
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker.
- A wrench must not be used if its jaws are sprung, because it might slip.
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.

Saw blades, knives, or other tools are to be directed away from walkways, aisles, and other employees working in close proximity. Knives and scissors must be kept sharp to reduce the need to use excessive force and the potential for slippage.

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

PNEUMATIC POWER TOOLS

Pneumatic tools are powered by compressed air; they include chippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools. The main hazard is the danger of getting hit by one of the tool's attachments, or some kind of fastener the worker is using with the tool. Noise is another hazard associated with pneumatic tools.

Pneumatic tools that shoot nails, rivets, or staples, and operate at more than 100 pounds per square inch (psi), must be equipped with a special device to keep fasteners from being ejected unless the muzzle is pressed against the work surface. Eye protection is required and face protection is recommended for employees working with pneumatic tools. Noise is another hazard. Working with noisy tools such as jackhammers requires proper, effective use of ear protection.

When using pneumatic tools, employees must check to see that they are fastened securely to the hose by a positive means to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.

Airless spray guns which atomize paints and fluids at high pressures (1,000 psi or more) must be equipped with automatic or visual manual safety devices which will prevent pulling the trigger until the safety device is manually released.

If an air hose is more than one–half inch in diameter, a safety excess flow valve must be installed at the source of the air supply to shut off the air automatically in case the hose breaks. In general, the same precautions should be taken with an air hose that are recommended for electric cords, since the hose is

subject to the same kind of damage or accidental striking and presents tripping hazards. The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded. In addition, the use of hoses for hoisting or lowering is not permitted.

A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel. Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

Compressed air guns should never be pointed toward anyone. The user should never "dead–end" it against him or herself or anyone else. Compressed air shall not be used to blow dirt, debris, or similar material off of your clothing, unless reduced to less than 30 psi. If using less than 30 psi for cleaning purposes, effective chip guarding and personal protective equipment meeting the requirements of 29 CFR 1926, Subpart E must be used.

Heavy jackhammers can cause fatigue and strains; heavy rubber grips reduce these effects by providing a secure handhold. Workers operating a jackhammer must wear safety glasses and safety shoes, which protect against injury if the hammer slips or falls. A face shield should also be used.

Electric Tools

Employees using electric tools must be aware of several dangers; the most serious is the possibility of electrocution. Among the chief hazards of electric–powered tools are burns and slight shocks which can lead to injuries or even heart failure. Under certain conditions, even a small amount of current can result in fibrillation of the heart and eventual death. A shock may cause the user to fall off a ladder or other elevated work surface.

To protect the user from shock, tools must either have a three–wire cord and be grounded, be double insulated, or be powered by a low–voltage isolation transformer. Three–wire cords contain two current–carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Anytime an adapter is used to accommodate a two–hole receptacle, the adapter wire must be attached to a known ground. The third prong should never be removed from the plug.

Double insulation is more convenient. The user and the tools are protected in two ways: by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.

The following general practices should be followed when using electric tools:

- Electric tools should be operated within their design limitations.
- Gloves and safety footwear are recommended during use of electric tools.
- When not in use tools should be stored in a dry place.
- Electric tools should not be used in damp or wet locations.
- Work areas should have adequate lighting.

POWDER-ACTUATED TOOLS

Powder-actuated tools used for fastening operate and can injure and kill much like a loaded gun and should be treated with the same respect and precautions. In fact, they are so dangerous, that they must be operated only by specially trained employees. For these reasons, OSHA regulates powder-actuated tools under 29 CFR 1926.302(e).

The following requirements are to be followed when using powder-actuated tools:

- The tool must be tested each day before loading according to the manufacturer's recommended procedure.
- If a defect develops during use, the tool must be removed from service until properly repaired.
- Employees using powder-actuated tools must wear proper personal protective equipment.
- Tools must not be loaded until just prior to the intended firing time. People and hands must be kept clear of the open barrel end.
- Loaded tools must not be left unattended.
- Fasteners must not be driven into very hard or brittle materials.
- Driving into easily penetrable materials must be avoided unless these materials are backed by an impenetrable substance.
- No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.
- Powder-actuated tools shall not be used in an explosive or flammable atmosphere.
- Powder-actuated tools must be used with correct shield, guard, or attachment recommended by the manufacturer.
- Powder-actuated tools must meet ANSI A10.3-1970, Safety Requirements for Explosive-Actuated Fastening Tools.

TRAINING

- Only employees who have been trained in the operation of a particular tool in use may be allowed to operate a powder-actuated tool.
- Employees must be trained to recognize and avoid unsafe conditions and the regulations applicable to their work environment to control or eliminate the hazards.
- Protection limitations and precautions must be provided to users of eye protection equipment necessary for powder-actuated tool use.

ABRASIVE WHEELS

Abrasive wheels are power tools used to grind, cut, polish, and buff materials and surfaces. There are different types of wheels, depending upon their uses. Refer to 29 CFR 1910.215.215 for exact language and specific details about abrasive wheels.

The tasks abrasive wheels are used for involve the hazards of flying particles. As the wheels spin, material is applied against them to achieve the desired results, whether it is to grind, cut, polish, or buff. There is also a risk that, while the wheel is spinning at high speeds, it could fly apart.

Before an abrasive wheel is mounted, it should be inspected closely and ring tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non–metallic implement. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or "ring."

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, but not tight enough to distort the flange. Follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel specifications.

Due to the possibility of a wheel disintegrating (exploding) during start–up, the employee should never stand directly in front of the wheel as it accelerates to full operating speed.

In addition, when using a powered grinder:

- Always use eye protection.
- Turn off the power when not in use.
- Never clamp a hand–held grinder in a vise.

To help prevent injuries, closely inspect the wheels to ensure they have not been damaged. Do not mount a wheel if there are signs of damage or defects. The spindle speed of the machine must be checked before mounting the wheel to be certain that it does not exceed the maximum operating speed marked on the wheel. Use only wheels marked with the type of wheel and maximum speed in revolutions per minute. Always select the right wheel for the job. A wheel is dangerous when used for work for which it was not designed.

Abrasive wheels need to be handled and stored carefully; avoid dropping or bumping them. Transport wheels in containers designed to provide support for the wheels if they are too heavy to carry by hand. When storing abrasive wheels, do not allow other items, such as tools, to be piled on top. Place them in racks or bins with dividers for different types of wheels. This will help with quick and safe identification. Place straight or tapered wheels on end in a cradle or chocked position to prevent them from rolling.

Never store wheels near excessive heat or cold, in contact with oil or moisture, or in drawers with loose tools. This may cause them to bump together and may cause the wheels to crack. Follow the manufacturer’s instructions for length of time a wheel should be stored and how to store thin wheels.

Maintain grinding machines in good working condition. Make sure that only qualified employees provide maintenance on grinding machines.

Abrasive wheels greater than 2 inches can only be used on machines with safety guards. Because of the hazards involved, safety guards must be installed and located so as to be between the operator and the wheel during use. Adjustment of the guard must be done so pieces of an accidentally broken wheel will be deflected away from the operator. The top half of the wheel should be enclosed at all times.

GUARDING

Hazardous moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed to contact by employees.

Guards, as necessary, should be provided to protect the operator and others from the following:

- Point of operation
- In-running nip points
- Rotating parts, and
- Flying chips and sparks.

Safety guards must never be removed when a tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

When power tools are designed to accommodate guards, they will be equipped with such guards at all times when in use. All power saws (circular, skill, table, etc.) will be equipped with blade guards. Ensure that guards are in place before using a piece of equipment that is equipped with guards. Do not use power saws with the guard tied or wedged open.

Portable grinding tools need to be equipped with safety guards to protect workers, not only from the moving wheel surface, but also from flying fragments in case of breakage.

Guarding shall meet the requirements set forth in ANSI B15.1. Guards may not be manipulated in such a way that will compromise its integrity or the protection intended.

4.6 General Waste Management

T&N Van Service views responsible waste management as an essential aspect in all work and necessary for providing a safe and healthy work environment for employees. The purpose of this policy it to provide guidance and requirements for safe and effective management of waste.

Waste management includes the collection, transportation, processing, recycling, disposal and monitoring of waste materials. Before starting work on a job, all project wastes, trash, and/or scrap must be taken into consideration. The waste that will be generated must be estimated and the need for containers and waste removal, if necessary, can be determined.

Waste materials must be properly stored and handled to minimize the potential for an accident or injury due to excessive clutter, the potential for a spill, or impact to the environment. During outdoor actives, receptacles must be covered to prevent dispersion of waste materials and to control potential runoff.

Before a job, employees must be instructed on the proper disposal method for wastes, including general instruction on disposal of non-hazardous wastes, trash or scrap metals. If wastes generated are classified as hazardous, employees must be trained to ensure proper disposal and the risks associated with this waste. Training will occur prior to any work dealing with hazardous waste.

To minimize environmental impact, recycling is encouraged. All recyclable wastes should be segregated to ensure opportunities for reuse or recycling. Recycling bins will be provided and properly labeled to ensure the proper disposal of waste materials.

For the safety of the employees, the necessary personal protective will be provided and required to be used. This PPE can include gloves, safety glasses or goggles and face protection as needed per jobsite.

4.7 GOOD HOUSEKEEPING POLICY

There are good safety reasons for OSHA's concern about housekeeping. A messy workplace is not only annoying and inefficient; it creates a number of potential safety hazards:

- Tripping and falling over equipment that doesn't belong on the floor, such as machines, tools, cords, hoses, scrap, and boxes.
- Getting hit by or bumping into objects: For instance, tools left perched on the edge of a roof, shelf or table, or a drawer that's left open.
- Punctures and splinters from sharp tools left lying around, or from rough pieces of wood or other sharp objects.
- Serious electrical hazards such as cords left near heat or water.
- Fire hazards, including flammable liquids or scrap left near ignition sources; dust or lint on machinery; or materials blocking fire exits or equipment.
- Chemical exposure or spills when chemical containers are left open.
- Chemical reactions from open chemical container contents exposed to other chemicals, water, or air.
- Potential fatalities if obstacles inhibit an emergency evacuation
- Potential injuries from falling objects.

The best way to prevent these dangers is to follow this simple and old-fashioned rule: Assign a specific storage place for each item, and then insist that every item be kept in its assigned place whenever it is not in use.

Yes, that's easier said than done. But the first step is to say it—repeatedly—and then insist that it be done right then and there. If necessary, take the time to reorganize or rearrange the work area to provide an assigned place for all items. You may also want to obtain extra boxes, bins, etc., for storage.

Be sure workers understand that the maintenance department or cleaning staff can't be expected to handle internal housekeeping. Workers don't know where tools and supplies are supposed to be kept and, in many cases, are prohibited from handling various tools, machines, or chemical containers. In addition, the maintenance personnel are not standing around waiting to clean up a spill or throw away trash. It only takes a second to put, or throw, things away—NOW.

Remember that a neat workplace is more than "nice to have." With persistence, neatness will eventually become a habit. People are even likely to discover that they can do their jobs a lot faster and easier in a neat work area.

Good housekeeping in the workplace is more than an attempt to keep things looking presentable. It's also an important safety issue. OSHA requires general housekeeping for all jobsites during the course of construction, alteration, or repairs. Refer to 29 CFR 1926.25 of the OSHA standards for specific language and details.

4.8 MANUAL LIFTING

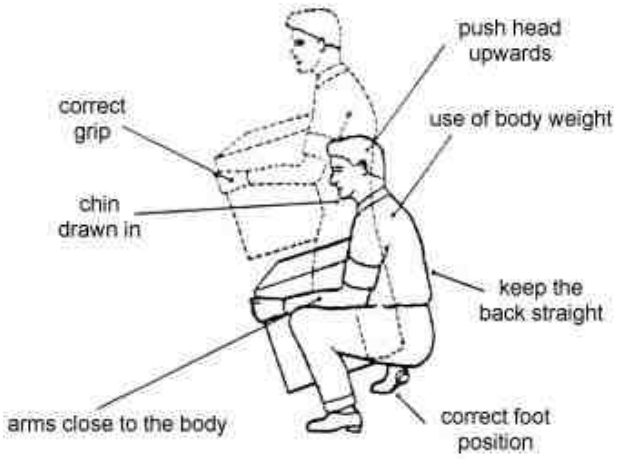
A hazard assessment shall be accomplished prior to any employee manually lifting an object. This assessment must consider the size, bulk, and weight of the object or objects. The assessment must consider if mechanical lifting equipment is required, if two-man lift is required, and whether vision will be obscured while carrying the object.

Training shall be provided on proper lifting techniques. The training shall include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries. Additionally, job specific training should be given on safe lifting and work practices, hazards, and controls.

Musculoskeletal injuries caused by improper lifting must be investigated and documented. Incorporation of investigation findings into work procedures must be accomplished to prevent future injuries.

Where use of lifting equipment is impractical or not possible, two-man lifts must be used.

Supervision must periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations should be evaluated to engineer out hazards before work processes are implemented.



Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, and hoists must be provided for employees. Other engineering controls such as conveyors, lift tables, and work station design should be considered.

Use of provided manual lifting equipment by employees must be enforced.

4.9 COMPRESSED GAS AWARENESS

Hazards associated with compressed gases include oxygen displacement, fires, explosions, and toxic gas exposures, as well as the physical hazards associated with high pressure systems. Special storage, use, and handling precautions are necessary in order to control these hazards

Compressed gas is defined as:

- A material or mixture in a container with an absolute pressure of 40 psi (pounds per square inch) at 70 degrees Fahrenheit.
- A material or mixture in a container with an absolute pressure exceeding 104 psi at 130 degrees Fahrenheit.
- A liquid material having a vapor pressure exceeding 40 psi absolute at 100 degrees Fahrenheit.

Absolute pressure is the pressure reading on the gauge plus local atmospheric pressure (14.7 psi at sea level).

COMPRESSED GAS HAZARDS

Gases may be hazardous because they are:

- Under high pressure: When a high-pressure cylinder accidentally ruptures or when a valve assembly breaks off, rocketing can occur. If the pressure of the contents increases enough, it can drive the cylinder, turning it into a missile that can blast its way right through a concrete wall.
- Flammable: Flammable gases catch fire easily and burn quickly. Hydrogen, acetylene, ethylene, propane, and natural gas are some examples. If you were to add flammability to a compression hazard, you would have some extremely dangerous materials.
- Asphyxiant (inert): Inert gases displace oxygen for breathing and can lead to suffocation of the exposed employee.
- Oxidizing: Oxidizing gases can explode violently when they react with organic and combustible materials. It is important that containers of oxidizing gases or oxygen and associated equipment be free of oils, greases, and other hydrocarbon-based materials. In addition, clothing which has been exposed to an oxygen-rich atmosphere is a fire hazard.
- Corrosive: Corrosive gases attack tissue and other materials. Employees should be aware that they will be required to wear special PPE and a self-contained breathing apparatus when handling these gases. Eyewashes and emergency showers must be available. Point out their location.
- Toxic or highly toxic: Poison (toxic) gases such as arsine, diborane, methyl bromide, nitric oxide, nitrogen dioxide, phosgene, and phosphine can only be handled by specially trained personnel. Workers must be fully aware of the potential hazards involved and must wear the appropriate PPE to handle them.
- Cryogenic (extremely cold): A cryogenic liquid has a boiling point colder than -150 degrees Fahrenheit at 14.7 psia. Besides causing frostbite or burning the skin on contact, such a liquid has an asphyxiation hazard associated with it, too. Cryogenic liquids require a higher level of PPE than other substances contained in pressurized tanks.

STORAGE, MAINTENANCE, & HANDLING

Employees must be trained on the proper use, handling and storage of compressed gas cylinders. The following is a list of recommendations for storage, maintenance, and handling of compressed gas cylinders:

- Make sure the contents of the compressed gas cylinder are clearly stenciled or stamped on the cylinder or on a durable label.
- Do not identify a gas cylinder by the manufacturer's color code.
- Never use cylinders with missing or unreadable labels.
- Visually inspect all cylinders for damage before use.
- Be familiar with the properties and hazards of the gas in the cylinder before using.
- Wear appropriate protective eyewear when handling or using compressed gases.
- Use the proper regulator for each gas cylinder.
- Do not tamper with or attempt to repair a gas cylinder regulator.
- Never lubricate, modify, or force cylinder valves.
- Open valves slowly using only wrenches or tools provided by the cylinder supplier directing the cylinder opening away from people.
- Check for leaks around the valve and handle using a soap solution, "snoop" liquid, or an electronic leak detector.
- Leaking cylinders should be 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.
- Close valves and relieve pressure on cylinder regulators when cylinders are not in use. Label empty cylinders "EMPTY" or "MT" and date the tag; treat in the same manner that you would if it were full.
- Always attach valve safety caps when storing or moving cylinders.
- Transport cylinders in a vertical secured position with an approved cart with a safety chain; never move or roll gas cylinders by hand.
- Securely attach all gas cylinders (empty or full) to a wall or laboratory bench with a clamp or chain, or secure in a metal base in an upright position.
- Store cylinders by gas type, separating oxidizing gases from flammable gases by either 20 feet or a 30-minute firewall that is 5 feet high.
- Store gas cylinders in cool, dry, well-ventilated areas away from incompatible materials and ignition sources.
- Do not subject any part of a cylinder to a temperature higher than 125 °F or below 50 °F.
- Store empty cylinders separately from full cylinders.
- When a cylinder cap cannot be removed by hand, cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.
- Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.
- Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

RESOURCES

With so many compressed gas hazards, OSHA developed general compressed gas regulations as well as gas-specific regulations to eliminate and prevent injury and illness associated with compressed gases, regardless of content or packaging (cylinder, portable tank, or standing tank). General compressed gas requirements are outlined in 29 CFR 1910.101, and are summarized below:

- Each compressed gas cylinder under the employer's control must be maintained in a safe condition as determined by a visual inspection
- The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in Sec. 1910.6.
- Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained in accordance with Compressed Gas Association Pamphlets S-1.1-1963 and 1965 addenda and S-1.2-1963, which is incorporated by reference as specified in Sec. 1910.6.

4.10 VEHICLES AND MOBILE EQUIPMENT

If vehicle safety practices are not observed, employees risk being pinned between vehicles and walls, struck by swinging backhoes, crushed beneath overturned vehicles, or other similar accidents. In addition, work near public roadways present the risk of being struck by trucks or cars.

Provided below are suggested practices for operations involving vehicles and mobile equipment. For further details, refer to the OSHA standards covering motor vehicles and mechanized equipment.

- Only authorized employees are allowed to operate mobile equipment.
- Employees must be instructed to stay clear of backing and turning vehicles and equipment with rotating cabs.
- All off-road equipment used on site must be equipped with rollover protection (ROPS).
- Back-up alarms for equipment with limited rear view must be maintained, or use someone to help guide them back.
- Conduct pre-shift inspections on the assigned equipment to verify that the equipment is in working order.
- Be sure that all vehicles have fully operational braking systems, brake lights, and a working backup alarm.
- Use seat belts when transporting workers in motor and construction vehicles.
- Maintain at least a 10-foot clearance from overhead power lines when operating equipment.
- Block up the raised bed when inspecting or repairing dump trucks.
- Know the rated capacity of the crane and use accordingly.
- Ensure the stability of the crane.
- Use a tag line to control materials moved by a crane.
- Verify experience or provide training to crane and heavy equipment operators.
- Passengers are not permitted to ride on equipment unless it is equipped to accommodate passengers.
- The equipment operator shall use access provided to get on and off equipment.
- If the mobile equipment does not have an enclosed cab, eye protection must be used when in operation.
- Vehicles and mobile equipment must only be used in the manner in which it was designed and intended for.
- Before fueling, the operator of a gasoline or diesel vehicle must shut off the engine 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.

4.11 Preventative Maintenance Program

T&N Van Service has implemented a preventive maintenance program to mitigate the potential of equipment failure. In order to accomplish this planned maintenance inspections are required to meet manufacturer and legislated requirements. This will include oil changes, lubrication, replace parts, and complete overhauls. An equipment inventory must be established and maintained. The main purpose is to preserve the equipment and improve the reliability of the equipment. The preventive maintenance program will help prevent equipment failure before it ever occurs. Equipment found to be defective is removed from service until it is repaired.

Examples of preventive maintenance:

- Oil changes
- Fluid inspections
- Lubrication
- Replace worn parts
- Replace worn tires
- Replace brakes
- Replace worn belts and hoses
- Complete equipment overhauls

T&N Van Serviceis responsible for monitoring the preventive maintenance program and tracking costs and maintenance activity.

4.12 Spill Prevention & Response

Chemicals whether liquid, solid, or gas can spill or leak and be harmful to both personnel and the environment. In order to prevent the release of chemicals, T&N Van Service will ensure that all chemical substances are stored in proper containers (preferably closed) and stored so that they are not exposed to storm water. Areas where chemicals may be used or stored must be maintained using good housekeeping best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary. A proper spill kit will be maintained in an easily accessible area and will contain the appropriate supplies for materials that may be spilled.

Employees will be instructed on the proper response procedures for spilled materials. The training should include materials available for use, proper waste disposal, and communication procedures.

In the event of a spill or chemical release, the following procedures will be initiated:

- Once discovered, all employees must leave the area immediately and notify their supervisor.
- Consult the SDS for the spilled or leaking material to identify potential hazards, protective equipment required, and correct procedures for clean-up.
- Shut off ignition sources, flames, spark producing or heat producing equipment, and provide adequate ventilation.
- If the spill or leak is too big to handle with available equipment, an emergency response team should be notified.

4.13 ISO 26000 – THE ENVIRONMENT

T&N Van Serviceis aware of the need for and benefits of socially responsible behavior. An organization's performance in relation to the society in which it operates and to its impact on the environment has become a critical part of measuring its overall performance and its ability to continue operating effectively. This is, in part, a reflection of the growing recognition of the need to ensure healthy ecosystems, social equity and good organizational governance. In the long run, all organizations' activities depend on the health of the world's ecosystems. Organizations are subject to greater scrutiny by their various stakeholders.

In order to uphold our social responsibility to the environment, we will consider implementing the following:

- Procedures to protect the climate including limiting the amount of greenhouse gases by use of low-emission technologies, driving less or carpooling, and use of renewable energy.
- Consideration of the impact a product has on the environment before purchasing. Preference would be given to products that minimally impact the environment, made of recycled, renewable material, energy-efficient, etc.
- Vehicles and equipment preventative maintenance and practices, including, not leaving equipment idling unnecessarily, the use of alternative fuels, when possible, etc. The most efficient vehicles and equipment should be used when possible.
- Implementation of a plan to minimize the environmental impact when activities may affect the local animal or plant population or habitat.
- An efficient material management system to reduce the impact on the environment by limiting the amount of materials that are used, left over as waste, or transported.
- Energy conservation measures will be used whenever possible. This can include shutting down equipment when it's not in use, use of energy efficient light bulbs, using new energy efficient technology, using equipment with the ENERGY STAR mark, etc.

Water conservation measures will be used whenever possible. This can include repair on any equipment leaking water, use of a broom instead of a hose for cleaning purposes, upgrade equipment efficiency, educate employees, etc.

4.14 GROUND-FAULT CIRCUIT INTERRUPTERS (GFCI)

T&N Van Service uses Ground Fault Circuit Interrupters when 120-volt, single phase 15 and 20-ampere temporary wiring is in exclusive use. When deemed appropriate, a competent person will be assigned to oversee the GFCI program.

A ground-fault occurs when there is a break in the low-resistance grounding path from a tool or electrical system. The electrical current may then take an alternative path to the ground through the user, resulting in serious injuries or death. The ground-fault circuit interrupter, or GFCI, is a fast-acting circuit breaker designed to shut off electric power in the event of a ground-fault within as little as 1/40 of a second. It works by comparing the amount of current going to and returning from equipment along the circuit conductors. When the amount going differs from the amount returning by approximately 5 milliamperes, the GFCI interrupts the current.

The GFCI is rated to trip quickly enough to prevent an electrical incident. If it is properly installed and maintained, this will happen as soon as the faulty tool is plugged in. If the grounding conductor is not intact or of low-impedance, the GFCI may not trip until a person provides a path. In this case, the person will receive a shock, but the GFCI should trip so quickly that the shock will not be harmful.

The GFCI will not protect you from line contact hazards (i.e. a person holding two "hot" wires, a hot and a neutral wire in each hand, or contacting an overhead power line). However, it protects against the most common form of electrical shock hazard, the ground-fault. It also protects against fires, overheating, and destruction of wire insulation.

Because GFCIs are so complex, they require testing on a regular basis. Test permanently wired devices monthly, and portable-type GFCIs before each use. All GFCIs have a built-in test circuit, with test and reset buttons, that triggers an artificial ground-fault to verify protection. Ground-fault protection, such as GFCIs provide, is required by OSHA in addition to (not as a substitute for) general grounding requirements.

Receptacle Type: The Receptacle Type incorporates a GFCI device within one or more receptacle outlets. Such devices are becoming popular because of their low cost.

Portable: Portable Type GFCIs come in several styles, all designed for easy transport. Some are designed to plug into existing non-GFCI outlets, or connect with a cord and plug arrangement. The portable type also incorporates a no-voltage release device that will disconnect power to the outlets if any supply conductor is open. Units approved for outdoor use will be in enclosures suitable for the environment. If exposed to rain, they must be listed as waterproof.

Cord-Connected: The Cord-Connected Type of GFCI is an attachment plug incorporating the GFCI module. It protects the cord and any equipment attached to the cord. The attachment plug has a non-standard appearance with test and reset buttons. Like the portable type, it incorporates a no-voltage release device that will disconnect power to the load if any supply conductor is open.

4.15 RADIO FREQUENCY SAFETY

Radiofrequency (RF) and microwave (MW) radiation are electromagnetic radiation in the frequency ranges 3 kilohertz (kHz) - 300 Megahertz (MHz), and 300 MHz - 300 gigahertz (GHz), respectively. Research continues on possible biological effects of exposure to RF/MW radiation from radios, cellular phones, the processing and cooking of foods, heat sealers, vinyl welders, high frequency welders, induction heaters, flow solder machines, communications transmitters, radar transmitters, ion implant equipment, microwave drying equipment, sputtering equipment and glue curing.

HEALTH EFFECTS

Electric and magnetic fields are complex physical agents whose potential health effects are the subject of much research. Particularly controversial are the biophysical mechanisms by which these RF fields may affect biological systems. General health effects reviews explore possible carcinogenic, reproductive and neurological effects. Health effects by exposure source are noted in radar traffic devices, wireless communications with cellular phones, radio transmission, and magnetic resonance imaging (MRI).

HAZARD LOCATIONS AND SOLUTIONS

In recent years there has been considerable discussion and concern about the possible hazards of RF/MW radiation. Extensive research on this topic is underway in many countries. Natural low-frequency EM fields come from two main sources: the sun, and thunderstorm activity, but man-made fields at much higher frequencies have altered this natural EMF. At sufficiently high-power densities, RF/MW energy can cause thermal effects that can cause blindness, and sterility. Non-thermal effects, such as alteration of the human body's circadian rhythms, immune system and the nature of the electrical and chemical signals communicated through the cell membrane have been demonstrated. However, none of the research has conclusively proven that low-level RF/MW radiation causes adverse health effects.

EVALUATING RF AND MICROWAVE EXPOSURE

RF energy includes frequencies ranging from about 3000 cycles per second (3 kHz) to 300 billion cycles per second (300 GHz). Microwaves are a subset of radio waves and includes frequencies ranging from around 300 million cycles per second (300 MHz) to 3 GHz. RF exposures are directly linked to absorption and distribution of RF energy in the body, and the absorption and distribution are strongly dependent on body size and orientation and on frequency and polarization of the incident radiation. A common measure of exposure is the Specific Absorption Rate (SAR), the rate of energy absorption in tissue, measured in watts per kilogram of tissue.

SAFETY RULES

The warning symbol for radio frequency radiation hazards shall consist of a red isosceles triangle above an inverted black isosceles triangle, separated and outlined by an aluminum color border. The words "Warning - Radio-Frequency Radiation Hazard" shall appear in the upper triangle.

- Reports that workers near RF sealers may be unaware of their exposure to RF emissions, because the RF energy from sealers and heaters can penetrate deeply into the body without activating the heat sensors located in the skin. The results of a NIOSH study indicate that the majority of the workers surveyed were exposed to RF energy at levels exceeding values citable by OSHA. The following controls are recommended:
    - When in designated areas, employees must wear proper PPE.
    - Properly design and install shielding material.
    - Maximize the distance between the worker and the source of RF energy emission should be maximized. Examples of means to accomplish this include the use of automatic feeding devices, rotating tables, and remote materials handling.
    - Tune the equipment electronically to minimize the stray power emitted.
    - Whenever possible, switch off equipment when it is not being used. Maintenance and adjustment of the equipment should be performed only while the equipment is not in operation.
    - After the performance of maintenance or repair, all machine parts, including cabinetry, should be reinstalled so that the equipment is intact and its configuration is unchanged.
    - Post warnings and information.
    - Develop a medical surveillance program tailored to the expected degree of employee use of RF equipment and potential for exposure to RF energy.
    - Take exposure measurements at regular intervals.

TRAINING

Appropriate training based on the complexity of the job and potential hazards related to radio frequency shall be provided to all applicable employees. Assessments shall be used to determine whether the personnel have the knowledge and have demonstrated skills to safety perform their work assignments. Retraining and testing shall be required for unsatisfactory/unsafe performance of job assignments.

4.16 ERGONOMICS

Ergonomics is the science of fitting the job to the worker. In the workplace, ergonomic principles are used to make alterations to a job so that it conforms to the person doing that job, rather than to force the person to fit the job. Redesigning various job functions to match a person's stature will reduce stress on the body and eliminate many potential injuries associated with the overuse of muscles, unnatural postures, and repetitive motions.

Ergonomic solutions may involve the following:

- Restructuring of tasks,
- Redesigning workstations
- Implementing new or different tools, lighting, and equipment to fit a worker's physical capabilities and limitations

Some of these options may mean adjusting the height of a workstation or a computer screen, or rearranging the steps in a process so the worker will not have to lift and twist in the same motion.

The goal of a workplace ergonomics program is to reduce or eliminate the risk factors that lead to musculoskeletal disorders (MSD)s. Jobs that expose workers to excessive vibration, repetitive motions, heavy lifting, awkward postures, and continual contact pressure will be assessed and ways found to reduce exposure to those factors that cause MSDs. Identifying ergonomic risk factors in your workplace is the first step toward making changes that will improve the safety and health of all workers.

MUSCULOSKELETAL DISORDERS

Musculoskeletal disorders are caused or aggravated by repetitive motions, forceful exertions, vibration, mechanical compression (hard and sharp edges), and sustained or awkward postures that occur over extended periods of time. MSDs can affect nearly all tissues, the nerves, tendons, tendon sheaths, and muscles, with the upper extremities being the most frequently affected. These injuries range from disorders of the back, the neck, the arms and legs, or the shoulders and involve strains, sprains, or tissue inflammation, and dislocation.

Workers suffering from MSDs may experience less strength for gripping, less range of motion, loss of muscle function, and inability to do everyday tasks. These painful and sometimes crippling injuries develop gradually over periods of weeks, months, and years as the result of the repeated actions required to perform their jobs.

RISK FACTORS THAT CAUSE MSDS

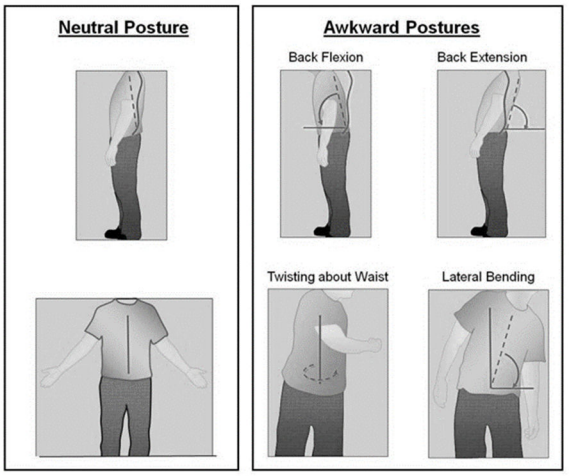
The physical stresses that can contribute to or cause MSDs are called "risk factors." The initial symptoms of MSDs may include fatigue, discomfort, and pain; as tissue damage worsens, other symptoms, such as weakness, numbness, or restricted movement, may also appear. Work-related MSDs occur when the risk factors that cause or contribute to musculoskeletal system pathology are associated with a person's job duties. Workplace musculoskeletal disorders are caused by exposure to the following risk factors:

Repetition

Doing the same motions over and over again places stress on the muscles and tendons. The severity of risk depends on how often the action is repeated, the speed of movement, the number of muscles involved, and the required force.

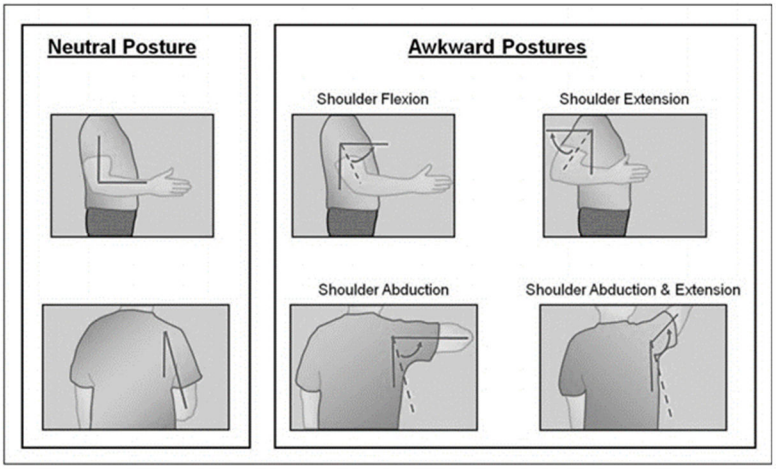
Forceful Exertions

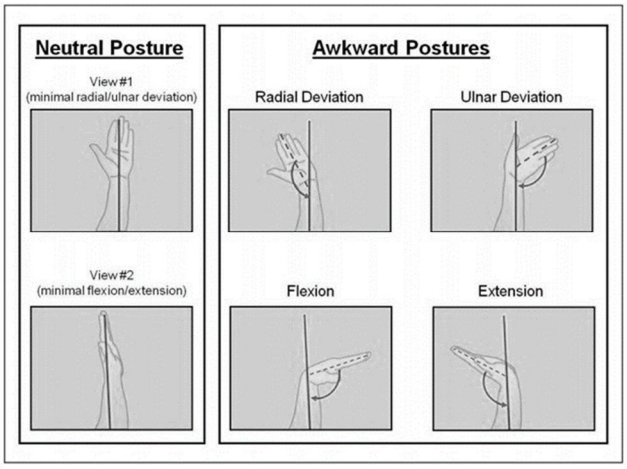
Force is the amount of physical effort required to perform a task, such as heavy lifting or pushing/pulling, or to maintain control of equipment or tools. The amount of force depends on the type of grip, the weight of an object, body posture, the type of activity, and the duration of the task.



Awkward Postures

Posture is the position your body is in and affects muscle groups that are involved in physical activity. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding fixed positions.





Contact Stress

Pressing the body against a hard or sharp edge can result in placing too much pressure on nerves, tendons, and blood vessels. For example, using the palm of your hand as a hammer can increase your risk of suffering an MSD.

Vibration

Operating vibrating tools or equipment that typically have high or moderate vibration levels such as sanders, grinders, chippers, routers, drills, and other saws can lead to nerve damage.

Cold Temperatures

Operations where the work environment is a cold setting, such as a food processing plant, or meatpacking facility, the risk for potential MSDSs to develop increases, especially in combination with any of the previously mentioned risk factors.

Other Factors

Not every solution will work for every employee. Keep an eye out for employees who may be doing any behaviors that may indicate there are still ergonomic issues. If any of the following behaviors are observed, certain actions should be made such as re-assessing work stations and tasks to find ergonomic improvement opportunities:

- Modifying their tools, equipment or work area
- Shaking their arms and hands
- Rolling their shoulders
- Bringing products such as back belts or wrist braces into the workplace

MSD Signs & Symptoms

Symptoms can vary in severity, depending on the amount of exposure to MSD hazards and often appear gradually. Usually, symptoms become more severe as exposure continues. If the employee continues to be exposed, symptoms may increase to the point that they interfere with performing the job. Finally, pain may become so severe that the employee is unable to perform physical work activities).

Signs that may indicate an MSD include deformity, decreased grip strength, decreased range of motion, and loss of function. Common symptoms of MSDs include:

- Painful joints,
- Pain, tingling, or numbness in the hands or feet,
- Shooting or stabbing pains in the arms or legs,
- Swelling or inflammation,
- Burning sensation,
- Pain in wrists, shoulders, forearms, or knees,
- Fingers or toes turning white,
- Back or neck pain, and

Breaks, Rest Periods, & Stretching

Pay attention to signs of discomfort and fatigue on the job; these are warning signs from your body. As muscles tire during a work task, slouching can lead to poor posture, sloppy, uncontrolled movements, and injuries. Rest breaks mean recovery for the body. During a job task, take micro-breaks lasting 10-15 seconds every ten minutes. Take periodic mini-breaks lasting 3-5 minutes. These short breaks give the body a rest, reduce discomfort, and improve your performance.

Alternate your work activities and postures throughout the day. Rotating tasks may seem inefficient, but the rest and use of different muscle groups increases energy and maintains productivity. For example, if

you are a landscaper, don't trim all of the shrubs, sweep up the trimmings, and then leaf-blow the whole area; work in sections and trim, sweep, and leaf-blow in alternating tasks. If you work at a single workstation and job task all day, move into different postures while you work: first standing, then standing with one foot resting on a stool, then sitting.

Stretches help you warm-up before work and relax during breaks; they increase flexibility and boost blood flow and oxygen to muscles. Perform stretches slowly and gently; avoid extreme postures and stop stretching if you feel pain or discomfort. Physical and Occupational Therapists are the most qualified individuals to generate a specific stretching and warm-up program.

Reporting Symptoms or Injuries

Report any signs or symptoms of suspected musculoskeletal disorders as soon as you believe one may be developing. It is always best to report a symptom or injury to the appropriate personnel sooner rather than later. The sooner it is reported the sooner action can be taken to redirect the course or degree of injury.

Re assess the employees work station

Once an injury has been brought to management's attention, the employees' workstation will be re-evaluated to determine what factors may be contributing to the injury. Once the root cause of the injury is determined, appropriate action must be taken to ensure the hazard is eliminated. This may include restructuring the employee's tasks or workstation or even introducing tools or equipment that may aid in the comfort of the worker.

Continue to monitor for worsening/further injuries

This is the last and most crucial step. Once the problem has been identified and mitigated; it is important to monitor it to ensure that the symptoms or injury do not continue or worsen. Should that be the case, the workstation should be re-evaluated

Training

Training will be provided to employees. Training includes:

1. Review what Ergonomics is and why it is important.
2. Review Musculoskeletal Disorders (MSDs)
    - Signs and symptoms
    - The risk factors
3. Review the most prevalent types of ergonomics concerns and how to help prevent or reduce injuries

TAB 5: TRAINING & EDUCATION

5.1 SAFETY MEETINGS

Safety meetings are an important part of jobsite safety. They are an opportunity for employees and their supervisor to discuss specific hazards encountered at the jobsite and how best to address them.

Meetings will focus on situations faced by the workers in the current work environment. Prior to each shift, supervisors should address the hazards that will face the workers on the particular jobsite. Individual workers should be encouraged to provide input on their observations of hazards that exist or will be encountered during the shift that is about to begin.

Effective safety meetings should incorporate the following:

- Discuss safety policies and procedures with management and make recommendations for improvements.
- Review accident investigation reports on all accidents and “near-misses”.
- Identify unsafe conditions and work practices and make recommendations for corrections.
- Discuss problems that have arisen or that are anticipated along with any other safety and health topics.

The meeting should be a valuable educational experience by:

- Keep the discussion flowing and on-topic
- Start and stop the meetings on time
- Use illustrated material and demonstrations to make the point
- Discuss each topic thoroughly
- Review accidents, injuries, property losses, and near misses
- Evaluate accidents, injuries, property losses, and near misses for trends and similar causes to initiate corrective actions.

Safety meetings may also incorporate various training topics in the form of toolbox talks which are brief discussions regarding areas of safety applicable to a particular task or jobsite. Tool box talks that include subject matter applicable to construction are included in the training section of this document.

Each safety meeting will be documented on the form on the following page.

Safety Meeting Minutes

Jobsite: _____ Date: _____

Supervisor: _____

Topics Discussed:

Action Items:

Meeting Attended By:

Print Name:	Signature:

5.2 TRAINING & EDUCATION

Training is an essential component of an effective safety and health program addressing the responsibilities of both management and employees at the site. Training is most effective when incorporated into other education on performance requirements and job practices.

Training programs should be provided as follows:

- Initially when the safety and health plan is developed
- For all new employees before beginning work
- When new equipment, materials, or processes are introduced
- When procedures have been updated or revised
- When experiences/operations show that employee performance must be improved
- At least annually

Besides the standard training, employees should also be trained in the recognition of hazards – be able to look at an operation and identify unsafe acts and conditions. A list of typical hazards employees should be able to recognize may include:

- **Fall Hazards** – Falls from- Floors, Roofs and roof openings, Ladders (Straight and Step), Scaffolds, Wall openings, Tripping, Trenches, Steel Erection, Stairs, Chairs
- **Electrical Hazards** – Appliances, Damaged cords, Outlets, Overloads, Overhead High Voltage, Extension cords, Portable Tools (broken casing or damaged wiring), Grounding, Metal Boxes, Switches, Ground fault circuit interrupters(GFCI)
- **Caught Between** – Cave-Ins, Unguarded Machinery, Equipment, Confined Spaces
- **Struck-By** – Vehicles, Machinery, Flying/Falling Objects, Concrete/Masonry Walls
- **Housekeeping Issues** – Exits, Walkways, Floors, Trash, Storage of Materials (Hazardous and Non-Hazardous), Protruding Nails, Exits (blocked), Trips/Slips, Stairs, Un-even flooring, Electrical cords, icy walkways, etc.
- **Fire Hazards** – Oily-Dirty Rags, Combustibles, Fuel Gas Cylinders, Exits (blocked)
- **Health Hazards** – Silicosis, Asbestos, Loss of hearing, Eye injury due to flying objects, Chemical exposures, Poison Ivy, Stagnant water

Employees trained in the recognition and reporting of hazards and supervisors trained in the correction of hazards will substantially reduce the likelihood of a serious injury.

Annual safety training is conducted by Lancaster Safety Consulting, Inc. The annual training session lasts approximately four hours. Additional training may be conducted throughout the year by authorized in-house trainers. Training topics for all employees include, but are not limited to:

- Intro to OSHA
- Hazard Communication
- PPE
- Forklift
- Fire
- Bloodborne Pathogens

- Fall Protection
- Powered hand tools
- Electrical Safety
- Heat Stress
- Ladder
- Aerial Lift
- Ergonomics

Training methods and media may include, but not be limited to PowerPoint based training, videos, quizzes, scenarios, and group discussions. Alternative training methods are not utilized at this time.

T&N Van Service measures training comprehension based on verbal discussions, group activities, or quizzes administered throughout the training class and through on the job monitoring. Training documentation and training programs are maintained at the main office and are available for review, upon request. Training records are kept in accordance with established procedures and are maintained for a minimum of five years.

T&N Van Service conducts audits of the safety program on an annual basis, at minimum. Factors addressed in the annual audit include, but are not limited to the following.

- Hazard Assessment review
- Personal Protective Equipment analysis
- Written safety program review
- The need for medical clearances or evaluations
- Renewal of training and professional certifications, if applicable

5.3 NEW HIRE ORIENTATION

Whenever a new employee comes on board, there is a period of training and learning in which the new employee learns about the company's safety and health programs, emergency action plans, fire protection policy, and any other safety-related issues that the employee must know.

This is also an opportunity to influence the new employee on the safety culture of the company, and positively influence that employee to keep safety always in mind.

The employee orientation will be started during the employee's first day on his or her new job. A qualified company representative will conduct the new hire orientation. The entire orientation program may be broken up over a period of a few days, but when it is complete, employees should know the following safety information:

- The organization's safety objectives and goals.
- The function of the corporate safety committee.
- What employees should do if they are injured on the job.
- The procedures for reporting accidents, near-miss incidents, hazards, injuries, and illness.
- What to do in case of an emergency.
- The facility's use of warning signs and tags.
- OSHA's recordkeeping requirements and employee access to exposure and medical records.
- The safety rules and safe procedures that apply to their jobs (especially for tasks with OSHA-required training).

As part of the new hire orientation process, the following topics, at minimum, will be covered:

- Personal Protective Equipment
- Hazard Communication
- Emergency Evacuation & Fire Safety
- Bloodborne Pathogens

Depending on the job classification, the following training may also be provided at the company's discretion:

- OSHA 10 Hour training
- OSHA 30 Hour training
- First Aid, CPR, and AED training

5.4 MISCELLANEOUS TRAINING LOGS

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

TAB 6: FORMS DIRECTORY

BLOODBORNE PATHOGENS FORMS

Name:	Location:	Responsibility:	Occurrence:
Hepatitis B Vaccine Declination Form	Bloodborne Pathogens Exposure Control Plan	Management/Employee	Once employees are exposed to bloodborne pathogens, they must be offered the Hep. B Vaccination. If they decline, a declination form will need to be reviewed & signed.
Sharps Injury Form	Bloodborne Pathogens Exposure Control Plan	Management and affected employee	Following exposure to bloodborne pathogens
Bloodborne Pathogens Exposure Report Form	Bloodborne Pathogens Exposure Control Plan	Management and affected employee	Following exposure to bloodborne pathogens

CONFINED SPACE FORMS

Name:	Location:	Responsibility:	Occurrence:
Confined Space Entry Permit	Confined Space Entry Program	Entry Supervisor	Before entering confined spaces
Confined Space Pre-Entry Checklist and Reclassification	Confined Space Entry Program	Entry Supervisor	Before entering confined spaces

EMERGENCY ACTION & FIRE SAFETY FORMS

Name:	Location:	Responsibility:	Occurrence:
Emergency Evacuation Drill Attendance Log & Completion Form	Emergency Action and Fire Safety	Personnel in charge of head count	Annually
General Fire Prevention Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Exit Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Flammable & Combustible Materials Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Fire Extinguisher Inspection Checklist	Emergency Action Plan & Fire Safety Program	Management or designated employee	Monthly
Hot Work Permit	Emergency Action Plan & Fire Safety Program	Supervisor	Before completing hot work; Only valid for 24 hours

FALL PROTECTION FORMS

Fall Protection Forms			
Name:	**Location:**	**Responsibility:**	**Occurrence:**
Walking-Working Surfaces Inspection Checklist	Fall Protection Program	Supervisor	As needed (weekly, monthly, quarterly, etc.)
Fall Arrest Harness Inspection Report	Fall Protection Program	Employee wearing the PPE	Pre/post use
Fall Protection Safety Inspection Report	Fall Protection Program (1926 only)	Supervisor	Before use
Fall Protection Safety Audit Checklist	Fall Protection Program	Supervisor	As needed
Fall Protection Accident Investigation Report	Fall Protection Program	Management and affected employee	Following an accident involving fall protection
Fall Protection Safety Meeting Report	Fall Protection Program	Supervisor with employees	To be completed during/following any safety meetings regarding fall protection
Site Specific Fall Protection Plan	Fall Protection Program (1926 only)	Jobsite supervisor	Before starting work on a new jobsite

FORKLIFT FORMS

Name:	Location:	Responsibility:	Occurrence:
Forklift Inspection Checklist	Safety Program for Forklifts & Other Industrial Trucks	Forklift Operator	Daily/Before use

INJURY & ILLNESS PREVENTION PROGRAM FORMS

Name:	Location:	Responsibility:	Occurrence:
Stop Work Report	Injury & Illness Prevention Program	Any employee	When necessary
Disciplinary Action Form	Injury & Illness Prevention Program	Management with employee(s) involved	Following any violations
Subcontractor Prequal Form	Injury & Illness Prevention Program	Subcontractors	Before working with subcontractors
Accident Investigation Report	Injury & Illness Prevention Program	Management with employee(s) involved	Following any accident. Complete right away.
Near Miss Reporting	Injury & Illness Prevention Program	Management with employee(s) involved	Following any near misses
Job Hazard Analysis Form	Injury & Illness Prevention Program	Management or designated employee	Encouraged to be completed for all job tasks
Risk Analysis Form	Injury & Illness Prevention Program	Management or designated employee	Encouraged to be completed for all job tasks
General Work Permit	Injury & Illness Prevention Program	Management or designated employee	Refer to Section 3.2 for a list of tasks that require a work permit
Safety Meeting Minutes	Injury & Illness Prevention Program	Management or designated employee	Following safety committee meetings, if applicable.

JOBSITE SAFETY & HEALTH MANUAL FORMS

Name:	Location:	Responsibility:	Occurrence:
Emergency Information	Jobsite Safety & Heath Manual	Management or designated employee	Prior to the start of each job
Stop Work Report	Jobsite Safety & Heath Manual	Supervisor	Any time a person in the work area is at risk of injury
Jobsite Inspection Checklist	Jobsite Safety & Heath Manual	Safety Coordinator	Prior to the start of each job

PERSONAL PROTECTIVE EQUIPMENT FORMS

Name:	Location:	Responsibility:	Occurrence:
Personal Protective Equipment Checklist	Personal Protective Equipment	Affected Employee	Initial Assignment

HAZARD COMMUNICATION PROGRAM

T&N Van Service

TABLE OF CONTENTS

HAZARD COMMUNICATION PROGRAM

T&N Van Service

1.1 INTRODUCTION

This written Hazard Communication program (Hazcom) has been developed and implemented by T&N Van Service in order to comply with the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard. This program will be maintained in The Main Office and is available for review upon request.

1.2 RESPONSIBILITY

HAZARD COMMUNICATION OFFICER - GENERAL MANAGER

- Ensure overall adherence to this program
- Ensure that all employees are trained
- Advise employees of any special precautions to follow when conducting non-routine tasks
- Provide hazardous chemical information to other personnel and/or subcontractors who may be exposed
- Review and update this program as necessary
    - Provide other employers with information regarding the chemicals/hazardous materials
    - Inform other employers of the labeling systems used in the workplace
    - Verify that each container of hazardous chemicals in the workplace is appropriately labeled.
    - Verify that secondary containers at jobsites are appropriately labeled
    - Ensure that safety data sheets are available for all chemicals used at the workplace
-

SAFETY DATA SHEET (SDS) COORDINATOR - GENERAL MANAGER

- Establish and monitor the SDS program
- Update the SDS log and Hazardous Chemical list
- Maintain and update the company's list of hazardous chemicals
- Ensure that all primary and secondary containers are appropriately labeled

EMPLOYEES

- Attend all training
- Know where Safety Data Sheets can be obtained
- Report containers with worn, torn, or missing labels to your Supervisor
- Read and understand all hazard warning labels

1.3 DEFINITIONS

A full list of definitions can be found at 29 CFR 1910.1200(c). Common terms used throughout this program include:

CHEMICAL - Any substance or mixture of substances

CLASSIFICATION - to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

CONTAINER - any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. Pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

EXPOSURE OR EXPOSED - an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

HAZARD CATEGORY - the division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

HAZARD CLASS - the nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

HAZARDOUS CHEMICAL - any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

PRODUCT IDENTIFIER - the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

SUBSTANCE - chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

USE - to package, handle, react, emit, extract, generate as a byproduct, or transfer

1.4 HAZARD CLASSIFICATION

All chemicals must be classified by their hazards. Before distribution, chemical manufacturers and importers must:

- evaluate chemicals produced in their workplaces or imported by them in order to determine the hazard classes, and where appropriate, the category of each class that apply to the chemical being classified.
- identify and consider the full range of available scientific literature and other evidence concerning the potential hazards.
- consult Appendix A to §1910.1200 regarding classification of health hazards
- consult Appendix B to §1910.1200 regarding the classification of physical hazards
- follow the procedures in Appendices A and B to classify the hazards of the chemicals in mixtures

T&N Van Service may choose to classify chemicals based on the above criteria if the company chooses not to rely on the classification performed by the chemical manufacturer or importer. However, in most cases the manufacturer or importer's classification will be used.

1.5 SAFETY DATA SHEETS

Safety Data Sheets (SDS), formerly known as material safety data sheets, communicate information regarding the hazards of a particular chemical. SDSs are prepared by a chemical's manufacturer, importer, or distributer in accordance to OSHA's Hazcom standard.

T&N Van Service retains a copy of the SDS for each hazardous chemical used in the workplace. SDSs will be maintained in an organized fashion and will be readily accessible during each work shift to employees when in their work areas. A copy of the SDS log will be maintained in Dock area on wall for all employees to view at will.

The SDS Program Coordinator will ensure that SDSs are received and appropriately filed in the T&N Van Service SDS log. In order to continually maintain the SDS log and list of hazardous chemicals, the following procedure will be used:

1. Appropriate safety data sheets will be distributed to T&N Van Service with or before the initial shipment of each chemical, and with the first shipment after an SDS is updated.
2. Upon receipt, the SDSs shall be reviewed for the following items before inserting it into the company's SDS log:
    a. That the SDS is appropriately updated and current,
    b. That the SDS appropriately describes and matches the chemical being used,
    c. If there are any new or introduced hazards, and
    d. The warning and caution sections have been modified.
3. If a chemical which does not have a current SDS on file is received, the SDS coordinator must:
    a. Immediately contact the chemical manufacturer or distributer to request that the SDS be faxed or emailed to the SDS coordinator.

b. If the manufacturer or distributor is unable to produce a SDS upon request, the Hazard Communication Officer should be notified immediately and the chemical is to be returned to the sender.

4. The SDS Coordinator will update the SDS log's table of contents and the Hazardous Chemical list (Attachment B) with the product identifier and manufacturer name.
5. If an updated SDS is received, the update should replace the obsolete SDS. Old SDSs must be retained in a separate file. Do not throw them away.

For each particular jobsite, will maintain the SDSs for chemicals/hazardous materials being used at that site.

An overview of the required sections and how to read an SDS can be found in section 2.1 of this program.

1.6 HAZARDOUS CHEMICAL LISTS

A list of all hazardous chemicals; whether solid, liquid, or gas; that are known to be present in the workplace is maintained in Attachment B of this document.

The list is organized by a product identifier for each chemical that is referenced on the appropriate safety data sheet. A duplicate list is to be kept in the front of each SDS book and may also be maintained electronically.

The SDS Coordinator is responsible for updating this list whenever any new chemicals are introduced to the workplace.

1.7 LABELING

Each container of a hazardous chemical that is used in or around the work area must be properly labeled, tagged, or marked with a product identifier; signal word; hazard statement(s); pictogram(s); precautionary statement(s); and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party. The labels must be prominently displayed, and in English, although other languages may also be included, if necessary.

Worn and torn labels must be replaced. It is the responsibility of employees to report inappropriate labels or the need to replace them to their Supervisor. Labels are not to be defaced or removed. If a label needs to be changed, please report it to General Manager. It is the ultimate responsibility of the Hazard Communication Officer to ensure that appropriate labels are in place and that replacement labels are available.

It is the responsibility of General Manager to verify that each container of hazardous chemicals in the workplace is appropriately labeled.

EXEMPTIONS

The following chemicals are exempt from the container labeling requirement:

- Hazards not otherwise classified
- The hazard label for solid materials may be transmitted to the customer at the time of initial shipment or with the SDS
- Portable secondary containers which will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

ALTERNATIVE LABELING SYSTEMS

For hazardous chemical containers that have no labels from the manufacturer (usually secondary containers that are used when contents from a manufacturer's container are poured into another container), General Manager will assure that labels that provide the required information are affixed to the container.

Alternative labeling systems such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS III) may be used to convey the hazards associated with chemicals in workplace containers. After June 1, 2016, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms. Information regarding the HMIS III and NFPA 704 rating systems can be found in Section 2.3.

In lieu of labeling, T&N Van Service may choose to convey all hazards associated with chemicals in stationary process containers to employees through the use of signs, placards, process sheets, batch tickets, operating procedures, as long as the alternative method identifies the containers to which it is applicable and conveys the information required to be on a label. If written materials are used, they will be readily accessible to the employees in their work areas throughout each shift.

1.8 NON-ROUTINE TASKS & UNLABELED PIPES

Employees must be informed of the hazards of non-routine tasks. Before any non-routine task is performed, employees must contact the Hazard Communication Officer to be advised of any special precautions to follow. The Hazard Communication Officer will provide the following information about the activity as it relates to the specific chemicals expected to be encountered:

- Specific chemical name(s) and hazard(s);
- Personal protective equipment required and safety measures to be taken;
- Measures that have been taken to lessen the hazards including ventilation, respirators, presence of other employees(s); and
- Emergency procedures.

In addition, any other personnel who could be exposed as a result of this work will be informed so that appropriate safety measures can be taken.

There are zero non-routine tasks known to exist at T&N Van Service's workplace.

Employees will be informed about the hazards associated with chemicals transferred through unlabeled pipes in the work area by the Hazard Communication Officer and/or Supervisors.

1.9 MULTI-EMPLOYER WORKSITES

Before performing any work at T&N Van Service, General Manager will ensure that all temporary workers, subcontractors, and/or any employees of other employers who may be exposed to hazardous chemicals are provided with the following information:

- Location of onsite SDS for each hazardous chemical that they may be exposed to while working
- Precautionary measures that need to be taken to protect employees during normal operating conditions in foreseeable emergencies
- The labeling system used in the workplace
- Procedures to follow if they are exposed.

In addition, T&N Van Service should contact each contractor or sub-contractor before work is started to gather and disseminate any information concerning chemical hazards the sub-contractor is bringing into the workplace, and vice versa.

1.10 PROGRAM MAINTENANCE & COMPLIANCE

The Hazard Communication Officer will review and update this hazard communication program as necessary and at the following instances:

- Whenever there is a change in personnel affecting this program
- Whenever there is a change in process that involves a change in, or addition of a non-routine task
- Whenever a deficiency in a current process is noted

Any direct or intentional violation or non-compliance with this program may result in the termination of the person or persons involved, in accordance with company policy.

1.11 TRAINING

All employees will be provided with effective information and training on hazardous chemicals in their work area upon initial assignment and whenever a new chemical hazard is introduced into the work area. Employees shall be informed of:

- The requirements of OSHA's Hazard Communication Standard
- Any operations in the employees' work areas where hazardous chemicals are present
- The location and availability of this written Hazard Communication program, hazardous chemical lists, and safety data sheets

Annual refresher training will be conducted by a qualified representative designated by T&N Van Service Training shall consist of the following components, at minimum:

- Methods and observations that may be used to detect the presence of release of a hazardous chemical in the work area,
- The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area,
- Measures employees can take to protect themselves from these hazards, including specific procedures to protect employees from exposure to hazardous chemicals (work practices, emergency procedures, and personal protective equipment to be used), and
- The details of this Hazard Communication program
- An explanation of the labels received on shipped containers and the workplace labeling system used by T&N Van Service
- Safety Data Sheets, including the order of information and how employees can obtain and use the appropriate hazard information

Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals.

HAZARDOUS CHEMICAL AWARENESS

HAZARDOUS CHEMICAL AWARENESS

2.1 SECTIONS OF AN SDS

The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). In addition, OSHA requires that SDS preparers provide specific minimum information as detailed in Appendix D of 29 CFR 1910.1200. The SDS preparers may also include additional information in various section(s).

Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

A description of all 16 sections of the SDS, along with their contents, is presented below:

SDS Section 1: Identification

This section identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier. The required information consists of:

- Product identifier used on the label and any other common names or synonyms by which the substance is known.
- Name, address, phone number of the manufacturer, importer, or other responsible party, and emergency phone number.
- Recommended use of the chemical (e.g., a brief description of what it actually does, such as flame retardant) and any restrictions on use (including recommendations given by the supplier).[1]

SDS Section 2: Hazard(s) Identification

This section identifies the hazards of the chemical presented on the SDS and the appropriate warning information associated with those hazards. The required information consists of:

- The hazard classification of the chemical (e.g., flammable liquid, category1).
- Signal word.
- Hazard statement(s).
- Pictograms (the pictograms or hazard symbols may be presented as graphical reproductions of the symbols in black and white or be a description of the name of the symbol (e.g., skull and crossbones, flame).
- Precautionary statement(s).
- Description of any hazards not otherwise classified.
- For a mixture that contains an ingredient(s) with unknown toxicity, a statement describing how much (percentage) of the mixture consists of ingredient(s) with unknown acute toxicity. Please note that this is a total percentage of the mixture and not tied to the individual ingredient(s).

SDS Section 3: Composition/Information on Ingredients

This section identifies the ingredient(s) contained in the product indicated on the SDS, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed. The required information consists of:

SUBSTANCES

- Chemical name.
- Common name and synonyms.
- Chemical Abstracts Service (CAS) number and other unique identifiers.
- Impurities and stabilizing additives, which are themselves classified and which contribute to the classification of the chemical.

MIXTURES

- Same information required for substances.
- The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are:
    - Present above their cut-off/concentration limits or
    - Present a health risk below the cut-off/concentration limits.
- The concentration (exact percentages) of each ingredient must be specified except concentration ranges may be used in the following situations:
    - A trade secret claim is made,
    - There is batch-to-batch variation, or
    - The SDS is used for a group of substantially similar mixtures.

CHEMICALS WHERE A TRADE SECRET IS CLAIMED

- A statement that the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.

SDS Section 4: First-Aid Measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical. The required information consists of:

- Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion).
- Description of the most important symptoms or effects, and any symptoms that are acute or delayed.
- Recommendations for immediate medical care and special treatment needed, when necessary.

SDS Section 5: Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:

- Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation.
- Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns.
- Recommendations on special protective equipment or precautions for firefighters.

SDS Section 6: Accidental Release Measures

This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard. The required information may consist of recommendations for:

- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing.
- Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing.
- Methods and materials used for containment (e.g., covering the drains and capping procedures).
- Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up)

SDS Section 7: Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals. The required information consists of:

- Precautions for safe handling, including recommendations for handling incompatible chemicals, minimizing the release of the chemical into the environment, and providing advice on general hygiene practices (e.g., eating, drinking, and smoking in work areas is prohibited).
- Recommendations on the conditions for safe storage, including any incompatibilities. Provide advice on specific storage requirements (e.g., ventilation requirements)

SDS Section 8: Exposure Controls/Personal Protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure. The required information consists of:

- OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.
- Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system).
- Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face, skin or respiratory protection needed based on hazards and potential exposure).
- Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material).

SDS Section 9: Physical and Chemical Properties

This section identifies physical and chemical properties associated with the substance or mixture. The minimum required information consists of:

- Appearance (physical state, color, etc.);
- Upper/lower flammability or explosive limits;
- Odor;
- Vapor pressure;
- Odor threshold;
- Vapor density;
- pH;
- Relative density;
- Melting point/freezing point;
- Solubility(ies);
- Initial boiling point and boiling range;
- Flash point;
- Evaporation rate;
- Flammability (solid, gas);
- Partition coefficient: n-octanol/water;
- Auto-ignition temperature;
- Decomposition temperature; and
- Viscosity.

The SDS may not contain every item on the above list because information may not be relevant or is not available. When this occurs, a notation to that effect must be made for that chemical property. Manufacturers may also add other relevant properties, such as the dust deflagration index (Kst) for combustible dust, used to evaluate a dust's explosive potential

SDS Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into three parts: reactivity, chemical stability, and other. The required information consists of:

REACTIVITY

- Description of the specific test data for the chemical(s). This data can be for a class or family of the chemical if such data adequately represent the anticipated hazard of the chemical(s), where available.

CHEMICAL STABILITY

- Indication of whether the chemical is stable or unstable under normal ambient temperature and conditions while in storage and being handled.
- Description of any stabilizers that may be needed to maintain chemical stability.
- Indication of any safety issues that may arise should the product change in physical appearance.

OTHER

- Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or polymerize, which could release excess pressure or heat, or create other hazardous conditions. Also, a description of the conditions under which hazardous reactions may occur.
- List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions).
- List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the chemical could react to produce a hazardous situation.
- List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or heating. (Hazardous combustion products should also be included in Section 5 (Fire-Fighting Measures) of the SDS.)

SDS Section 11: Toxicological Information

This section identifies toxicological and health effects information or indicates that such data are not available. The required information consists of:

- Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact). The SDS should indicate if the information is unknown.
- Description of the delayed, immediate, or chronic effects from short- and long-term exposure.
- The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose)) - the estimated amount [of a substance] expected to kill 50% of test animals in a single dose.
- Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.
- Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA

SDS Section 12: Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment. The information may include:

- Data from toxicity tests performed on aquatic and/or terrestrial organisms, where available (e.g., acute or chronic aquatic toxicity data for fish, algae, crustaceans, and other plants; toxicity data on birds, bees, plants).
- Whether there is a potential for the chemical to persist and degrade in the environment either through biodegradation or other processes, such as oxidation or hydrolysis.
- Results of tests of bioaccumulation potential, making reference to the octanol-water partition coefficient (Kow) and the bioconcentration factor (BCF), where available.
- The potential for a substance to move from the soil to the groundwater (indicate results from adsorption studies or leaching studies).
- Other adverse effects (e.g., environmental fate, ozone layer depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and/or global warming potential).

SDS Section 13: Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS. The information may include:

- Description of appropriate disposal containers to use.
- Recommendations of appropriate disposal methods to employ.
- Description of the physical and chemical properties that may affect disposal activities.
- Language discouraging sewage disposal.
- Any special precautions for landfills or incineration activities.

SDS Section 14: Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea. The information may include:

- UN number (i.e., four-figure identification number of the substance).
- UN proper shipping name.
- Transport hazard class(es).
- Packing group number, if applicable, based on the degree of hazard.
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)).
- Guidance on transport in bulk (according to Annex II of MARPOL 73/78 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)).
- Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises (indicate when information is not available).

SDS Section 15: Regulatory Information (non-mandatory)

This section identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS. The information may include:

- Any national and/or regional regulatory information of the chemical or mixtures (including any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission regulations)

SDS Section 16: Other Information

This section indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes. Other useful information also may be included here.

2.2 CHEMICAL LABELING

OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). As of June 1, 2015, all labels will be required to have pictograms, a signal word, hazard and precautionary statements, the product identifier, and supplier identification. A sample revised HCS label, identifying the required label elements, is shown below. Supplemental information can also be provided on the label as needed.

SAMPLE LABEL

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name_____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measure against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear Protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO_2) fire extinguisher to extinguish.

First Aid
If exposed call Poison Center.
If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

HAZARD PICTOGRAMS

SIGNAL WORD
Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION

Directions for use

_____
_____
_____

Fill weight: _____ Lot Number _____
Gross weight: _____ Fill Date: _____
Expiration Date: _____

PICTOGRAMS & HAZARDS

HEALTH HAZARD  ▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity	FLAME  ▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides	EXCLAMATION MARK  ▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
GAS CYLINDER  ▪ Gases Under Pressure	CORROSION  ▪ Skin Corrosion/Burns ▪ Eye Damage ▪ Corrosive to Metals	EXPLODING BOMB  ▪ Explosives ▪ Self-Reactives ▪ Organic Peroxides
FLAME OVER CIRCLE  ▪ Oxidizers	ENVIRONMENT  (Non-Mandatory) ▪ Aquatic Toxicity	SKULL & CROSSBONES  ▪ Acute Toxicity (fatal or toxic)

2.3 HAZARDOUS MATERIAL IDENTIFICATION SYSTEM LABELING SYSTEM

The Hazardous Material Identification System (HMIS III) provides a format for hazard determinations, complies with the OSHA Hazard Communication Standard, and simplifies the employee training and information process. This system was developed by the paint manufacturers (National Paint and Coatings Association) to address situations more common to their environment than those encountered by firefighters.

The HMIS provides clear, recognizable information to employees by standardizing the presentation of chemical information. This is accomplished by using color codes corresponding to the hazards of a product, assigning numeric ratings to indicate the degree of severity of health effects, flammability, and stability/reactivity hazards, along with providing alphabetical codes to designate appropriate personal protective equipment (PPE) employees should use while handling the material.

Hazard severity is indicated by a numerical rating that ranges from zero (0), indicating a minimal hazard, to four (4), indicating a severe hazard. The information is arranged using a color bar system as follows. A blue bar at the top provides health information, a red bar at second from the top indicates flammability, a yellow or orange bar second from the bottom physical properties or instability/reactivity, and a white bar at the bottom addresses personal protective equipment.

With this system, the white section is used to indicate what level of protective equipment is required. Instead of a hazard ranking, a level of protection is indicated by a letter, with each letter specifying a different level of protection. A wide variety of icons include the physical hazards, target organs, as well as the continued use of icons for PPE.

As of June 1, 2016, all alternative labeling must have been updated to the Hazard Communication standard.

HMIS LABEL & KEY

HMIS Label - Health

The health section conveys the health hazards of the material. In the latest version of the HMIS label, the blue health bar has two spaces, one for an asterisk and one for a numeric rating.

If present the asterisk signifies a chronic health hazard, meaning that long term exposure to the material could cause a health problem such as emphysema or kidney damage.

The numeric ratings for the HMIS system are as follows.

- **4** - Life Threatening – Major or permanent damage may result from single or repeated overexposures.
- **3** - Major injury likely unless prompt action is taken and medical treatment is given.
- **2** - Temporary or minor injury may occur.
- **1** - Irritation or minor reversible injury may occur.
- **0** - No significant risk to health.

HMIS Label - Flammability

OSHA defines a flammable liquid as "any liquid having a flash point below 100 degrees F. (37.8 degrees C.), except any mixture having components with flash points of 100 degrees F. (37.8 degrees C.) or higher, the total of which make up 99 percent or more of the total volume of the mixture. Flammable liquids shall be known as Class I liquids." A flammable material can be a solid, liquid or gas.

The numeric ratings for the HMIS system are as follows.

4 - Flammable gases or very volatile flammable liquids with flash points below 73°F, and boiling points below 100°F. Materials may ignite spontaneously with air. (Class IA).

3 - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73°F and boiling points above 100°F, as well as liquids with flash points between 73° F and 100° F. (Classes IB & IC).

2 - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100°F but below 200°F. (Classes II & IIIA).

1 - Materials that must be preheated before ignition will occur. Includes liquids, solids, and semi-solids having a flash point above 200°F. (Class IIIB).

0 - Materials that will not burn.

HMIS Label - Physical Hazard (HMIS® III)

These hazards are assessed using the OSHA criterion of physical hazard. Seven such hazard classes are recognized:

- Water Reactive
- Explosives
- Pyrophoric materials
- Oxidizers
- Organic Peroxides
- Compressed gases
- Unstable Reactives

The numeric ratings for the HMIS system are as follows.

4 - Materials which are readily capable of explosive water reaction, detonation or explosive decomposition, polymerization, or self-reaction at normal temperature and pressure.

3 - Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may polymerize, decompose, self-react, or undergo other chemical change at normal temperature and pressure with moderate risk of explosion.

2 - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

1 - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

0 - Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HMIS Label - Reactivity or Stability (HMIS I & 2 - Now Obsolete)

"Reactive or Unstable" means a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature. The numeric ratings for the HMIS system are as follows.

4 - Materials which in themselves are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures. This degree should include materials that are sensitive to mechanical or localized thermal shock at normal temperatures and pressures.

3 - Materials which in themselves are capable of detonation or of explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation. This degree should include materials which are sensitive to thermal or mechanical shock at elevated temperatures and pressures or which react explosively with water without requiring heat or confinement.

2 - Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This degree should include materials which can undergo chemical change with rapid release of energy at normal temperatures and pressures or which can undergo violent chemical change at elevated temperatures and pressures. It should also include those materials which may react violently with water or which may form potentially explosive mixtures with water.

1 - Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently.

0 - Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

HMIS Label – Personal Protection

A	=	Safety glasses
B	=	Safety glasses, gloves
C	=	Safety glasses, gloves, chemical apron
D	=	Face shield, gloves, chemical apron
E	=	Safety glasses, gloves, dust respirator
F	=	Safety glasses, gloves, chemical apron, dust respirator
G	=	Safety glasses, gloves, vapor respirator
H	=	Splash goggles, gloves, chemical apron, vapor respirator
I	=	Safety glasses, gloves, dust and vapor respirator
J	=	Splash goggles, gloves, chemical apron, dust and vapor respirator
K	=	Air line hood or mask, gloves, full chemical suit, boots
X	=	Ask Supervisor

Note: before using any respirator contact EH&S for assistance.

2.4 NFPA 704

The NFPA has a hazard identification marking system that it developed in 1961. The system was intended to provide basic information to emergency personnel so they can evaluate what firefighting techniques to employ when they enter a facility where hazardous materials are present. The system does not provide any detailed hazard information, but it is acceptable as an in-plant labeling system as long as training regarding the system is provided. Also, the safety data sheets (SDSs) must be available to provide the required detailed chemical hazard information.

The NFPA system identifies hazards by categorizing them by Health, Flammability, and Instability. Five divisions ranging from 0 – no hazard, to 4 – severe hazard, indicate the degree of severity for each hazard numerically.

The square-on-point label contains four colored squares with a number appearing in each square. The blue square indicates health hazard, the red square represents flammability, and the yellow square indicates instability. The fourth square represents a special hazard, such as unusual reactivity with water. The usual symbol for alerting firefighting personnel to the possible hazard of using water is the letter W with a line through it.

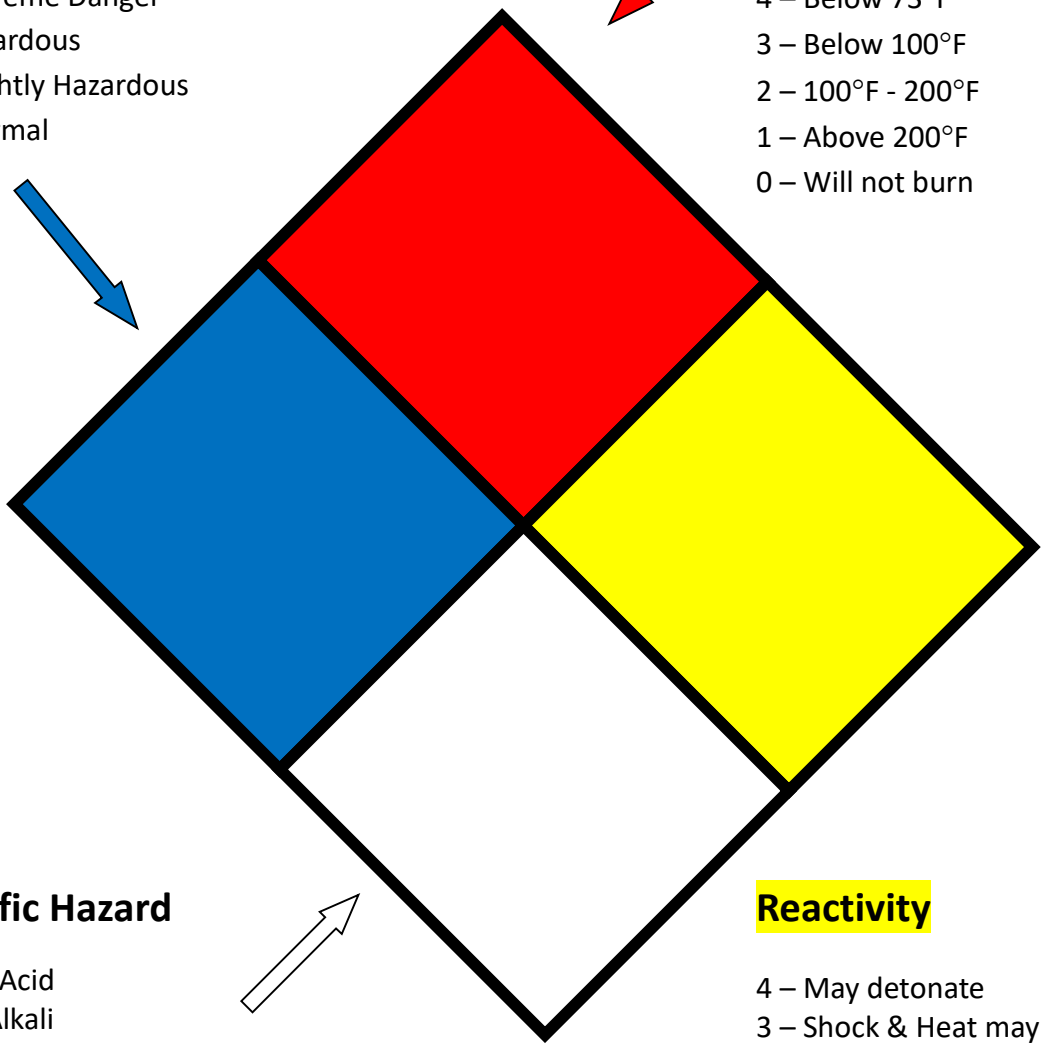
NFPA 704 LABEL

Health Hazard

4 – Deadly
3 – Extreme Danger
2 –Hazardous
1 – Slightly Hazardous
0 – Normal

Fire Hazard

Flash Points
4 – Below 73°F
3 – Below 100°F
2 – 100°F - 200°F
1 – Above 200°F
0 – Will not burn



Specific Hazard

ACID – Acid
ALK – Alkali
COR – Corrosive
OXY – Oxidizer
☢ – Radioactive
~~W~~ – Use no Water

Reactivity

4 – May detonate
3 – Shock & Heat may detonate
2 – Violent Chemical change
1 – Unstable if heated
0 – Stable

ATTACHMENT A: HAZARDOUS CHEMICALS LIST

ATTACHMENT B: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following items must be reviewed with employees upon initial assignment and whenever new chemicals are introduced into the work environment:

- Information on hazardous chemicals in the employee's work area.
- The requirements of the OSHA Hazard Communication Standard.
- Operations in the employee's work area where hazardous chemicals are present.
- The location and availability of this written hazard communication program, including the hazardous chemical list (Attachment B), and safety data sheets (SDS).
- Review one or more SDSs for chemicals used in the employee's work area to review the hazards associated with chemicals in the work area.
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
- The measures employees can take to protect themselves from these hazards, including specific procedures that have been implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used
- The details of this hazard communication program, including an explanation of the labels received on shipped containers and the workplace labeling system used in the workplace; the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information.

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Hazard Communication

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM

T&N Van Service

TABLE OF CONTENTS

PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM

T&N Van Service

1.1 INTRODUCTION

This written Personal Protective Equipment (PPE) program has been developed by T&N Van Service in order to minimize employee injury and hazard exposure when other work practice controls are neither feasible nor effective. The program will be maintained in The Main Office and is available for review upon request.

1.2 RESPONSIBILITY

MANAGEMENT

- Perform an assessment of the operation to identify workplace hazards.
- Use engineering and administrative controls to limit employee exposure.
- Provide adequate PPE for employees.
- Post signs and warnings in all high noise areas.
- Conduct personal protective equipment training for all new employees.
- Conduct annual PPE training for all employees.

EMPLOYEES

- Use company-issued and approved PPE.
- Request PPE when needed.
- Exercise proper care of issued PPE.

PROGRAM ADMINISTRATOR - GENERAL MANAGER

- Administer and implement this PPE program.
- Perform and sign the hazard assessment.
- Select and fit PPE to affected employees.
- Assure the adequacy, proper maintenance, and sanitation of all PPE.
- Provide signage in areas that necessitate PPE
- Retain training records

1.3 HAZARD IDENTIFICATION

In order to identify current and potential hazards in the workplace, a baseline hazard assessment has been conducted. Consideration has been given to the following categories

- Impact
- Penetration
- Compression (roll-over)
- Chemical
- Heat
- Harmful dust
- Light (optical) radiation

Additional hazard identification tools that may be used in the hazard identification process include job hazard analyses, workplace inspections, accident and incident investigation data, and injury/illness analysis.

The hazard identification process will be used for routine and non-routine activities, new processes, as well as changes in operation, services, or products. Workplace hazard will be reassessed as necessary by identifying and evaluating new equipment and processes, reviewing accident records, and reevaluating the suitability of previously selected PPE.

Employees are trained in the hazard identification process and are encouraged to report hazards and to take an active role in the hazard determination process. The Hazard Assessment is reviewed with employees annually, at minimum.

A copy of the most recent hazard assessment along with previous assessments can be found in Attachment B.

1.4 CONTROLS

Once the hazard identification process has been completed and the hazards have been prioritized, engineering and administrative controls are addressed. The following actions may be taken to eliminate or mitigate each hazard:

- Find a new method of doing the job (i.e., analyze various ways of reaching the safest possible method. Consider work-saving tools and equipment.)
- Change or modify the physical conditions that create the hazards.
- Eliminate hazards still present by changing work procedures.
- Reduce the necessity of doing a job or the frequency with which it must be performed. (Reducing job frequency contributes to safety only in that it limits exposure. Make every effort to eliminate hazards and to prevent potential accidents through changing physical or environmental conditions.)

- Provide adequate and effective PPE. This should be the last line of defense after all other methods of controlling the hazard have been exhausted.

All corrective actions taken to mitigate a hazard will be reviewed periodically to ensure that new hazards have not been created. Corrective actions will be documented and retained for future analysis.

1.5 SELECTION

If engineering and administrative controls cannot eliminate the hazard, PPE will be necessary to protect the employee. General Manager will select the types of PPE to be used to protect each affected employee from identified hazards. The PPE selection will be communicated to each affected employee and PPE will be fitted to each employee to ensure its proper performance.

General Manager is responsible to assure the adequacy, proper maintenance, and sanitation of all PPE, whether it has been provided by T&N Van Service or is employee-owned. All PPE must be used and maintained in sanitary and reliable condition; defective or damaged PPE shall not be used. This equipment is to be properly disposed of and replaced with new equipment.

Attachment C provides a list of PPE used by T&N Van Service

1.6 TYPES OF PPE

EYE & FACE PROTECTION

Each affected employee must use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. Side protection will be provided whenever there is a hazard from flying objects.

T&N Van Service recognizes that regular prescription lenses are not appropriate eye protection. When eye protection is necessary, affected employees who wear prescription lenses must wear eye protection that incorporates the prescription in its design or eye protection that can be worn over prescription lenses without disturbing the proper position of the safety eyewear.

Protective eyewear used by T&N Van Service will comply with ANSI/ISEA Z87.1-2010, ANSI Z87.1-2003, or ANSI Z87.1-1989 (R-1998).

HEAD PROTECTION

Whenever employees are working in areas where there is a potential for injury to the head from falling objects, protective helmets will be provided. A protective helmet designed to reduce electrical shock hazard must be worn when an affected employee is working near exposed electrical conductors which could contact the head.

Head protection will comply with ANSI Z89.1-2009, ANSI Z89.1-2003, or ANSI Z89.1-1997.

HEARING PROTECTION

When employees are subjected to sound levels which exceed those listed in 29 CFR 1910.95, Table G-16 (see below), feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of Table G-16, hearing protection shall be provided and used to reduce sound levels within the levels of the table.

TABLE G-16 - PERMISSIBLE NOISE EXPOSURES (1)	
Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115
Footnote(1) When the daily noise exposure is composed of two or more periods of noise exposure of different levels, th eir combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: C(1)/T(1) + C(2)/T(2) C(n)/T(n) exceeds unity, then, the mixed exposure should be considered to exceed the limit value. Cn indicates the total time of exposure at a specified noise level, and Tn indicates the total time of exposure permitted at that level. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.	

Hearing protection devices such as earplugs or ear muffs are utilized whenever noise control measures are infeasible, or until effective engineering and administrative controls are implemented. Employees will have the opportunity to choose from at least two different types of hearing protection devices representative of at least two different types such as earplugs and earmuffs. Personal stereo headsets are not approved for hearing protection and are not permitted in any operating area.

HAND PROTECTION

Appropriate hand protection is required to be used when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

The selection of hand protection will be based on /an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

FOOT PROTECTION

When there is a danger of foot injuries from falling objects, rolling objects, objects piercing the sole, or where the employee’s feet are exposed to electrical hazards, proper footwear will be required.

Foot protection will comply with ASTM F-2412-2005 and ASTM F-2413-2005, ANSI Z41-1999, or ANSI Z41-1991.

RESPIRATORY PROTECTION

Respiratory protection will be provided whenever airborne hazards cannot be eliminated through accepted engineering control methods or whenever such controls are being instituted.

1.7 PAYMENT

T&N Van Service will provide protective equipment and PPE at no cost to the employee. The following types of PPE may not be provided by the company, as specified in 29 CFR 1910.132(h)

- Non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots)
- Non-specialty prescription safety eyewear
- Shoes or boots with built-in metatarsal guards when metatarsal guards are provided
- Everyday clothing such as long-sleeve shirts, long pants, street shoes, and normal work boots
- Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen

Replacement PPE will be provided by T&N Van Service at no cost to the employee unless the employee has lost or intentionally damaged the PPE.

1.8 EMPLOYEE TRAINING

Employees are required to attend training concerning the proper usage of PPE in their work area. Each affected employee shall demonstrate an understanding of the training and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE. The training will be conducted by a qualified representative designated by T&N Van Service

Training shall consist of the following components, at minimum:

A. When PPE is necessary
B. What PPE is necessary
C. How to properly don, doff, adjust, and wear PPE
D. Limitations of the PPE
E. Proper care, maintenance, useful life and disposal of the PPE

When there is reason to believe that any affected employee who has already been trained does not have an understanding of the training specified above and the ability to use PPE properly, the employee will be retrained. Retraining is additionally required in the following situations:

A. Changes in the workplace render previous training obsolete
B. Changes made in the types of PPE to be used render previous training obsolete
C. Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill

T&N Van Service's training records will be maintained in a safe location. Training documentation includes the training subject, employees' names, the trainer, and the date of training. Attachment D contains copies of training records.

ATTACHMENT A: OSHA STANDARD FOR PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment - 29 CFR 1910 Subpart I

General Requirements	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132
Eye and Face Protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.133
Respiratory Protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134
Head Protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.135
Foot Protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.136
Electrical Protective Equipment	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.137
Hand Protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.138
Personal Fall Protection Systems	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.140
App A – References for Further Information (Non-Mandatory)	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppA
App B – Nonmandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppB
App C – Personal Fall Protection Systems Non-Mandatory Guidelines	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppC
App D – Test Methods and Procedures for Personal Fall Protection Systems Non-Mandatory Guidelines	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppD

ATTACHMENT B: HAZARD ASSESSMENT

ATTACHMENT B: HAZARD ASSESSMENT

The following pages contain T&N Van Service's most current version of the hazard assessment along with any previous versions.

The following hazard categories were considered when conducting the assessment:

- Sources of motion,
- Sources of high temperature,
- Types of chemical exposures,
- Sources of harmful dust or mist,
- Sources of light radiation,
- Sources of falling objects of potential for dropping objects,
- Sources of sharp objects which could cut or pierce the hands,
- Sources of rolling or pinching objects,
- Hazards related to the layout of the workplace and the location of co-workers,
- Electrical hazards, and
- Problem areas identified as a result of reviewing injury and accident data.

ATTACHMENT C: PERSONAL PROTECTIVE EQUIPMENT LIST

ATTACHMENT C: PERSONAL PROTECTIVE EQUIPMENT CHECKLIST

I, _____, have received the following PPE which has been determined to be necessary to protect against hazards while performing my job duties.

Personal Protective Equipment Provided:	**N/A for my job duties:**
☐	☐
☐ Safety Glasses	☐
☐ Gloves	☐
☐ Hard Hats	☐

I have been trained on how to use the required PPE in the appropriate situations.

Signature _____ Date_____

ATTACHMENT D: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following information must be reviewed with employees, and they shall demonstrate an understanding of the training before being allowed to perform work requiring the use of PPE.

- Review the most current version of the company's hazard assessment (Attachment B)
- Review the most current version of the Personal Protective Equipment (PPE) list. Explain the types of PPE that the employee will be using during specific tasks and operations.
- Explain the different company-specific tasks and operations where PPE is necessary to protect the employee from hazards
- Show the employee how to properly put on (don), take off (doff), adjust, and wear PPE.
- Explain the limitations of PPE and that PPE is the last line of defense against hazards. Proper measures must first be taken to eliminate any hazards through engineering or administrative controls before resorting to the use of PPE.
- Explain the proper care, maintenance, useful life, disposal, and replacement procedures of PPE.
- If respirator use is voluntary, the employee uses their own respirator, or paper dust masks are used, refer to 29 CFR 1910.134 Appendix D located in Attachment A.

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Personal Protective Equipment

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

FORKLIFTS & POWERED INDUSTRIAL TRUCK SAFETY PROGRAM

T&N Van Service

TABLE OF CONTENTS

FORKLIFTS & POWERED INDUSTRIAL TRUCK SAFETY PROGRAM

T&N Van Service

1.1 PURPOSE

In accordance with OSHA's powered industrial truck standard found in 29 CFR 1910.178 (see Attachment A), this program is designed to present procedures for the safe operation of:

- Forklifts
- Powered Pallet Jacks
- Stackers
- Other Material Handling Equipment

All employees must successfully complete a training course before operating this type of equipment.

1.2 INTRODUCTION

Each year, tens of thousands of forklift-related injuries occur in U.S. workplaces. Many employees are injured when lift trucks are inadvertently driven off loading docks or lifts fall between a dock and an unsecured trailer. Employees are also struck by a lift truck or fall while on elevated pallets and tines. Most incidents also involve property damage, including damage to overhead sprinklers, racking, pipes, walls, and machinery. Unfortunately, most employee injuries and property damage can be attributed to lack of safe operating procedures, lack of safety-rule enforcement, and insufficient or inadequate training. It is a violation of Federal law for anyone under 18 years of age to operate a forklift or anyone over 18 years of age whom is not properly trained and certified to do so. Cell phones and earbuds are not to be used while working on the equipment or in the warehouse. Violation will result in disciplinary action.

The National Institute for Occupational Safety and Health (NIOSH) investigations of forklift-related deaths indicate that many workers and employers may not be aware of the risks of operating or working near forklifts. Many individuals are not following the procedures set forth in the OSHA standards, consensus standards, or equipment manufacturer's guidelines.

Generally, reducing the risk of forklift incidents requires comprehensive worker training, systematic traffic management, a safe work environment, a safe forklift, and safe work practices. The primary OSHA standard is 1910.178, Powered Industrial Trucks (see Attachment A for a copy of this Standard). It should be noted however, this standard incorporates by reference a number of other OSHA standards as well as industry standards describing truck design, approval, and labeling.

The specific OSHA requirements that apply to employers who use powered industrial trucks are separated into the following activities:

- Loading and Unloading
- Working With Hazardous Materials
- Vehicle Maintenance

1.3 RESPONSIBILITIES

PROGRAM ADMINISTRATOR - GENERAL MANAGER

- Administer and implement this program.
- Account for initial and follow-up training/certification
- Maintain program documentation

FORKLIFT & POWERED INDUSTRIAL TRUCK OPERATORS

- Comply with company rules for operating the equipment.
- Inspect equipment at the beginning of each shift, including completion of an inspection checklist.
- Immediately report any maintenance problems or malfunctions to the Supervisor

MAINTENANCE

- Maintain all material handling equipment according to manufacturer's recommendations
- Contract with outside vendors, if needed, to perform service on the equipment.
- Keep a maintenance log that lists:
    - Repairs needed for each forklift and piece of material handling equipment, and
    - Repairs completed for each forklift and piece of material handling equipment.

1.4 TYPES OF POWERED INDUSTRIAL TRUCKS

The hazards commonly associated with powered industrial trucks vary depending on the vehicle type and the workplace where the truck is used. Each type of truck presents different operating hazards. For example, a sit-down, counterbalanced high lift rider truck is more likely than a motorized hand truck to be involved in a falling load accident, because the sit-down rider truck can lift a load much higher than a hand truck. Workplace conditions also present different hazards.

T&N Van Service presently uses the following types of powered industrial trucks:

Make & Model:	Type of Forklift	Purpose:	Location:
Toyota 9BRU18	Stand Up	Material Handling in Warehouse	Warehouse- 1510 Lancer Drive
Hysten N4OXMR	Stand Up	Material Handling in Warehouse	Warehouse- 1510 Lancer Drive
Yale GLCO5OLXNVAE087	Sit Down	Material Handling in	Warehouse- 1510 Lancer

		Warehouse	Drive
Hysten 50	Sit Down	Material Handling in Warehouse	Warehouse- 1510 Lancer Drive
Clark TM15	Sit Down	Material Handling in Warehouse	Warehouse- 1510 Lancer Drive

The best way to protect employees from injury also depends on the type of truck operated and worksite where it is being used. Employees must be properly trained on each different type of forklift that they operate.

1.5 TRAINING AND CERTIFICATION

Before an employee may operate a powered industrial truck (except for training purposes), employers must make sure that each operator has successfully completed appropriate training and has demonstrated competency to operate each powered industrial truck safely.

Training is to consist of a combination of formal instruction (e.g., lecture, discussion, interactive computer learning, video tape, 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 must be conducted by persons who have the knowledge, training, and experience to train powered industrial truck operators and evaluate their competence.

LEARNING TO OPERATE A POWERED INDUSTRIAL TRUCK

Prior to taking a driving test, employees must be provided with training on how to operate the specific powered industrial truck(s) that they will be using in the workplace. The operator's manual will need to be reviewed with the employee for each vehicle type that they are being trained to operate. Additional training will be provided for any new equipment that the employee will be operating.

Section 1910.178(l)(3) of the OSHA standards requires that powered industrial truck operators receive training on the following topics (except for topics which the employer can demonstrate are not applicable to safe operation of the truck in the employer's workplace).

TRUCK-RELATED TOPICS

- Operating instructions, warnings, and precautions for the types of trucks the operator will be authorized to operate
- Differences between powered industrial trucks and automobiles
- Truck controls and instrumentation: where they are located, what they do, and how they work
- Engine or motor operation
- Steering and maneuvering
- Visibility (including restrictions due to loading)

- Fork and attachment adaptation, 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 the vehicle will be operated
- Narrow aisles and other restricted places where the vehicle will be operated
- Hazardous (classified) 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.

Trainees may operate a powered industrial truck only under the following conditions:

- Under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence and
- Where such operation does not endanger the trainee or other employees.

REFRESHER TRAINING

During the course of truck operation, a Supervisor may observe the employee performing an unsafe act, such as riding with the load too high or traveling at an unsafe speed. The person making the correction should point out the incorrect manner of operation of the truck or other unsafe act being conducted, tell the employee how to do the operation correctly, and then ensure the employee performs the operation correctly.

When there have been multiple on-the-spot corrections, the employer may decide to conduct a more structured retraining program which would include the following information.

- Common unsafe situations encountered in the workplace
- Unsafe operating methods observed or known to be used

- The need for constant attentiveness to the vehicle, the workplace conditions, and the manner in which the vehicle is operated

Refresher training in relevant topics must be provided to an operator when:

- The operator has been observed to operate the vehicle in an unsafe manner;
- The operator has been involved in an accident or near-miss incident;
- The operator has received an evaluation that reveals that the operator is not operating the truck safely;
- The operator is assigned to drive a different type of truck; or
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

EVALUATION & CERTIFICATION

After employees complete training exercises and prior to operating the truck in the workplace, an evaluation of powered industrial truck operators must be conducted. This evaluation will determine the adequacy of training and the ability of the employee to perform truck operations safely in the workplace. An evaluation of the operator's performance is required to be conducted at least once every three years.

Certification that each operator has been trained and evaluated per the OSHA standard is required. The certification must include 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.

Note: If an operator has previously received training in a topic specified in the OSHA powered industrial truck standard, and such training is appropriate to the truck and working conditions encountered, additional training in that topic is not required, if the operator has been evaluated and found competent to operate the truck safely.

1.6 MAINTENANCE, FUELING, & REPAIR

Forklift mechanics are exposed to a variety of hazardous materials. Chemicals pose a wide range of health hazards (such as irritation, sensitization, and carcinogenicity) and physical hazards (such as flammability, corrosion, and reactivity). Forklift operators are often authorized to perform some of their own maintenance, such as refueling diesel or gasoline powered trucks, changing propane tanks on LPG trucks, or recharging and servicing electric batteries on electric forklifts. They may also change oil, antifreeze, or other fluids and so are also exposed to a variety of hazardous chemicals.

The OSHA standard includes specific training requirements for forklift operators who change and charge batteries, handle propane tanks; fuel diesel or gasoline engines, and otherwise repair and maintain powered industrial trucks.

All forklifts and material handling equipment must be kept clean and free of excess dirt, oil, and grease. Do not operate forklift or material handling equipment in need of repair until repairs are completed. The equipment must be labeled or tagged: OUT OF SERVICE, DO NOT USE.

- After repairs are completed, forklifts and material handling equipment must be tested to assure safe operation.
- No fuel tanks will be filled while the engine is running; turn the power off when refueling.
- Oil and fuel spilled on the floor during filling must be cleaned up immediately.
- Equipment is provided to safely flush spilled fuel and battery acid.
- Eyewash equipment is maintained in all fueling and charging areas.
- The following are prohibited in the fueling and charging areas:
    - Eating
    - Smoking
    - Open Flames
    - Sparks

1.7 OPERATOR SAFETY

AUTHORIZED USE

Only trained operators are authorized to operate powered industrial trucks. Forklift and material handling equipment operators are responsible for complying with safe operation rules, conducting pre-use inspections, and immediately reporting maintenance problems or defects. Inspection checklists are located in Attachment B of this program.

Unauthorized personnel are not permitted to ride on a forklift or material handling equipment. A safe place to ride must be provided where riding is authorized.

UNATTENDED EQUIPMENT

Special precautions apply to forklifts and material handling equipment that is unattended. Equipment will be considered unattended whenever:

- The operator is 25 feet or more away; or
- The forklift or material handling equipment is not in view.

When equipment is left unattended, the operator must:

- Fully lower the load engaging means
- Put the equipment into neutral.
- Set the emergency brake.
- Turn the power off.
- Block the wheels (if the equipment is parked on an incline).

HAZARDOUS MATERIALS & LOCATIONS

Forklift operators transport chemicals and encounter hazardous locations. Please refer to the SDS and labeling regarding hazards associated with transported chemicals.

In hazardous locations, only specially approved industrial forklifts and material-handling equipment will be used.

An overhead guard must be used to protect the operator from falling objects unless operating conditions do not permit doing so.

1.8 EQUIPMENT OPERATION

OPERATION RULES

The following rules must be obeyed when operating a powered industrial truck:

1. When equipped, safety belts must be worn at all times
2. Never lift a person unless a safety platform is used and is firmly secured to the lifting carriage or forks. An operator must remain at the controls at all times while a person is being lifted.
3. Speed limits will be posted and observed at all times. Always operate equipment at a speed that permits safe stopping.
4. When more than one powered industrial truck is being operated, at least three truck lengths will be maintained between the pieces of equipment.
5. The operator must remain in control of the equipment at all times.
6. The operator will keep a clear view of the path of travel. At corners or when vision is obscured, the operator will slow down and sound the horn.
7. Only stable and safely arranged loads that are within the forklift or material handling equipment's rated capacity will be handled.
8. If a load blocks the operator's view, the forklift, or material handling equipment will be driven backwards.
9. Loaded forklifts and material handling equipment will be driven with the load upgrade when traveling on an upgrade or decline of more than 10%.
10. When forklift or material handling equipment is used to remove materials from truck trailer, employees must set the brakes on the trailer and place wheel chocks under the wheels.
11. Wheel stops will be used to prevent railroad cars from moving during loading and unloading.
12. All forklifts or material handling equipment will cross railroad tracks at an angle.
13. Dock boards or bridges will be properly secured before they are driven upon.

LOADING AND UNLOADING

Forklifts, also known as powered industrial trucks, are used in numerous work settings, primarily to load and unload materials. Forklift overturns are the leading cause of fatalities involving forklifts; they represent about 25% of all forklift-related deaths. The case studies examined by NIOSH indicate that the

forklift, the factory environment, and actions of the operator can all contribute to fatal incidents involving forklifts. In addition, these fatalities indicate that many workers and employers are not using or may be unaware of safety procedures and the proper use of forklifts to reduce the risk of injury and death.

ATTACHMENT A: OSHA STANDARD

29 CFR 1910.178 – Powered Industrial Trucks

- https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.178

ATTACHMENT B: INSPECTION CHECKLISTS

Forklift Inspection Daily Checklist

Week of		Operator		Truck#	

Key: ✓ – Good X – Attention Needed

General Inspection (All Powered Industrial Truck types)	M	T	W	Th	F	Sat	Sun
Fluid Levels - oil, water, & hydraulic fluid							
Visual leaks, cracks, or any other visible defect including hydraulic hoses and mast chains							
Tire condition & pressure including cuts & gouges							
Condition of the forks and the top clip retaining pin and heel							
Load backrest extension							
Finger guards							
Safety decals & nameplates							
Operator manual on truck and legible							
Operator compartment - check for grease and debris							
All safety devices are working properly including the seatbelt							
Electric forklifts	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Cables and connectors for frayed or exposed wires							
Battery restraints							
Electrolyte levels							
Hood latch							
Internal Combustion Forklifts	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Engine oil							
Brake reservoir							
Engine coolant							
Air filter							
Belts and hoses							
Radiator							
Hood latch							
Liquid Propane Forklifts	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Properly mounted tank							
Pressure relief valve pointing up							
Hose and connectors							
Tank restraint brackets							
Tank for dents and cracks							
Tank fits within profile of truck							
Leaks. Use a soapy solution							

Notes:

Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

Operator's Daily Checklist
Internal Combustion Engine Industrial Truck - Gas/LPG/Diesel Truck

Week of		Operator		Truck#	

Key: ✓– Good X – Attention Needed

Engine Off Checks	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Leaks – fuel, hydraulic oil, engine oil or radiator coolant							
Tires – condition and pressure							
Forks, top clip retaining pin and heel – check condition							
Load backrest – securely attached							
Hydraulic hoses, mast chains, cables and stops – check visually							
Overhead guard – attached							
Finger guards – attached							
Propane tank (LP gas truck) – rust corrosion, damage							
Safety warnings – attached (refer to parts manual for location)							
Battery – check water/electrolyte level and charge							
All engine belts – check visually							
Hydraulic fluid level – check level							
Engine oil level – dipstick							
Transmission fluid level – dipstick							
Engine air cleaner – squeeze rubber dirt trap or check the restriction alarm (if equipped)							
Fuel sedimentor (diesel)							
Radiator coolant – check level							
Operator's manual – in container							
Nameplate – attached and information matches model, serial number and attachments							
Seat belt – functioning smoothly							
Hood latch – adjusted and securely fastened							
Brake fluid – check level							
Engine On Checks – Unusual Noises Must Be Investigated Immediately	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Accelerator or direction control pedal – functioning smoothly							
Service brake – functioning smoothly							
Parking brake – functioning smoothly							
Steering operation – functioning smoothly							
Drive control – forward/reverse – functioning smoothly							
Tilt control – forward and back – functioning smoothly							
Hoist and lowering control – functioning smoothly							
Attachment control – operation							
Horn and lights – functioning							
Cab (if equipped) – heater, defroster, wipers – functioning							
Gauges: ammeter, engine oil pressure, hour meter, fuel level, temperature, instrument monitors – functioning							

Operator's Daily Checklist
Electric Industrial Truck

Week of		Operator		Truck#	

Key: ✓– Good X – Attention Needed

Motor Off Checks	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Leaks – Hydraulic Oil, Battery							
Tires – Condition and Pressure							
Forks, Top Clip Retaining Pin and Heel -- Condition							
Load Backrest Extension – Attached							
Hydraulic Hoses, Mast Chains, Cables & Stops – Check Visually							
Finger Guards – Attached							
Overhead Guard – Attached							
Safety Warnings – Attached (Refer to Parts Manual for Location)							
Battery – Water/Electrolyte Level and Charge							
Hydraulic Fluid Level – Dipstick							
Transmission Fluid Level – Dipstick							
Operator's Manual in Container							
Capacity Plate Attached – Information Matches Model, Serial Number and Attachments							
Battery Restraint System – Adjust and Fasten							
Operator Protection Sit Down Truck - Seat Belt – Functioning Smoothly Man-up Truck – Fall protection/Restraining means - Functioning							
Brake Fluid – Check level							

Motor On Checks (Unusual Noises Must Be Investigated Immediately)	**M**	**T**	**W**	**Th**	**F**	**Sat**	**Sun**
Accelerator Linkage – Functioning Smoothly							
Parking Brake – Functioning Smoothly							
Service Brake – Functioning Smoothly							
Steering Operation – Functioning Smoothly							
Drive Control – Forward/Reverse – Functioning Smoothly							
Tilt Control – Forward and Back – Functioning Smoothly							
Hoist and Lowering Control – Functioning Smoothly							
Attachment Control – Operation							
Horn – Functioning							
Lights & Alarms (where present) – Functioning							
Hour Meter – Functioning							
Battery Discharge Indicator – Functioning							
Instrument Monitors – Functioning							

Operator's Daily Checklist
Electric Pallet Jacks

Week of		Operator		Truck#	

Key: ✓– Good X – Attention Needed

	M	T	W	Th	F	Sat	Sun
Tires/Wheels: wear, damage, nuts tight							
Gauges/Instruments: damage, operation							
Warning Decals/Operators' Manual: Missing, not readable							
Data Plate: not readable, missing							
Forks: bent, worn, stops OK							
Covers/Sheet metal: damaged, missing							
Brake: Emergency Brake Test							
Steering: rolls up, down, back and forth freely							
Horn: Operational							
Battery connections loose, charge, electrolyte lot							
Lift/Lower: loose/binding, excessive drift, leaks							
Directional Control: lose/binding, find neutral OK							

Notes:

Monday:
Tuesday:
Wednesday:
Thursday:
Friday:
Saturday:
Sunday:

ATTACHMENT C: PERFORMANCE TESTS

Powered Industrial Truck Operator Training:
Written Proficiency Test

Student's Name: **Date:**

	True	False
1. Only authorized and trained employees or their supervisors can operate a forklift	❑	❑
2. Operators are required to inspect their forklift prior to use	❑	❑
3. Riders are allowed on a forklift if they are strapped in	❑	❑
4. Travel with your load high enough to see under it	❑	❑
5. Pedestrians have the right of way, except when the forklift driver is in a hurry	❑	❑
6. Always look over both shoulders before backing up	❑	❑
7. If your vision is obstructed when traveling with a load, travel in reverse	❑	❑
8. You only need to obey traffic rules and signs when people are around	❑	❑
9. A forklift is less stable when the mast is raised during load stacking and unstacking	❑	❑
10. Forklift repairs should be made whenever you get a break from work	❑	❑
11. Forks should be inserted into the pallet at least three quarters of the way	❑	❑
12. The rated capacity will not be affected by the use of special load attachments	❑	❑
13. Always check the mast for cracked or broken welds	❑	❑
14. Always drive straight-on when driving over railroad tracks	❑	❑
15. A forklifts rated capacity is located on the manufacturer's ID plate	❑	❑
16. Allow at least one forklift length when driving behind another vehicle	❑	❑
17. Five miles an hour is always a safe driving speed	❑	❑
18. Industrial areas/warehouses can have low overhead clearances	❑	❑
19. When you are working in a trailer, you should use dock lights or headlights	❑	❑
20. A lateral tip-over is usually caused by driving over trash or carrying a load too high	❑	❑
21. When carrying a load, you drive down a ramp forks first	❑	❑
22. The front wheels steer a forklift	❑	❑
23. When turning into an aisle, steer wide	❑	❑
24. Turning off the engine is all you need to do when leaving a forklift unattended	❑	❑
25. When traveling with a load, keep the forks approximately six inches off the surface	❑	❑
26. The only check that a battery needs is for cracks or holes	❑	❑
27. Forklifts are powered by battery, gasoline, diesel or propane	❑	❑
28. Pre-use inspections should require that each hydraulic line be checked	❑	❑
29. The forklift should always be started at the beginning of a pre-inspection	❑	❑
30. If the mast height must be adjusted, only lower the mast when in forward motion	❑	❑
31. When setting down your load, start leveling forks before reaching your destination	❑	❑
32. After picking up a load, the forklift will be more stable if the mast is tilted forward	❑	❑
33. Before pre-inspection it is OK to lift a heavy object to check the lift cylinders	❑	❑
34. If a tire is not flat, assume the vehicle is useable	❑	❑
35. When loading a trailer with a forklift that is too heavy, use more trailer supports	❑	❑
36. Drive at a steady speed to avoid slipping and skidding on bridge plates	❑	❑
37. Forklift tires are engineered to prevent skidding, slipping and sliding	❑	❑
38. Propane tanks should be checked for leaks and for secure valves and nozzles	❑	❑
39. Inadequately trained spotters have been caught between fixed objects and forklifts	❑	❑

ANSWER KEY:
Powered Industrial Truck Operator Training:
Written Proficiency Test

	True	False
1. Only authorized and trained employees or their supervisors can operate a forklift	❑	☑
2. Operators are required to inspect their forklift prior to use	☑	❑
3. Riders are allowed on a forklift if they are strapped in	❑	☑
4. Travel with your load high enough to see under it	❑	☑
5. Pedestrians have the right of way, except when the forklift driver is in a hurry	❑	☑
6. Always look over both shoulders before backing up	☑	❑
7. If your vision is obstructed when traveling with a load, travel in reverse	☑	❑
8. You only need to obey traffic rules and signs when people are around	❑	☑
9. A forklift is less stable when the mast is raised during load stacking and unstacking	☑	❑
10. Forklift repairs should be made whenever you get a break from work	❑	☑
11. Forks should be inserted into the pallet at least three quarters of the way	❑	☑
12. The rated capacity will not be affected by the use of special load attachments	❑	☑
13. Always check the mast for cracked or broken welds	☑	❑
14. Always drive straight-on when driving over railroad tracks	❑	☑
15. A forklifts rated capacity is located on the manufacturer's ID plate	☑	❑
16. Allow at least one forklift length when driving behind another vehicle	❑	☑
17. Five miles an hour is always a safe driving speed	❑	☑
18. Industrial areas/warehouses can have low overhead clearances	☑	❑
19. When you are working in a trailer, you should use dock lights or headlights	☑	❑
20. A lateral tip-over is usually caused by driving over trash or carrying a load too high	☑	❑
21. When carrying a load, you drive down a ramp forks first	❑	☑
22. The front wheels steer a forklift	❑	☑
23. When turning into an aisle, steer wide	☑	❑
24. Turning off the engine is all you need to do when leaving a forklift unattended	❑	☑
25. When traveling with a load, keep the forks approximately six inches off the surface	☑	❑
26. The only check that a battery needs is for cracks or holes	❑	☑
27. Forklifts are powered by battery, gasoline, diesel or propane	☑	❑
28. Pre-use inspections should require that each hydraulic line be checked	☑	❑
29. The forklift should always be started at the beginning of a pre-inspection	❑	☑
30. If the mast height must be adjusted, only lower the mast when in forward motion	❑	☑
31. When setting down your load, start leveling forks before reaching your destination	❑	☑
32. After picking up a load, the forklift will be more stable if the mast is tilted forward	❑	☑
33. Before pre-inspection it is OK to lift a heavy object to check the lift cylinders	❑	☑
34. If a tire is not flat, assume the vehicle is useable	❑	☑
35. When loading a trailer with a forklift that is too heavy, use more trailer supports	☑	❑
36. Drive at a steady speed to avoid slipping and skidding on bridge plates	☑	❑
37. Forklift tires are engineered to prevent skidding, slipping and sliding	❑	☑
38. Propane tanks should be checked for leaks and for secure valves and nozzles	☑	❑
39. Inadequately trained spotters have been caught between fixed objects and forklifts	☑	❑

Forklift Training Group Exercise

1. **Define the term counterweight and discuss its role in forklift load handling.**

2. **Discuss forklift longitudinal stability and the importance it has in forklift operation.**

3. **What is the stability triangle?**

4. **Discuss what is meant by lateral stability.**

5. **Define the term dynamic stability.**

6. **Define the term fulcrum. How is the term relevant to forklift operation?**

7. **What is the difference between track and wheelbase? How could these differences effect forklift operations?**

8. **How does grade affect forklift operation?**

ANSWER KEY:
Forklift Training Group Exercise

1. **Define the term counterweight and discuss its role in forklift load handling.**

   Weight that is part of the basic structure of a truck that is used to offset the load and maximize the resistance to keep the truck from tipping over.

2. **Discuss forklift longitudinal stability and the importance it has in forklift operation.**

   This is the resistance of a truck to overturning forward or rearward

3. **What is the stability triangle?**

   The vehicle wheelbase, track height, and weight distribution of the load, and the location of the counterweights of the vehicle.

4. **Discuss what is meant by lateral stability.**

   It is the line of action: a vertical line that passes through combined center of gravity of the vehicle and the load.

5. **Define the term dynamic stability.**

   This is when the vehicle and load are put into motion; moving, braking, cornering, lifting, tilting, and lowering loads, etc. are important stability considerations.

6. **Define the term fulcrum. How is the term relevant to forklift operation?**

   The fulcrum would be the pivot point pertaining to forklift operations: the axis of rotation of the truck when it tips over.

7. **What is the difference between track and wheelbase? How could these differences effect forklift operations?**

   Track is the distance between wheels on the same axle. Wheelbase is the distance between centers of the front and rear wheels of the forklift.

8. **How does grade affect forklift operation?**

   It can upset the stability triangle. Grade is measured as the number of feet in rise of fall over a hundred foot horizontal distance.

Powered Industrial Truck Operator Training:
Hands-On Proficiency Test

Student's Name: _____ **Date:** _____
Evaluator's Name: _____ **Type of PIT:** _____
Results: ❑ **Pass** ❑ **Fail**

Category	**Action**	**Pass**	**Fail**	**N/A**
Inspection	1. Able to accurately follow vehicle inspection checklist	❑	❑	❑
Operating Principles	2. Able to identify type of power source	❑	❑	❑
	3. Able to follow local procedures for refueling/recharging	❑	❑	❑
	4. Able to safely start vehicle in preparation for use	❑	❑	❑
	5. Understands use/location of controls and gauges	❑	❑	❑
	6. Able to demonstrate example of unattended vehicle	❑	❑	❑
Fork Adjustment	7. Able to determine proper adjustment of forks for load	❑	❑	❑
Traffic Patterns	8. Able to maintain vehicle within established traffic pattern	❑	❑	❑
	9. Able to recognize warning devices, mirrors, guards etc.	❑	❑	❑
Forklift Type	10. Able to determine the type and configuration of vehicle	❑	❑	❑
	11. Able to determine rated lifting capacity of vehicle	❑	❑	❑
Picking Up Loads	12. Approaches slowly and straight-on	❑	❑	❑
	13. Stops when forks are about a foot from load	❑	❑	❑
	14. Safely engages pallet	❑	❑	❑
	15. Checks mast height for obstructions	❑	❑	❑
	16. Slowly/safely picks up load with load against backrest	❑	❑	❑
	17. Checks rear for pedestrians, traffic, obstructions	❑	❑	❑
Unstacking Loads	18. Approaches slowly and straight-on	❑	❑	❑
	19. Stops when forks are about a foot from load	❑	❑	❑
	20. Checks mast height for obstructions	❑	❑	❑
	21. Safely raises forks to desired height	❑	❑	❑
	22. Safely engages pallet and tilts to safe angle	❑	❑	❑
	23. Slowly and safely picks up load and lowers to safe height	❑	❑	❑
Stacking Loads	24. Approaches slowly and straight-on	❑	❑	❑
	25. Stops when forks are about a foot from load	❑	❑	❑
	26. Checks mast height for obstructions	❑	❑	❑
	27. Safely raises forks to desired height	❑	❑	❑
	28. Safely drives forward until load is squarely over stack	❑	❑	❑
	29. Safely tilts to safe angle and places load on stack	❑	❑	❑
	30. Slowly and safely levels forks within inside of pallet	❑	❑	❑
	31. Checks rear for pedestrians, traffic, obstructions	❑	❑	❑
	32. Slowly and safely backs out and lowers to safe height	❑	❑	❑

Powered Industrial Truck Operator Training:
Hands-On Proficiency Test (Continued)

Driving With Loads	33. Plans load route based on current path obstructions	❑ ❑ ❑
	34. Carries load with load tilted back to safe angle	❑ ❑ ❑
	35. Carries load with forks at safe height above surface	❑ ❑ ❑
	36. Drives cautiously and at slow speeds	❑ ❑ ❑
	37. Avoids tight turns when possible	❑ ❑ ❑
	38. Applies brakes smoothly and evenly	❑ ❑ ❑
	39. Aware of overhead clearances and mast height	❑ ❑ ❑
	40. Never passes pedestrians (allows them to yield way)	❑ ❑ ❑
	41. Obeys all local traffic rules and signs en-route	❑ ❑ ❑
	42. Uses horns when approaching corners, doorways etc.	❑ ❑ ❑
	43. Uses mirrors effectively	❑ ❑ ❑
	44. Maintains a safe distance from other vehicles	❑ ❑ ❑
	45. Passes other vehicles only in authorized areas	❑ ❑ ❑
	46. Approaches railroad tracks at 45 degree angle	❑ ❑ ❑
	47. Slowly and safely levels forks within inside of pallet	❑ ❑ ❑
Loading Docks	48. Checks bridge or dock plates for safety	❑ ❑ ❑
	49. Approaches bridge or dock plates straight-on	❑ ❑ ❑
	50. Never accelerates on bridge or dock plates	❑ ❑ ❑
	51. Maintains safe distances from edges	❑ ❑ ❑
Trailer Operations	52. Verifies trailer floor is rated for vehicle weight	❑ ❑ ❑
	53. Verifies trailer floor is in serviceable condition	❑ ❑ ❑
	54. Verifies trailer will not roll	❑ ❑ ❑
	55. Verifies that vehicle will not unbalance trailer	❑ ❑ ❑
	56. Checks interior trailer height before loading or unloading	❑ ❑ ❑
Ramp Operations	57. Loaded Vehicle - Travels up ramp load first	❑ ❑ ❑
	58. Loaded Vehicle - Travels down ramp load last	❑ ❑ ❑
	59. Unloaded Vehicle - Travels up ramp forks last	❑ ❑ ❑
	60. Unloaded Vehicle - Travels down ramp forks first	❑ ❑ ❑
Obstacle Course	61. Maintains safe distance from obstacles	❑ ❑ ❑
	62. Able to maneuver safely in tight areas	❑ ❑ ❑
	63. Maintains safe speed	❑ ❑ ❑
	64. Accelerates and brakes smoothly	❑ ❑ ❑

ATTACHMENT D: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following items must be reviewed with employees upon initial assignment.

- Operating instructions, warnings, and precautions (Incorporate engine or motor operation; controls and instrumentation: where they are located, what they do, and how they work; Steering and maneuvering)
- Operating limitations including differences between the forklift and the automobile
- Vehicle capacity
- Vehicle stability
- Fork and attachment adaptation, operation, and use limitations
- Workplace Hazards (Surface conditions where the vehicle will be operated; Narrow aisles and other restricted places; Ramps and other sloped surfaces that could affect the vehicle's stability; Pedestrian traffic in areas where the vehicle will be operated; Visibility including restrictions due to loading; Etc.)
- Hazardous (classified) locations including closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust
- Unique or potentially hazardous environmental conditions in the workplace that could affect safe operation
- Load Hazards (Composition of loads to be carried and load stability; Load manipulation, stacking, and unstacking; Etc.)
- Vehicle inspection and maintenance
- Refueling and/or charging and recharging of batteries

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Forklifts & Powered Industrial Trucks

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

EMERGENCY ACTION PLAN & FIRE SAFETY

T&N Van Service

TABLE OF CONTENTS

EMERGENCY ACTION PLAN & FIRE SAFETY

T&N Van Service

1.1 INTRODUCTION

This Emergency Action Plan has been developed in accordance with Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.38. A copy of this standard is provided in Attachment A. This plan provides employees guidance for what to do in emergency situations (fire, tornado, spill, earthquake, etc.). T&N Van Service recognizes that the personal safety of each employee is and always will be of primary importance.

This written program will be maintained in The Main Office and may be reviewed by employees, as necessary.

1.2 RESPONSIBILITY

PROGRAM ADMINISTRATOR - GENERAL MANAGER

- Ensure this program is adhered to by all employees
- Review and approve any changes or revisions to this plan
- Enforce safety policies and procedures
- Conduct continual observational safety checks of work operations

MANAGEMENT

- Provide adequate resources for employee training and materials

EMPLOYEES

- Bring any unsafe/hazardous conditions or acts to management's attention in order to prevent injury to either themselves or any other employees

1.3 METHODS OF COMPLIANCE

EMERGENCY ESCAPE ROUTES

All employees are instructed to evacuate the building through the nearest possible exit. Emergency escape routes must be kept clear at all times. Escape routes are shown in Attachment B. A copy of the escape route and emergency procedures will be posted. T&N Van Service has designated safe areas for employees to report to in case of an emergency. Refer to site map for designated safe areas.

Procedures for Critical Operations

Critical operation shutdown procedures are not required for the office or shop. Therefore, no employees are authorized to delay evacuation for this purpose. It is the responsibility of General Manager to determine and communicate necessary changes to employees.

Procedures to Account for Employees

After an emergency evacuation of each site location, employees are to gather at the following meeting points.	
Site Location	**Meeting Point**
Warehouse	Corner of Lancer Drive and Glen Avenue
Jobsite	To Be Determined Prior to Job Start

General Manager will be responsible for specific procedures to account for employees, visitors and subcontractors after the emergency evacuation. These procedures should be designed to account for all employees, determine if an employee needs assistance in evacuating, and to establish their possible location.

Procedure for Reporting Emergencies

The quicker and more efficient emergencies are reported, the greater the chance for saving lives and property. The following is the procedure for reporting an emergency in this company. This procedure should be accessible to all employees.

Reporting an Emergency

Should an employee discover a fire or other emergency, the employee must report it to the Supervisor immediately. The Supervisor must then contact the appropriate emergency services. If a fire occurs and it is not out of control, the employee should send someone to notify the Supervisor and attempt to extinguish the fire with the appropriate fire extinguishing equipment.

Supervisors must quickly assess the severity of the incident, determine the number of injured persons, and arrange for the appropriate emergency services. Should the Supervisor not be immediately available, the employee should contact the fire department. Use the following procedures when contacting the fire department, police department, EMT, or other emergency response party.

Direct Contact with Emergency Services – If appropriate, directly contact the fire department, police department, EMT, or other appropriate party. Be calm and accurate, and be sure instructions are understood before hanging up. Provide the following information:

a. Your Name
b. Company Name
c. Location & GPS coordinates (if applicable)
d. Type of incident (fire, medical emergency, spill, cave-in, or other)
e. Call Back Number or Cell Phone Number

Post an employee at the facility entrance to control access and direct emergency response personnel (i.e., fire truck, ambulance, police, hazmat team, etc.). If applicable, assign someone to contact neighbors, neighboring companies, or community agencies (schools, churches, or community groups such as community advisory panels, etc.) other than emergency services that could be affected by the emergency.

An employee should never place themselves or other employees in danger to extinguish a fire or respond to an emergency. A properly trained person may administer first aid/CPR until the ambulance service, rescue squad, or other appropriate emergency service provider arrives.

Employees must report all accidents, injuries and/or illnesses to General Manager who will make sure that company accident/injury/illness reporting procedures are followed.

FIRE

Should an employee discover a fire, the employee must report it to the Supervisor. Portable fire extinguishers are provided in the workplace for use by employees. In the event of fire, any trained and authorized employee may use a fire extinguisher to attempt to put out the fire before evacuation. If a fire cannot be put out with the appropriate fire extinguisher, evacuate the building immediately.

In the event the building needs to be evacuated an announcement should be made. Evacuation maps point out exit routes and assembly areas. Employees are to evacuate the building via the closest, safest, available exit in an orderly fashion and should not run, push or cause confusion. If time permits, designated employees should turn off power to equipment and machinery.

After evacuation of the facilities, employees must gather at the designated assembly areas in order to be accounted for in a head count. General Manager has the responsibility to account for all employees. Refer to the Fire evacuation drawing.

TORNADO

In the event that a tornado is likely to hit in the area, an announcement must be made. Employees should shut off all power to machinery and equipment, gas lines, etc., as long as time permits. Employees should then seek shelter in a safe area or designated shelter area. If an employee cannot make it to the designated shelter area, seek shelter away from doors and windows and towards the center of the building, near inside walls, corridors or support columns. Employees who are outdoors should seek shelter in a low-lying ditch or near a solid structure. Employees should not use telephones unless it is necessary for emergency purposes. Remain calm, walk, and do not push or cause confusion. All employees should gather at the assembly point to be accounted for. General Manager has the responsibility to account for all employees.

FUEL OR CHEMICAL RELEASE

Chemicals whether liquid, solid, or gas can spill or leak and be harmful to both personnel and the environment. If an employee should discover a spill or leak, they should leave the area immediately and notify the Supervisors. The Safety Data Sheet (SDS) for the spilled or leaking material should be consulted

to identify potential hazards, protective equipment required, and correct procedures for clean-up. Shut off ignition sources, flames, spark producing or heat producing equipment, and provide adequate ventilation. If the spill or leak is too big to handle with available equipment, an emergency response team should be notified.

Liquid Spills – If a container is leaking, a reasonable effort should be made to stop the leak and/or contain the spill, without compromising personal risk. Maneuver containers so that the hole is above the liquid level or try to plug the hole. If possible, confine a spill so that its contents do not enter a drain, ditch or seep into the ground.

Gas Leaks – Alert all employees, check the wind direction, and begin assessing the extent of the release.

- Evacuate and assemble upwind of the leak.
- Direct non-essential personnel and visitors to evacuate the immediate area. Ensure that the selected assembly area is upwind of the gas leak. If not, evacuate all personnel to the alternate safe area outside of the facility using routes and exits that will avoid the hazard area.
- Perform a headcount.
- ***WARNING! RESCUE OF ANY DOWNED PERSONNEL SHOULD BE PERFORMED ONLY BY A TRAINED, QUALIFIED PERSON WEARING SCBA WITH AN APPROPRIATE BACKUP/WATCHER.*** Without this capacity, do not attempt a rescue; contact the EMS and/or fire department.
- Stop or contain the leak, if possible. NOTE: Careful assessment is essential before you proceed.

EARTHQUAKE

Earthquakes usually occur without any type of warning. Due to the suddenness of earthquakes, employees should seek shelter in a doorway passage, under a table or desk or other structurally sound area. Although earthquakes in themselves are dangerous, other emergencies may develop as a result of the earthquake. Gas lines, water lines and power lines may all be damaged in an earthquake and present significant hazards. Therefore, after an earthquake has stopped, the workplace should be inspected for damages and preventive measures taken. General Manager has the responsibility to account for all employees once an earthquake has stopped, checking for injuries and providing first aid where needed. The facilities shall also be inspected for damage, water lines, power lines and gas lines shall also be shut off. If the building has suffered major structural damage, employees must be evacuated. Management shall notify proper utility companies or other services as needed.

Emergency phone numbers should be posted near telephones, or employees' notice boards and other conspicuous locations where telephones will be used as a means of reporting emergencies.

ACTIVE SHOOTER EVENT

An active shooter is a person or persons who appears to be actively engaged in harming or attempting to kill people in the facility. They may use firearms, other weapons, or improvised explosive devices. Although authorities and management are working hard to protect you, situations can arise and

employees may be in danger. In most active shooter cases, warning signs may vary, motivations are different, and there may be no pattern or method for selecting victims.

The effects may be minor to devastating; always prepare for the worst.

As a facility that welcomes new and returning individuals on a daily basis, your survival may depend on if you have an effective plan in place. Remember, it doesn't have to be complicated. If you can get out, do so. It is always best to leave and evacuate to a designated location if you can do so safely. Encourage others to follow you but do not stay behind for them. You are your most important priority, not your belongings or materials.

During active shooter event, you have three options; run, hide, or fight:

1. Run	2. Hide	3. Fight
a. If there is an escape path, attempt to evacuate to the designated area. b. Evacuate whether others agree to or not. c. Leave your belongings behind. d. Help others escape if possible. e. Prevent others from entering the area. f. Call 911 when you are safe	a. Lock and/or blockade the door. b. Silence your cell phone. c. Hide behind large objects. d. Remain very quiet.	a. Attempt to incapacitate the shooter. b. Act with physical aggression. c. Improvise weapons. d. Commit to your actions.

When law enforcement arrives:

- Remain calm and follow instructions.
- Keep your hands visible at all times.
- Avoid pointing or yelling.
- Know that help for the injured is on its way.
- Provide as much of the following information as possible:
    - Number of shooters
    - Number of individual victims and any hostages
    - The source or type of program causing the situation
    - Type and number of weapons in possession of the shooter
    - Keys to all involved areas as well as floor plans

After law enforcement arrives and the situation is under control, uninjured employees may contact family members or leave the premises if given approval by management. General Manager shall inform emergency contacts and family members of all injured employees. Work closely with law enforcement and provide all known information to ensure the situation is fully resolved and the "All Clear" is given.

Following any type of active shooter situation or event where employees are in danger, there will be repercussions. All injured/non-injured employees, bystanders, and even family members may need further assistance with completely resolving the situation. Notify employees that healthcare or counseling services can be provided if necessary.

Rescue and Medical Duties

General Manager is responsible for, if appropriate, the enlistment and training of the authorized Fire Brigade personnel or availability of site fire and rescue services. At this time, T&N Van Service relies on the local fire department and EMS.

Emergency Notification

T&N Van Service presently uses the sound of an alarm, public address system and cell phones. to alert employees of an emergency. Supervisors are responsible for providing the instruction for necessary emergency actions as called for by this program. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm.

Training and Recordkeeping

General Manager is responsible for ensuring the training of all employees covered under this program. As part of the Emergency Action Program our employees will be trained under the following circumstances:

- At the time of initial assignment and annually thereafter,
- When an employee's responsibilities change under this program.
- Any employees responsible for leading the evacuation will be trained in evacuation inspections of closed rooms, alternate escape routes, employees that may need additional assistance, buddy system, and hazardous areas to avoid during evacuation procedures.

Curriculum for training includes the following:

- Review of this plan, including how it can be accessed
- Review of applicable OSHA standards, including how they can be accessed
- Recognition of potential fire hazards
- Good housekeeping practices
- Proper response and notification in the event of an emergency
    - Hazardous substances and the risks associated with them in an emergency
    - The potential outcomes associated with an emergency created when hazardous substances are present
    - Recognizing the presence of hazardous substances in an emergency
    - Identifying the hazardous substances, if possible
    - The role of the first responder awareness individual in the employer's emergency response plan, including site security and control
    - Identifying the need for additional resources
    - Making appropriate notifications to the communication center
- Proper instruction on the use of portable fire extinguishers (as determined by company policy)

Training logs are provided in attachment H of this program. For additional information on training or recordkeeping for this Emergency Action Program, employees should contact General Manager.

EMERGENCY PHONE NUMBERS

The following page provides a list of telephone numbers to be used in the event of an emergency.

EMERGENCY CONTACTS

Title	Name	Number
Safety Officer	Bill Brown	800-851-6080 ext. 223 609-650-1871
Human Resources Manager	Jaime Martin	1-856-802-2880 ext. 246
General Manager	Russell Taddei Jr.	856-802-2880 ext. 222
Police	Local Services	911
Fire	Local Services	911
Ambulance	Local Services	911
EPA – Spill Response	National Spill Response Center	1-800-424-8802

Poison Control	Poison Control Centers	1-800-222-1222

GPS Coordinates: _____

FIRE SAFETY PLAN

2.1 OBJECTIVE

The purpose of this Fire Prevention Plan is to provide guidance for eliminating the causes of fire, prevent loss of life and property by fire, and to comply with the Occupational Safety and Health Administration's (OSHA) requirements for fire prevention plans. This plan provides employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards.

A copy of the OSHA standard covering Fire Extinguishers, 29 CFR 1910.157, is provided in Attachment C.

2.2 RESPONSIBILITY

FIRE SAFETY PLAN ADMINISTRATOR - GENERAL MANAGER

- Ensure this program is adhered to by all employees.
- Maintain all records pertaining to the plan.
- Review and approve any changes or revisions to this plan.
- Enforce safety policies and procedures.
- Develop and administer the T&N Van Service fire prevention training program.
- Ensure that fire control equipment and systems are properly maintained.
- Control fuel source hazards.
- Conduct fire risk surveys (see Attachment D) and make recommendations.
- Ensure that any gas leaks are repaired immediately upon notification.

MANAGEMENT AND SUPERVISORS

- Ensure that employees receive appropriate fire safety training.
- Enforce this fire prevention and protection plan.

EMPLOYEES

- Notify the Plan Administrator when changes in operation increase the risk of fire.
- Complete all required training before working without supervision.
- Conduct operations safely to limit the risk of fire.
- Report potential fire hazards to the Supervisors.
- Follow fire emergency procedures.

2.3 PLAN IMPLEMENTATION

GOOD HOUSEKEEPING

To limit the risk of fires, employees shall take the following precautions.

1. Minimize the storage of combustible materials.
2. Make sure that doors, hallways, stairs, and other exit routes are kept free of obstructions.
3. Dispose of combustible waste in covered, airtight, metal containers.
4. Use and store flammable materials in well-ventilated areas away from ignition sources.
5. Use only nonflammable cleaning products.
6. Keep incompatible (i.e., chemically reactive) substances away from each other.
7. Perform “hot work” (i.e., welding or working with an open flame or other ignition sources) in controlled and well-ventilated areas.
8. Keep equipment in good working order (i.e., inspect electrical wiring and appliances regularly and keep motors and machine tools free of dust and grease.
9. Ensure that heating units are safeguarded.
10. Report all gas leaks immediately.
11. Repair and clean up flammable liquid leaks immediately.
12. Keep work areas free of dust, lint, sawdust, scraps, and similar material.
13. Do not rely on extension cords if wiring improvements are needed, and take care not to overload circuits with multiple pieces of equipment.
14. Ensure that required hot work permits are obtained.
15. Turn off electrical equipment when not in use.

T&N Van Service will ensure that equipment is maintained according to manufacturers' specifications and in accordance with any applicable National Fire Protection Association (NFPA) requirements. The following equipment is subject to the maintenance, inspection, and testing procedures performed by properly trained personnel:

- Equipment installed to detect fuel leaks, control heating, and control pressurized systems;
- Portable fire extinguishers, automatic sprinkler systems, and fixed extinguishing systems;
- Detection systems for smoke, heat, or flame;
- Fire alarm systems; and
- Emergency backup systems and the equipment they support.

2.4 TYPES OF HAZARDS

The following sections address the major workplace fire hazards that may be present at T&N Van Service along with the procedures for controlling these hazards.

Electrical Fire Hazards

Electrical system failures and the misuse of electrical equipment are leading causes of workplace fires. Fires can result from loosened ground connections, wiring with frayed insulation, or overloaded fuses, circuits, motors, or outlets. To prevent electrical fires, employees shall:

1 Make sure that worn wires are replaced.
2 Use only appropriately rated fuses.
3 Never use extension cords as substitutes for wiring improvements.
4 Use only approved extension cords [i.e., those with the Underwriters Laboratory (UL) or Factory Mutual (FM) label].
5 Check wiring in hazardous locations where the risk of fire is especially high.
6 Check electrical equipment to ensure that it is either properly grounded or double insulated.
7 Ensure adequate spacing while performing maintenance.

Portable Heaters

General Manager shall approve all portable heaters. Portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over. There shall be adequate clearance between the heater and combustible furnishings or other materials at all times.

Office Fire Hazards

Fires in offices have become more likely because of the increased use of electrical equipment, such as computers and fax machines. To prevent office fires, employees shall:

1 Avoid overloading circuits with office equipment.
2 Turn off nonessential electrical equipment at the end of each workday.
3 Keep storage areas clear of rubbish.
4 Ensure that extension cords are not placed under carpets.
5 Ensure that trash and paper set aside for recycling is not allowed to accumulate.

2.5 Flammable and Combustible Materials

The combustible materials present at T&N Van Service will be assessed regularly by General Manager. A list of fire hazards can be found in Attachment D.

Certain types of substances can ignite at relatively low temperatures or pose a risk of catastrophic explosion if ignited. Such substances obviously require special care and handling.

Class A Combustibles

Class A combustibles include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in non-specialized areas such as offices. To handle Class A combustibles safely:

- Dispose of waste daily.

- Keep trash in metal-lined receptacles with tight-fitting covers (metal wastebaskets that are emptied every day do not need to be covered).
- Keep work areas clean and free of fuel paths that could allow a fire to spread.
- Keep combustibles away from accidental ignition sources, such as hot plates, soldering irons, or other heat- or spark-producing devices.
- Store paper stock in metal cabinets.
- Store rags in metal bins with self-closing lids.
- Do not order excessive amounts of combustibles.
- Make frequent inspections to anticipate fires before they start.

Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

CLASS B COMBUSTIBLES

Class B Combustibles include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols. To handle Class B combustibles safely:

- Use only approved pumps, taking suction from the top, to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
- Do not dispense Class B flammable liquids into containers unless the nozzle and container are electrically interconnected by contact or by a bonding wire. Either the tank or container must be grounded.
- Store, handle, and use Class B combustibles only in approved locations where vapors are prevented from reaching ignition sources such as heating or electric equipment, open flames, or mechanical or electric sparks.
- Do not use a flammable liquid as a cleaning agent inside a building (the only exception is in a closed machine approved for cleaning with flammable liquids).
- Do not use, handle, or store Class B combustibles near exits, stairs, or any other areas normally used as exits.
- Do not weld, cut, grind, or use unsafe electrical appliances or equipment near Class B combustibles.
- Do not generate heat, allow an open flame, or smoke near Class B combustibles.
- Know the location of and how to use the nearest portable fire extinguisher rated for Class B fire.

Water should not be used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), halon 1301, and halon 1211. (NOTE: Halon has been determined to be an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place.)

SMOKING

Smoking is only allowed in designated locations on the jobsites. Smoking is prohibited in the vicinity of operations which constitute a fire hazard (i.e., near flammables, combustibles, or when handling chemicals). These areas shall be conspicuously posted with signs stating the following: "No Smoking or Open Flame."

Any outdoor or jobsite areas where the T&N Van Service prohibits smoking must be identified by NO SMOKING signs.

2.6 TRAINING

General Manager shall ensure that basic fire prevention training is provided to all employees upon employment, and shall maintain documentation of the training, which includes:

1) Review of 29 CFR 1910.38, including how it can be accessed;
2) This Fire Prevention Plan, including how it can be accessed;
3) Good housekeeping practices;
4) Proper response and notification in the event of a fire;
5) Instruction on the use of portable fire extinguishers (as determined by company policy in the Emergency Action Plan); and
6) Recognition of potential fire hazards.

Supervisors shall train employees about the fire hazards associated with the specific materials and processes to which they are exposed, and will maintain documentation of the training. Employees will receive this training:

1) At their initial assignment;
2) Annually; and
3) When changes in work processes necessitate additional training.

2.7 PROGRAM REVIEW

General Manager shall review this Fire Prevention Plan at least annually for necessary changes.

ATTACHMENT A: OSHA EMERGENCY ACTION PLAN STANDARD

29 CFR 1910 Subpart E – Exit Routes and Emergency Planning

Table of Contents	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.33
Coverage and Definitions	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.34
Compliance with Alternate Exit-Route Codes	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.35
Design and Construction Requirements for Exit Routes	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.36
Maintenance, Safeguards, and Operational Features for Exit Routes	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.37
Emergency Action Plans	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.38
Fire Prevention Plans	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.39
Appendix to Subpart E– Exit Routes, Emergency Action Plans, and Fire Prevention Plans	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartEApp

ATTACHMENT B: EMERGENCY ESCAPE ROUTE(S)

ATTACHMENT B: EMERGENCY EXITS

Location	Exit(s)

Emergency Procedures

Insert copies of Location Specific Emergency Procedures and GPS coordinates on the following pages

ATTACHMENT C: OSHA FIRE EXTINGUISHER STANDARD

29 CFR 1910.157 – Portable Fire Extinguishers

Portable Fire Extinguishers	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.157

ATTACHMENT D: FIRE RISK SURVEY

ATTACHMENT D: FIRE RISK SURVEY

Fire Hazard	**Location**
Propane Powered PITs	Warehouse

Ignition Source	**Control**
Smoking	Not permitted inside or around flammables

Completed by: _____ **Date**: 02/15/2024

ATTACHMENT E: GENERAL FIRE PREVENTION CHECKLIST & EXITS CHECKLIST

ATTACHMENT E: GENERAL FIRE PREVENTION

Use this checklist to ensure fire prevention measures conform to the general fire prevention requirements found in OSHA standards.

□ Yes □ No Is the local fire department acquainted with your facility, its location, and specific hazards?

□ Yes □ No If you have a fire alarm system, is it tested at least annually?

□ Yes □ No If you have interior standpipes and valves, are they inspected regularly?

□ Yes □ No If you have outside private fire hydrants, are they on a routine preventive maintenance schedule and flushed at least once a year?

□ Yes □ No Are fire doors and shutters in good operating condition?

□ Yes □ No Are fire doors and shutters unobstructed and protected against obstructions, including their counterweights?

□ Yes □ No Are automatic sprinkler system water control valves, air pressure, and water pressure checked weekly or periodically?

□ Yes □ No Has responsibility for the maintenance of automatic sprinkler systems been assigned to an associate or contractor?

□ Yes □ No Are sprinkler heads protected by metal guards?

□ Yes □ No Is proper clearance maintained below sprinkler heads?

□ Yes □ No Are portable fire extinguishers provided in adequate number and type?*

□ Yes □ No Are fire extinguishers mounted in readily accessible locations?*

□ Yes □ No Are fire extinguishers recharged regularly with the recharge date noted on an inspection tag?*

□ Yes □ No Are associates periodically instructed in the use of extinguishers and fire protection procedures?*

*(NOTE: Use of fire extinguishers is based on company policy regarding associate fire fighting in your Emergency Action Plan and local fire code.)

Completed by:_____ **Date:**_____

ATTACHMENT E: EXITS CHECKLIST

Use this checklist to evaluate compliance with OSHA's standard on emergency exit routes.

□ Yes □ No	Is each exit marked with an exit sign and illuminated by a reliable light source?
□ Yes □ No	Are the directions to exits, when not immediately apparent, marked with visible signs?
□ Yes □ No	Are doors, passageways, or stairways that are neither exits nor access to exits, and which could be mistaken for exits, marked "NOT AN EXIT" or other appropriate marking?
□ Yes □ No	Are exit signs provided with the word "EXIT" in letters at least six inches high and with lettering at least 3/4 inch wide?
□ Yes □ No	Are exit doors side-hinged?
□ Yes □ No	Are all exits kept free of obstructions?
□ Yes □ No	Are there at least two exit routes provided from elevated platforms, pits, or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
□ Yes □ No	Is the number of exits from each floor of a building and from the building itself appropriate for the building occupancy? (NOTE: Do not count revolving, sliding, or overhead doors when evaluating whether there are sufficient exits.)
□ Yes □ No	Are exit stairways that are required to be separated from other parts of a building enclosed by at least one-hour fire-resistant walls (or at least two-hour fire-resistant walls in buildings over four stories high)?
□ Yes □ No	Are the slopes of ramps used as part of emergency building exits limited to one foot vertical and 12 feet horizontal?
□ Yes □ No	Are glass doors or storm doors fully tempered, and do they meet the safety requirements for human impact?
□ Yes □ No	Can exit doors be opened from the direction of exit travel without the use of a key or any special knowledge or effort?
□ Yes □ No	Are doors on cold storage rooms provided with an inside release mechanism that will release the latch and open the door even if it's padlocked or otherwise locked on the outside?
□ Yes □ No	Where exit doors open directly onto any street, alley, or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent associates from stepping into the path of traffic?
□ Yes □ No	Are doors that swing in both directions and are located between rooms where there is frequent traffic equipped with glass viewing panels?

Completed by:_____ **Date:**_____

ATTACHMENT F: FLAMMABLE & COMBUSTIBLE MATERIALS CHECKLIST & MONTHLY FIRE EXTINGUISHER INSPECTION CHECKLISTS

ATTACHMENT F: FLAMMABLE & COMBUSTIBLE MATERIALS CHECKLIST

Use this checklist to evaluate compliance with OSHA's standards on flammable and combustible materials:

□Yes □No Are combustible scrap, debris, and waste materials such as oily rags stored in covered metal receptacles and removed from the worksite promptly?

□Yes □No Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?

□Yes □No Are all connections on drums and combustible liquid piping vapor and liquid tight?

□Yes □No Are all flammable liquids kept in closed containers when not in use?

□Yes □No Are metal drums of flammable liquids electrically grounded during dispensing?

□Yes □No Do storage rooms for flammable and combustible liquids have appropriate ventilation systems?

□Yes □No Are NO SMOKING signs posted on liquefied petroleum gas tanks?

□Yes □No Are all solvent wastes and flammable liquids kept in fire-resistant covered containers until they are removed from the worksite?

□Yes □No Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?

□Yes □No Are fuel gas cylinders and oxygen cylinders separated by distances or fire-resistant barriers while in storage?

□Yes □No Are fire extinguishers appropriate for the materials in the areas where they are mounted?*

□Yes □No Are appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids and within 10 feet of any inside storage area for such materials?*

□Yes □No Are extinguishers free from obstruction or blockage?*

□Yes □No Are all extinguishers serviced, maintained, and tagged at least once a year?*

□Yes □No Are all extinguishers fully charged and in their designated places?*

□Yes □No Where sprinkler systems are permanently installed, are the nozzle heads directed or arranged so that water will not be sprayed into operating electrical switchboards and equipment?

□Yes □No Are NO SMOKING signs posted in areas where flammable or combustible materials are used or stored?

□Yes □No Are safety cans utilized for dispensing flammable or combustible liquids at the point of use?

□Yes □No Are all spills of flammable or combustible liquids cleaned up promptly?

□Yes □No Are storage tanks adequately vented to prevent the development of an excessive vacuum or pressure that could result from filling, emptying, or temperature changes?

*(NOTE: Use of fire extinguishers is based on company policy regarding associate fire fighting in your Emergency Action Plan and local fire code.)

Completed by:_____ **Date:**_____

ATTACHMENT F: FIRE EXTINGUISHER MONTHLY INSPECTION CHECKLIST

Inspector: _____ Date: _____

Fire extinguishers shall be inspected before being placed in service and yearly thereafter. Fire extinguishers are tagged with the month and year of the last annual inspection.

All fire extinguishers are required to be visually inspected monthly. If the unit is in satisfactory condition for use, the inspector shall write the date and his or her initials on the monthly inspection tag provided on the extinguisher.

If the fire extinguisher is missing, used, or damage is found, it must be replaced with an operable extinguisher.

Use the following checklist when performing monthly fire extinguisher inspections:

		Y	N	N/A
1	Is the extinguisher in a designated location and identified with a sign?			
2	Is the extinguisher free from obstructions to access or visibility?			
3	Are operating instructions are facing out and legible?			
4	Are safety seals and tamper indicators broken or missing?			
5	Is the extinguisher full? (Check fullness by lifting or weighing)			
6	Is there any obvious physical damage? (Corrosion, cracked or dry-rotted hoses, bent or cracked hose couplings, etc.)			
7	Is the pressure gauge indicator in the operable range or position?			
8	For dry chemical units, check the crimped sleeves connecting the hose line to the handle and the hose to the cylinder. Are these sleeves bent, deformed, or cracked?			
9	For wheeled units, are the tires, wheels, carriage, hose, and nozzle in operable condition?			

ATTACHMENT G: EMERGENCY EVACUATION DRILLS

ATTACHMENT G: EMERGENCY EVACUATION FORMS

EMERGENCY EVACUATION DRILL ATTENDANCE LOG

☐ Fire ☐ Tornado ☐ Earthquake ☐ Spill/Release ☐ Active Shooter ☐ Other: _____

Printed Name	Signature	Date

EMERGENCY EVACUATION DRILL COMPLETION FORM

Date: _____

Affected Department(s): _____

_____

Type of Drill Performed:

☐ Fire ☐ Tornado ☐ Earthquake

☐ Spill/Release ☐ Active Shooter

☐ Other: _____

	YES	NO	N/A
Did the alarm system appropriately alert all employees of the emergency/was it able to be heard above ambient noise?			
Were all employees aware of where to seek shelter and appropriately evacuate to the designated area?			
Was a head count taken to account for all evacuated employees?			
Were all employees accounted for?			
Did any personnel not evacuate?			
Were first aid kits located in the designated areas and appropriately stocked?			
Were fire extinguishers located in the designated areas and inspected?			

Identified Deficiency	Details	Corrective Action	Completion Date
☐ Faulty equipment			
☐ Failure to evacuate			
☐ Blocked Exits			
☐			
☐			
☐			

Drill Effectiveness: It took _____ minutes for all employees to assemble at the meeting area.

☐ **Success** ☐ **Failure** (Re-attempt the drill once corrective actions have been implemented.)

_____ _____

Supervisor Signature Date

ATTACHMENT H: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following items must be reviewed with associates upon hire.

- Review of the OSHA standards pertaining to fire safety and evacuation, including how it can be accessed
    - OSHA requires that all companies have an evacuation program and/or a fire prevention program
    - The OSHA regulations are kept inside the Company Fire Safety & Evacuation Program.
- Review of the Fire Safety & Evacuation Program, including how it can be accessed
    - Company-specific emergency evacuation procedure including exit routes, alarm systems, and assembly points
    - Location of the Fire Safety & Evacuation Program and that it is readily available for review.
- Proper response and notification in the event of an emergency
    - Talk about the company-specific procedures for alerting fellow co-workers, using fire extinguishers to fight a fire, and who to notify in the event of an emergency.
- Recognition of potential fire hazards
    - Convey the different company-specific fire hazards dealing with fuel sources (flammable and combustible liquids, combustible material, etc.) and any ignition sources (welding, cutting, grinding, etc.)
- Housekeeping practices
    - Proper storage of flammable and combustible liquids and material.
    - Any ignition sources need to be in an area away from any fuel source.
    - Work area cleanliness needs to be stressed.
- Instruction on the use of portable fire extinguishers (as determined by company policy)

Upon completing the review of the above information, have new associates sign the new hire training log on the following page.

New Hire Training Log: Emergency Action Plan & Fire Safety

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

T&N Van Service

TABLE OF CONTENTS

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

T&N Van Service

1.1 INTRODUCTION

Bloodborne pathogens are microorganisms in the bloodstream that are capable of causing disease. Workers in industry and construction are occasionally at risk of exposure to bloodborne pathogens such as Hepatitis B, Hepatitis C, and HIV/AIDS in the workplace. Tasks such as rendering first aid and housekeeping are examples of where these hazards could occur outside of the medical field.

T&N Van Service has developed this exposure control plan in order to comply with OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030, and to eliminate or minimize employee occupational exposure to blood, bodily fluids, or other potentially infectious materials. (See 1910.1030(b) in Attachment A for a full list of Definitions pertaining to this Plan).

This Bloodborne Pathogens Exposure Control Plan is maintained in The Main Office and will be made available upon request.

1.2 RESPONSIBILITY

PROGRAM ADMINISTRATOR – GENERAL MANAGER

- Administer and implement this program.
- Review this program annually or whenever processes change.
- Determine job classifications and locations in which employees may be exposed to bloodborne pathogens.
- Review the need for engineering controls.
- Ensure that provisions regarding PPE are met and maintained.
- Oversee the Hepatitis B vaccination program.
- Oversee the Bloodborne Pathogens training program.
- Review this plan annually, at minimum, and incorporate any necessary changes.
- Oversee the first aid safety program, including ensuring that adequate first responders are trained or located within 4 minutes of the facility and verifying that first aid supplies are maintained.

MANAGEMENT

- Provide adequate controls and equipment that, when used properly, will minimize or eliminate risk of occupational exposure to blood or other potentially infectious materials at no cost to the employees.
- Monitor proper adherence to this plan through the performance of periodic audits.
- Ensure that medical and training records are being properly maintained.

General Managers and Supervisors

- Ensure that employees are trained in and use proper work practices, universal precautions, personal protective equipment, and proper cleanup and disposal techniques.

Employees

- Utilize proper work practices, universal precautions, personal protective equipment, and cleanup/disposal techniques as described in this plan.
- Report all exposure incidents to General Manager immediately.

Contract Employees

- Comply with this plan
- Attend the training described herein by T&N Van Service

1.3 Exposure Determination

All job classifications and locations in which employees may be expected to incur occupational exposure to blood or other potentially infectious materials have been identified and evaluated. The determination was made based on the nature of the job or collateral duties, regardless of frequency, and without regard to the use of personal protective equipment.

Job classifications/tasks with occupational exposure have been separated into two categories:

- **Exposure on a Regular Basis** – Job classifications in which employees are exposed to blood or other potentially infectious materials on a regular basis, and in which such exposures are considered to be a part of the normal course of work
- **Exposure on an Occasional Basis** - Job classifications in which employees may have an occasional exposure to blood or other potentially infectious materials, and in which such exposures occur only during certain tasks or procedures that are collateral to the normal job duties

These lists are located in Attachment B of this program. The General Manager is responsible for updating the lists as job classifications or work situations change.

1.4 Exposure Controls

Universal Precautions

Universal Precautions is an approach to infection control by treating all human blood and certain human body fluids as if they are known to be infected with HIV, HBV, and other bloodborne pathogens.

T&N Van Service requires employees to observe Universal Precautions to prevent contact with blood or other potentially infectious materials (OPIM). Under circumstances in which differentiation between

body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials and treated with appropriate precautions such as the use of:

- PPE such as gloves, masks, and gowns if blood or OPIM exposure is anticipated.
- Engineering and work practice controls to limit exposure.

Engineering Controls

General Manager is responsible for reviewing the need for new equipment and/or technologies present at the workplace annually at minimum. At this time, there is no anticipated need for engineering controls to minimize bloodborne pathogens exposure at T&N Van Service

Sharps/Needles

At this time, T&N Van Service employees have no occupational exposure to sharps or needles. In the event that employees are exposed to sharps or needles, the following precautions and procedures apply.

Contaminated needles and other sharps must be placed into appropriate sharps containers immediately (or as soon as possible after use). All disposable sharps containers must be puncture resistant, labeled with a biohazard label, and leak-proof. Contaminated needles and other sharps may not be bent, recapped, removed, sheared, or purposely broken, unless otherwise stated in this plan.

Reusable sharps which are contaminated must be placed immediately after use into appropriate sharps containers. All reusable sharps containers must be puncture resistant, labeled with a biohazard label, and leak-proof.

Sharps Injury Log

A needle stick or sharps injury log (see Attachment C) is required to be maintained (for employers that keep records under 29 CFR 1904). These logs must include the following information for each incident.

A. Period of time the log covers;
B. Date incident is entered on the log;
C. Date of incident;
D. Type and brand of device involved;
E. Department or area of incident; and
F. Description of incident.

The log will be retained for five years after the end of the log year.

Hand Washing Facilities

Hand washing facilities must 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, T&N Van Service should provide an antiseptic cleanser in conjunction with clean cloth/paper

towels and/or antiseptic towelettes. When these alternatives are used, employees are to wash their hands with soap and running water as soon as feasible.

Work Area Restrictions

In work areas where there is a reasonable risk of exposure to blood or other potentially infectious materials, employees may not eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials may be present.

All processes and procedures are to be conducted in a matter that will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Mouth pipetting or suctioning of blood or other potentially infectious materials is prohibited.

Specimens

T&N Van Service does not handle blood specimens.

Contaminated Equipment

Equipment that has become contaminated with blood or other potentially infectious materials prior to servicing or shipping must be closely examined. Contaminated equipment should be decontaminated, unless decontamination is not feasible. Contaminated equipment must be tagged and labeled as such.

Personal Protective Equipment (PPE)

General Manager shall ensure that the provisions regarding personal protective equipment described in this plan are met and maintained.

Personal protective equipment shall be chosen based on the anticipated exposure to blood or other potentially infectious materials. Protective equipment shall be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach an employees' clothing, skin, eyes, mouth, or other mucous membranes under normal and proper conditions of use and for the duration of time that the equipment will be used.

A list of personal protective equipment and associated tasks for T&N Van Service can be found in Attachment D of this plan.

PPE Use

General Manager and Supervisors shall ensure that employees use appropriate PPE. In cases where an employee temporarily and briefly declines to use PPE because, in the employee's professional judgment, its use may prevent delivery of healthcare or pose an increased hazard to the safety of the worker or co-worker, then the Supervisors shall investigate and document the situation to determine whether changes can be instituted to prevent such occurrences in the future.

PPE ACCESSIBILITY

General Manager is responsible for ensuring that the appropriate PPE in the various sizes is readily accessible at the work site or is issued at no cost to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

PPE CLEANING, LAUNDERING AND DISPOSAL

All PPE shall be cleaned, laundered, repaired, replaced, or disposed of by T&N Van Service at no cost to the employees.

All garments penetrated by blood or other potentially infectious materials shall be removed immediately or as soon as feasible. All PPE shall be removed before leaving the work area.

When PPE is removed, it shall be placed in appropriately designated areas or containers for storage, washing, decontamination, or disposal.

TYPES OF PPE

- **Disposable gloves** are not to be washed or decontaminated for re-use, and are to be replaced as soon as possible when they become contaminated. Gloves that become torn or punctured (or their ability to function as a barrier is otherwise compromised) are to be replaced immediately or as soon as feasible.
- **Eye & Face Protection -** Masks worn in combination with eye protection devices (such as goggles or glasses with solid side shield, or chin-length face shields) are required when the occurrence of splashes, splatters, or droplets of blood or other potentially infectious materials can reasonably be anticipated to contaminate an employee's eye, nose, or mouth
- **Additional protective clothing** (such as lab coats, gowns, aprons, clinic jackets, or similar outer garments) is necessary in instances when gross contamination can reasonably be expected.

1.5 HOUSEKEEPING

The workplace is to be cleaned and decontaminated regularly and as needed in the event of a gross contamination. See Attachment E for cleaning schedule and required cleaning materials. All contaminated work surfaces, bins, pails, cans, and similar receptacles will be inspected and decontaminated regularly as described in Attachment E.

Any potentially contaminated glassware may not be picked up directly with the hands. Reusable sharps that are contaminated with blood or other potentially infectious materials are not to be stored or processed in a manner that requires employees to reach by hand into the containers where sharps are placed.

1.6 REGULATED WASTE DISPOSAL

Disposal of all regulated waste shall be in accordance with applicable federal, state, and local regulations.

SHARPS

Contaminated sharps should be discarded immediately or as soon as feasible in containers that are closable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded.

During use, containers for contaminated sharps must remain upright throughout use, shall be easily accessible to employees, and are to be located as close as feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (including laundry areas).

General Manager is responsible for replacing sharps containers routinely and not allowing them to overfill.

When moving sharps containers from the area of use, the containers must be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. Sharps containers should be placed in a secondary container if leakage of the primary container is possible. The second container is to be closeable, constructed to contain all contents, and designed to prevent leakage during handling, storage, transport, or shipping. The secondary container should be labeled or color-coded to identify its contents.

Reusable containers may not be opened, emptied, or cleaned manually or in any other manner that would expose employees to the risk of puncture injury.

OTHER REGULATED WASTE

Other regulated waste must be placed in containers that are closeable, constructed to contain all contents, and will prevent leakage of fluids during handling, storage, transportation, or shipping.

All waste containers are to be labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

1.7 LAUNDRY

Laundry contaminated with blood or other potentially infectious materials should be handled as little as possible. Such laundry must be placed in appropriately marked bags (biohazard labeled or color-coded bags) at the location where it was contaminated. Contaminated laundry may not be sorted or rinsed in the area of contamination.

T&N Van Service will use to clean contaminated laundry, as necessary. The professional laundry service selected will need to utilize Body Substance Isolation and/or Universal Precautions and follow the procedures below.

- If Body Substance Isolation or Universal Precautions are used in handling of all soiled laundry (all laundry is assumed to be contaminated), then no labeling or color-coding is necessary if all employees recognize the hazards associated with the handling of the laundry.
- If Universal Precautions are not used in the handling of all laundry, then contaminated laundry must be placed in bags or containers that are labeled or color-coded. One possible solution would be to include a requirement in the contract with the off-site laundry service that they also use the equivalent of Universal Precautions.

1.8 HEPATITIS B VACCINES & POST-EXPOSURE EVALUATION & FOLLOW UP

T&N Van Service will make the Hepatitis B vaccine and vaccination series available to all employees who have the potential for occupational exposure. In addition, the vaccine, vaccination series, and post-exposure follow up will be provided to employees who have experienced an exposure incident.

All medical evaluations and procedures involved in the Hepatitis B vaccine and vaccination series and post-exposure follow up (including prophylaxis) will be:

- Made available at no cost to the employee;
- Made available to the employee at a reasonable time and place;
- Performed by or under the supervision of a licensed physician or other licensed healthcare professional;
- Provided in accordance with the recommendations of the United States public health service; and
- An accredited laboratory must be used to conduct all laboratory tests.

General Manager is responsible for oversight of the Hepatitis B vaccination program, post exposure evaluations, and all follow-up activities.

HEPATITIS B VACCINATION

T&N Van Service plans to use a local hospital to administer the Hepatitis B Vaccination series. Employees may also obtain Hepatitis B vaccines, post-exposure evaluations, and follow-up through their personal physician.

Employees in job classifications which have an expected exposure to blood and/or other potentially infectious materials will be offered the Hepatitis B vaccination series after the employee has received training in occupational exposure and within 10 working days of initial assignment to job duties that involve exposure.

Employees in job classifications which have an occasional exposure to blood and/or other potentially infectious materials will be offered the Hepatitis B vaccination series no later than 10 hours after an exposure incident (November 1, 2000 OSHA Letter of Interpretation allows up to 24-hours).

All employees who decline the Hepatitis B vaccination are to sign a waiver indicating their refusal (a waiver form is provided in Attachment F), as required by OSHA. If the United States Public Health Service

recommends a routine booster dose of Hepatitis B vaccine, this must also be made available free of charge to affected employees.

Exceptions to the administration of the Hepatitis B vaccination include situations where an employee has previously received the complete Hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

Participation in a pre-screening program is not a prerequisite for an affected employee to receive the Hepatitis B vaccination. If an employee initially declines the Hepatitis B vaccination, but later decides to accept the vaccination and is still covered under the OSHA standard, the vaccination is to be made available at that time.

Post-Exposure Evaluation and Follow Up

Employees must report all exposure incidents to General Manager immediately or as soon as possible after the occurrence. All exposure incidents should be investigated and documented by T&N Van Service Following a report of an exposure incident, the exposed employee shall immediately receive a confidential post-exposure evaluation and follow up. OSHA requires the post-exposure evaluation and follow-up to include the following elements, at a minimum.

- Documentation of the route of exposure, and the circumstances under which the exposure occurred.
- Identification and documentation of the source individual, unless it can be established that identification is infeasible or prohibited by state or local law. (This provision may need to be modified in accordance with applicable local laws on this subject.)
- The source individual's blood shall be tested and documented as soon as feasible and after consent is obtained (if consent is required) in order to determine HBV and HIV infectivity. If consent cannot be obtained, General Manager must establish and document that legally required consent cannot be obtained.
- When the source individual is already known to be infected with the Hepatitis B virus (HBV) or human immunodeficiency virus (HIV), testing for the source individual's known HBV or HIV status need not be repeated.
- Results of the source individual's testing are to be made available to the exposed employee, and the employee must be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
- The exposed employee's blood is required to be collected as soon as feasible and tested after consent is obtained.
- The exposed employee is to be offered the option of having their blood tested for HBV and HIV serological status. The blood sample must be preserved for up to 90 days to allow the employee to decide if their blood should be tested for HBV and HIV serological status.
- Names of employees that contract HIV, Hepatitis, or tuberculosis are not to be recorded on the OSHA 300 log.

Information Provided to the Healthcare Professional

After an exposure incident occurs, General Manager must provide the healthcare professional responsible for the exposed employee's Hepatitis B vaccination, as well as the healthcare provider providing the post-exposure evaluation (if different) with the following:

- A copy of 29 CFR 1910.1030, OSHA's Bloodborne Pathogens Standard, with emphasis on the confidentially requirements contained therein;
- A written description of the exposed employee's duties as they relate to the exposure incident;
- Written documentation of the route of exposure and circumstances under which the exposure occurred;
- Results of the source individual's blood testing, if available; and
- All medical records relevant to the appropriate treatment of the employee, including vaccination status.

Healthcare Professional's Written Opinion

General Manager should obtain a copy of the evaluating healthcare professional's written opinion. This information must be provided to the exposed employee within 15 days of completion of the evaluation.

The healthcare professional's written opinion for HBV vaccination is to be limited to whether HBV vaccination is indicated for the employee, and if the employee has received said vaccination.

The healthcare professional's written opinion for post-exposure follow up must be limited to ONLY the following information:

- A statement that the employee has been informed of the results of the evaluation; and
- A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials that require further evaluation or treatment.

Other findings or diagnosis resulting from the post-exposure follow up are to remain confidential and may not be included in the written report.

1.9 Labels & Signs

Biohazard labels must be properly affixed to containers of regulated waste, refrigerators, and freezers containing blood or other potentially infectious materials. Labels must also be affixed to any other containers used to store, transport, or ship blood or other potentially infectious materials.

Labels must be fluorescent orange or orange-red, and include the universal biohazard symbol. Red bags or containers with the universal biohazard symbol may be substituted for labels. However, regulated wastes must be handled in accordance with the rules and regulations of the entity with jurisdiction. Blood products that have been released for transfusion or other clinical use are exempted from these labeling requirements.

BIOHAZARD SYMBOL

1.10 TRAINING

T&N Van Service must provide training at the time of initial assignment to tasks where occupational exposure to blood or other potentially infectious materials may occur. OSHA requires that training be repeated every 12 months, or when there are any changes to tasks or procedures affecting an employee's occupational exposure. Training should be interactive and tailored to the education level and language of the affected employees. The person conducting the training must be knowledgeable in the subject matter.

Training must include:

1. A copy of 29 CFR 1910.1030, OSHA's Bloodborne Pathogens Standard;
2. A discussion of the epidemiology and symptoms of bloodborne diseases;
3. An explanation of the modes of transmission of bloodborne pathogens;
4. An explanation of T&N Van Service' Bloodborne Pathogens Exposure Control Plan, and how employees can obtain a copy of the plan;
5. A description and recognition of tasks that may involve exposure;
6. An explanation of the use and limitations of the methods employed by T&N Van Service to reduce exposure (such as engineering controls, work practices, and personal protective equipment);
7. Information about the types, use, location, removal, handling, decontamination, and disposal of personal protective equipment;
8. An explanation of the basis of selection of personal protective equipment;
9. Information about the Hepatitis B vaccination (including efficacy, safety, method of administration, and benefits), as well as an explanation that the vaccination will be provided at no charge to the employee;
10. Instruction on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
11. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow up;
12. Information on the post-incident evaluation and follow up required for all exposure incidents; and
13. An explanation of signs, labels, and color-coding systems.

General Manager is responsible for training oversight.

1.11 RECORDKEEPING & PROGRAM REVIEW

MEDICAL RECORDS

Medical records will be maintained in accordance with 29 CFR 1910.1020 in . All records must be kept confidential and be retained for at least the duration of employment, plus 30 years.

Medical records are to include:

- Name and social security number of the employee;
- A copy of the employee's HBV vaccination status, including the dates of vaccination;
- A copy of all results of examinations, medical testing, and follow-up procedures; and
- 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.

T&N Van Service must also ensure that all contracts for Hepatitis B vaccinations and post-exposure evaluations and follow ups stipulate that medical providers follow all OSHA recordkeeping and retention requirements.

General Manager is responsible for maintaining all medical records relating to the company bloodborne pathogens program.

Training Records

T&N Van Service must maintain training records for three years from the date of training. Records should be kept inside of the Bloodborne Pathogens Program (Attachment G is provided for this purpose). Training records are required to 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.

General Manager is responsible for maintaining all training records relating to the company bloodborne pathogens program.

Availability of Records

Whenever an employee (or designated representative) requests access to a record, T&N Van Service must provide access to said employee's records in a reasonable time, place, and manner in accordance with 29 CFR 1910.1020(e). An employee (or designated representative) may only be given access to his or her own records.

Transfer of Records

If T&N Van Service ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the Director of the National Institute for Occupational Safety and Health (NIOSH) must be contacted three months prior to cessation of business for instruction on final disposition of the records.

Evaluation and Review

This Bloodborne Exposure Control Plan will be reviewed for effectiveness at least annually by a T&N Van Service designate. The plan will be updated to incorporate changes to the standard or changes in the work place, as needed.

1.12 First Aid Safety

First aid refers to medical attention that is usually administered immediately after the injury occurs and at the location where it occurred. It often consists of a one-time, short-term treatment and requires little technology or training to administer.

First aid can include the following:

- Cleaning minor cuts, scrapes, or scratches
- Treating a minor burn
- Applying bandages and dressings
- The use of non-prescription medicine
- Draining blisters
- Removing debris from the eyes
- Massage
- The use of hot/cold therapy
- Drinking fluids to relieve heat stress

General Manager is responsible for administering and implementing the T&N Van Service workplace First Aid program. The General Manager is responsible for the day-to-day supervision of this program.

First Responders

OSHA's Medical Services and First Aid standard requires that in the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid. A first responder is not located within four minutes of T&N Van Service's facility. Therefore, we have designated and trained employees in first aid & CPR.

First Aid Supplies

First Aid kits will be located in Dispatch office, warehouse and cafeteria. Also, each truck will be equipped with a sealed first aid kit. Ensuring that the kit is in the truck and sealed will be part of the driver's checklist. If the seal is broken there should be an injury report stating what happened. General Manager is responsible for checking the first aid kit at least weekly to ensure that the expended items are replaced.

At minimum, each first aid kit will contain the following:

ITEM	SIZE	MINIMUM QUANTITY
Absorbent compress	32 in^2	1
Adhesive bandages	1x3 inches	16
Adhesive tape	5 yards	1 roll
Antiseptic	0.5 g (0.14 fl oz.)	10 packets
Burn treatment	0.5 g (0.14 fl oz)	6 applications
Medical exam gloves	N/A	2 pair
Sterile pads	3x3 inches	4
Triangular bandage	40x40x56 inches	1
Bloodborne pathogens kit		1

Where an employee of T&N Van Service may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided within the work area for immediate emergency use.

ATTACHMENT A: OSHA STANDARD FOR BLOODBORNE PATHOGENS & MEDICAL SERVICES AND FIRST AID

Bloodborne Pathogens - 29 CFR 1910.1030

- https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030

Medical Services and First Aid - 29 CFR 1910.151

- https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.151

ATTACHMENT B: EXPOSURE DETERMINATION LISTS

ATTACHMENT B: EXPOSURE DETERMINATION

Exposure on a Regular Basis		
All employees in the following job classifications have occupational exposure to bloodborne pathogens.		
Job Title / Department	**Affected employees**	**Task/Procedure**
None Expected	N/A	N/A

Exposure on an Occasional Basis		
Some employees in the following job classifications may have occupational exposure to bloodborne pathogens.		
Job Title / Department	**Affected employees**	**Task/Procedure**
First Responders	All	Voluntary administering First Aid
Maintenance	All	Clean-up after a workplace accident

ATTACHMENT C: EXPOSURE REPORTING

Bloodborne Pathogens Exposure Report Form

This form is to be completed immediately after an exposure incident occurs where blood or other potentially infectious materials was present.

Return the completed form to with General Manager to discuss proper procedures regarding post-exposure follow-up.

Date of Incident: _____ Time: _____ Circle AM or PM

Location of Incident: _____

Name(s) of Injured Person(s): _____

_____

Name(s) of Designated First Aid Responders Who Rendered Assistance: _____

_____

Name(s) of Others Who Rendered Assistance: _____

_____

Briefly describe the first aid incident: _____

_____

_____

Were all unvaccinated first aid responders offered a HBV vaccination as required? Circle YES or NO.

Did an exposure incident occur? Circle YES or NO.

If yes, the list name(s) of exposed persons and describe the nature of the exposure (type and source of bloodborne pathogen, how contact occurred, extent of exposure, cleanup of exposed area).

_____

_____

_____

_____

Were all exposed employees offered an opportunity to receive a medical evaluation, HBV vaccination and medical follow-up as required? Circle YES or NO.

Supervisor's Name: _____ Date: _____

Sharps Injury Log

For period ending: _____

Date Entered	Date & Time of Incident	Type & Brand of Device	Department or Work Area Where Incident Occurred	Description of Incident

Retain Until _____ (five years after end of log year)

ATTACHMENT D: PERSONAL PROTECTIVE EQUIPMENT/TASK LIST

ATTACHMENT D: PERSONAL PROTECTIVE EQUIPMENT/TASK LIST

Job Classification	Task/Procedure	Type of PPE to be Used	PPE to be Issued By
Trained/Authorized Employees	Rendering of first aid	Safety Glasses Latex Gloves	T&N Van Service
Trained/Authorized Employees	Cleaning up blood and/or bodily fluids resulting from a workplace accident	Safety Glasses Latex Gloves Booties/Shoe Covers Splash Apron Coveralls Dust or Medical Mask	T&N Van Service

ATTACHMENT E: CLEANING AND DECONTAMINATION SCHEDULE

ATTACHMENT E: CLEANING AND DECONTAMINATION SCHEDULE

The following schedule describes work areas at T&N Van Service that should be decontaminated, decontamination frequency and method, and required types of cleaning. *Information concerning usage of protective coverings used to help keep surfaces free of contamination (such as plastic wrap) should be included.*

Work Area/Equipment	Cleaning and Decontamination Frequency	Type of Cleaners or Supplies to be Used	Method of Cleaning to be Used	Responsible Person
Entire contaminated area	After contamination due to a workplace accident or illness	Commercial disinfectant of ¼-cup Clorox per gallon of water	Clean as thoroughly as possible	Trained/ Authorized Employees

ATTACHMENT F: HEPATITIS B VACCINE DECLINATION

Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring the Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to me. However, I decline the Hepatitis B vaccination at this time.

I understand that by declining this vaccine, I continue to be at risk of acquiring the serious disease Hepatitis B.

If, in the future, I continue to experience occupational exposure to blood or other potentially infectious materials and I wish to be vaccinated with the Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Name (Print)	Signature	Date

Supervisor Name (Print)	Signature	Date

ATTACHMENT G: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the Supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following information must be reviewed with employees at the time of initial assignment to tasks where occupational exposure to bloodborne pathogens may occur and when changes or additions to tasks or procedures are made that will affect the employee's occupational exposure.

- Review the requirements of OSHA's Bloodborne Pathogen Standard, including requirements pertaining to the proper protection, handling, and cleanup of blood and other bodily fluid.
- Instruction on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials
    - Review company policy for dealing with emergencies
    - Review those individuals in the company who are trained as emergency first responders (first aid and CPR trained)
- Review this Bloodborne Pathogen Exposure Control Plan and how employees can obtain a copy.
- Examples of Bloodborne diseases (Hepatitis, HIV, etc.).
- Modes of transmission of Bloodborne pathogens - Contact with another person's blood or bodily fluid that may contain blood (via mucous membranes, non-intact skin, contaminated sharps/needles).
- A description and recognition of tasks that may involve exposure (i.e., first aid, clean-up after an accident).
- Information about the types, use, location, removal, handling, decontamination, and disposal of personal protective equipment:
    - Location of the proper PPE.
    - Personal protective equipment/Bloodborne pathogen clean-up kits.
    - Contaminated clothing and PPE need either to be properly disposed of or laundered.
- An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow up:
    - Review company-specific procedures to report exposure incidents and explain that medical evaluations will be provided at no charge to the employee.
- Information about the Hepatitis B vaccination (including efficacy, safety, method of administration, and benefits), as well as an explanation that the vaccination will be provided at no charge to the employee.

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Bloodborne Pathogens

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my Supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

WORKPLACE ERGONOMICS

T&N Van Service

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WORKPLACE ERGONOMICS

T&N Van Service

1.1 INTRODUCTION

OSHA requires employers to evaluate the tasks of their workers to determine the safest and proper ways to avoid lifting related injuries, and to train their workers in workplace ergonomics. T&N Van Service has compiled this Workplace Ergonomics safety reference manual in an effort to assure that all of our employees will exercise proper workplace ergonomic practices.

1.2 RESPONSIBILITY

PROGRAM ADMINISTRATOR – GENERAL MANAGER

- Administrate and implement the T&N Van Service Workplace Ergonomics safety program
- Responsible for the day-to-day supervision of the T&N Van Service Workplace Ergonomics safety program

MANAGEMENT

- Provide adequate resources for employee training and materials
- Take necessary action when workplace issues or injuries occur

EMPLOYEES

- Practice good workplace ergonomics
- Attend all company training sessions on ergonomics
- Report any issues or symptoms to Management as soon as possible

1.3 WHAT IS ERGONOMICS

Ergonomics is the science of fitting the job to the worker. In the workplace, ergonomic principles are used to make alterations to a job so that it conforms to the person doing that job, rather than to force the person to fit the job. Redesigning various job functions to match a person's stature will reduce stress on the body and eliminate many potential injuries associated with the overuse of muscles, unnatural postures, and repetitive motions.

Ergonomic solutions may involve the following:

- Restructuring of tasks,
- Redesigning workstations
- Implementing new or different tools, lighting, and equipment to fit a worker's physical capabilities and limitations

- Some of these options may mean adjusting the height of a workstation or a computer screen, or rearranging the steps in a process so the worker will not have to lift and twist in the same motion.

Technological advances, which result in more specialized tasks, higher assembly line speeds, and increased repetition, are often major causes of ergonomic problems. Consequently, workers' hands, wrists, arms, shoulders, backs, and legs may be subjected to thousands of repetitive twisting, forceful, or flexing motions during a typical workday. When this occurs on the job, the stress on those body parts builds up over time and results in musculoskeletal disorders (MSDs).

The goal of a workplace ergonomics program is to reduce or eliminate the risk factors that lead to MSDs. Jobs that expose workers to excessive vibration, repetitive motions, heavy lifting, awkward postures, and continual contact pressure will be assessed and ways found to reduce exposure to those factors that cause MSDs. Identifying ergonomic risk factors in your workplace is the first step toward making changes that will improve the safety and health of all workers.

1.4 WHY IS ERGONOMICS A CONCERN

Workers who perform repetitive procedures or work in positions that put a great deal of stress on the musculoskeletal system can suffer ergonomic stress. This stress can be caused by any number of factors including repetitive motion, excessive force, mechanical stresses caused by tools or machines, poor posture, awkward positioning, lifting, vibrations, temperature extremes, and unaccustomed activity.

The cost of worker injuries and illnesses caused by these ergonomic stressors is staggering. Over one third of all workers' compensation costs are associated with musculoskeletal disorders (MSDs), injuries caused by trauma to the body occurring over a period of time. A conservative estimate of the medical costs of treating one industrial case of carpal tunnel syndrome, a type of disorder affecting the wrists and hands, is about $20,000 a year.

This cost estimate does not take into consideration the costs involved with lost work time, replacement workers, and reduced productivity. Lower back pain, for example, which is often associated with improper or repeated lifting or sitting for an extended period of time, is responsible for about 1,400 lost work days per 1,000 workers every year. Only the common cold and the flu cause workers to miss more work annually.

1.5 OSHA & ERGONOMICS

OSHA issued a final ergonomics rule in November 2000. The goal of the standard was to reduce the level of work-related musculoskeletal disorders such as lower back injuries and carpal tunnel syndrome, which are the most prevalent, expensive, and preventable workplace injuries. The standard would have affected about 6.1 million employers and 102 million employees in general industry workplaces.

While organized labor supported the new rule, which addressed the most common workplace injuries, business organizations denounced it as prohibitively expensive, asserting that it would cost corporations more than $100 billion to implement. Ultimately, under the Congressional Review Act, the ergonomic standard was withdrawn.

OSHA currently publishes ergonomics guidelines focusing on specific industries and continues to monitor for ergonomic problems in industry and issue citations for hazardous situations under the General Duty Clause of the Occupational Safety and Health Act of 1970.

1.6 MUSCULOSKELETAL DISORDERS

Musculoskeletal disorders are caused or aggravated by repetitive motions, forceful exertions, vibration, mechanical compression (hard and sharp edges), and sustained or awkward postures that occur over extended periods of time. MSDs can affect nearly all tissues, the nerves, tendons, tendon sheaths, and muscles, with the upper extremities being the most frequently affected. These injuries range from disorders of the back, the neck, the arms and legs, or the shoulders and involve strains, sprains, or tissue inflammation, and dislocation.

Workers suffering from MSDs may experience less strength for gripping, less range of motion, loss of muscle function, and inability to do everyday tasks. These painful and sometimes crippling injuries develop gradually over periods of weeks, months, and years as the result of the repeated actions required to perform their jobs.

Awareness is the key to preventing serious MSD injuries. It is important for employers and employees alike to know the signs and symptoms of MSDs. These signs and symptoms are often ignored, because they seem slight at first and go away when the employee is not at work. However, as time goes on, the symptoms increase and last longer until finally it's impossible to perform simple tasks such as holding a drinking glass or keyboarding. Early intervention is essential to recovery.

It's important to train employees about MSD signs and symptoms and encourage them to report symptoms as soon as they become aware of them. Early reporting is essential to lessen the severity of the injury. The longer warning signs are ignored, the more damage is done, the longer recovery takes, and in some cases, the damage may be irreversible.

RISK FACTORS THAT CAUSE MSDS

The physical stresses that can contribute to or cause MSDs are called "risk factors." The initial symptoms of MSDs may include fatigue, discomfort, and pain; as tissue damage worsens, other symptoms, such as weakness, numbness, or restricted movement, may also appear. Work-related MSDs occur when the risk factors that cause or contribute to musculoskeletal system pathology are associated with a person's job duties. Workplace musculoskeletal disorders are caused by exposure to the following risk factors:

REPETITION

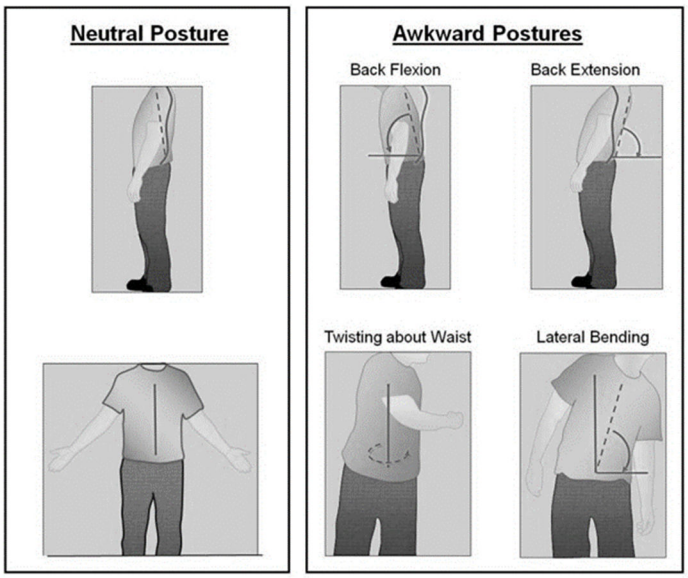
Doing the same motions over and over again places stress on the muscles and tendons. The severity of risk depends on how often the action is repeated, the speed of movement, the number of muscles involved, and the required force.

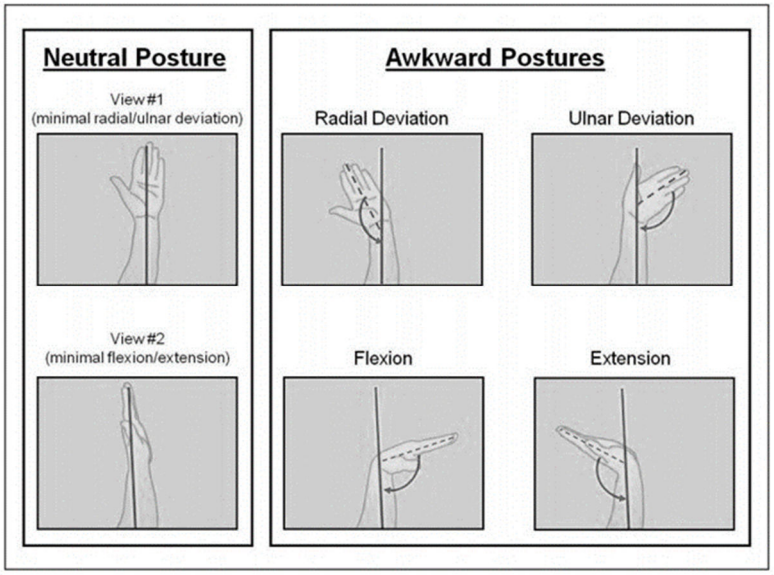
FORCEFUL EXERTIONS

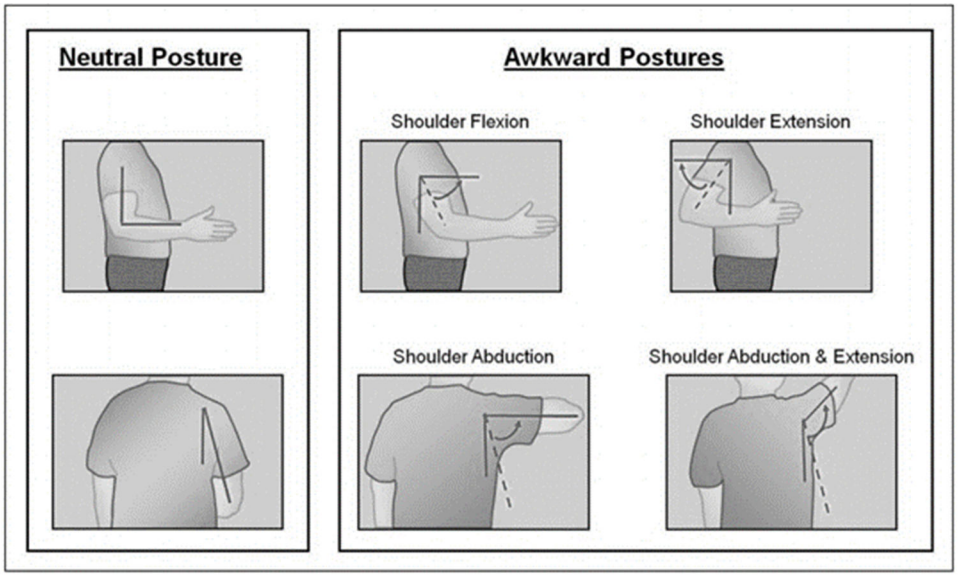
Force is the amount of physical effort required to perform a task, such as heavy lifting or pushing/pulling, or to maintain control of equipment or tools. The amount of force depends on the type of grip, the weight of an object, body posture, the type of activity, and the duration of the task.

AWKWARD POSTURES

Posture is the position your body is in and affects muscle groups that are involved in physical activity. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding fixed positions.







CONTACT STRESS

Pressing the body against a hard or sharp edge can result in placing too much pressure on nerves, tendons, and blood vessels. For example, using the palm of your hand as a hammer can increase your risk of suffering an MSD.

VIBRATION

Operating vibrating tools or equipment that typically have high or moderate vibration levels such as sanders, grinders, chippers, routers, drills, and other saws can lead to nerve damage.

COLD TEMPERATURES

Operations where the work environment is a cold setting, such as a food processing plant, or meatpacking facility, the risk for potential MSDSs to develop increases, especially in combination with any of the previously mentioned risk factors.

OTHER FACTORS

Aside from avoiding or eliminating the above mentioned risk factors, not every solution will work for every employee. Keep an eye out for employees who may be doing any behaviors that may indicate there are still ergonomic issues. If any of the following behaviors are observed, certain actions should be made such as re-assessing work stations and tasks to find ergonomic improvement opportunities:

- Modifying their tools, equipment or work area
- Shaking their arms and hands
- Rolling their shoulders
- Bringing products such as back belts or wrist braces into the workplace

1.7 MSD SIGNS & SYMPTOMS

The presence of MSD signs and/or symptoms is usually the first indication that an employee may be developing an MSD. The signs are objective physical findings that an MSD may be developing. The symptoms, on the other hand, are physical indications that an employee may be developing an MSD.

Symptoms can vary in severity, depending on the amount of exposure to MSD hazards and often appear gradually, for example, as muscle fatigue or pain at work that disappears during rest. Usually symptoms become more severe as exposure continues. If the employee continues to be exposed, symptoms may increase to the point that they interfere with performing the job. Finally, pain may become so severe that the employee is unable to perform physical work activities).

Signs that may indicate an MSD include deformity, decreased grip strength, decreased range of motion, and loss of function. Common symptoms of MSDs include:

- Painful joints,
- Pain, tingling, or numbness in the hands or feet,

- Shooting or stabbing pains in the arms or legs,
- Swelling or inflammation,
- Burning sensation,
- Pain in wrists, shoulders, forearms, or knees,
- Fingers or toes turning white,
- Back or neck pain, and

1.8 COMMON MUSCULOSKELETAL DISORDERS

TENDINITIS

Tendinitis is tendon inflammation that occurs when a muscle or tendon is repeatedly tensed from overuse, vibration, or unaccustomed usage of the wrist and shoulder. With further exertion, some of the fibers that make up the tendon can actually fray or tear apart. The tendon becomes thickened, bumpy, and irregular in certain areas of the body, such as the shoulder, and the injured area may calcify. Without rest and sufficient time for the tissues to heal, the tendon may be permanently weakened. Tendinitis is common among power press operators, welders, painters, and assembly line workers in the automobile, appliance, and electronic production industries.

TENOSYNOVITIS

Tenosynovitis is an inflammation or injury to the synovial sheath surrounding the tendon. These sheaths secrete synovial fluid which acts as a lubricant to reduce friction during movement. Repetitive motion using the hands and wrists may provoke an excessive secretion of synovial fluid, with the sheath becoming swollen and painful. Repetitions exceeding 1,500 to 2,000 per hour are known to produce symptoms associated with tendon sheath irritation in the hands. Tenosynovitis often affects workers in meatpacking and poultry processing. Also those whose tasks require buffing, grinding, sanding, sawing, and punch press operations.

DEQUERVAIN'S DISEASE

In DeQuervain's disease, the tendon sheath of the thumb is inflamed. This disease is attributed to excessive friction between two thumb tendons and their common sheath. Twisting and forceful gripping motions with the hands, similar to a clothes-wringing movement, can place sufficient stress on the tendons to cause DeQuervain's disease. Tasks involving these kinds of motions are frequently performed by butchers, housekeepers, packers, seamstresses, and cutters.

TRIGGER FINGER

Trigger finger, another tendon disorder, is attributed to the creation of a groove in the flexing tendon of the finger. If the tendon becomes locked in the sheath, attempts to move that finger will cause snapping and jerking movements. The palm side of the fingers is the usual site for trigger finger. This disorder is often associated with using tools that have handles with hard or sharp edges or whose handles are too

far apart for the user's hand. Meatpackers, poultry workers, electronic assemblers, and carpenters are at risk of developing trigger finger.

CARPAL TUNNEL SYNDROME

Carpal tunnel syndrome (CTS), a disorder affecting the hands and wrists, has probably received more attention in recent years than any other musculoskeletal disorder. CTS is the compression and entrapment of the median nerve where it passes through the wrist into the hand in the carpal tunnel. The median nerve is the main nerve that extends down the arm to the hand and provides the sense of touch in the thumb, index finger, middle finger, and half of the fourth or ring finger.

When irritated, tendons housed inside the narrow carpal tunnel swell and press against the nearby median nerve. The pressure causes tingling, numbness, or severe pain in the wrist and hand. The pain is often experienced at night. The pressure also results in a lack of strength in the hand and an inability to make a fist, hold objects, or perform other manual tasks. If the pressure continues, it can damage the nerve, causing permanent loss of sensation and even partial paralysis.

Carpal tunnel syndrome develops in the hands and wrists when repetitive or forceful manual tasks are performed over a period of time. Workers need to be aware of the symptoms and causes of CTS and what to do about them. Initially, they may have fatigue and pain which develops during the work day and disappears overnight with no physical symptoms. After a length of time, fatigue and pain develop earlier in the day, some physical symptoms such as clumsiness may occur which affect work performance, and there may be no overnight recovery.

When the case becomes full-blown, there is constant fatigue and pain with no overnight recovery and disturbed sleep results. At this point, work performance is inhibited to the extent of requiring off-duty time or light/restricted duty. Often workers do not associate their pain with their work because symptoms may only occur during evening or off-duty hours. When they finally seek medical help, surgery may be necessary and the road to recovery will take more time than anticipated.

RAYNAUD'S SYNDROME

Raynaud's syndrome, or white finger, occurs when the blood vessels of the hand are damaged as a result of repeated exposure to vibration for long periods of time. The skin and muscles are unable to get the necessary oxygen from the blood and eventually die. Common symptoms include:

- Intermittent numbness and tingling in the fingers;
- Skin that turns pale, ashen and cold; and
- Eventual loss of sensation and control in the fingers and hands.

Raynaud's syndrome is associated with the use of vibrating tools over time, such as pneumatic hammers, electric chain saws, and gasoline powered tools. After long-term exposure, the blood vessels in the fingers may become permanently damaged. This condition is also intensified when the hands are exposed to extremely cold temperatures.

There is no medical remedy for white finger. If the fingers are fairly healthy, the condition may improve if exposure to vibration stops or is reduced. Job activities that can lead to Raynaud's Syndrome include chain sawing, jack hammering, use of vibrating tools, sanding, painting, and using a tool too small for the hand, often in a cold environment.

Other types of vibration may affect the entire body, producing overall fatigue and potential permanent damage. Vibration in conjunction with prolonged sitting may also result in degenerative changes in the spine. For example, drivers of tractors, trucks, buses, construction machinery, and other heavy equipment may suffer from low back pain, and permanent abdominal, spinal and bone damage.

BACK DISORDERS

Pulled or strained muscles, ligaments, tendons, and disks are perhaps the most common back problems and may occur in almost half of the work force at least once during their lifetime. The majority of workplace back disorders result from chronic, or long-term injury to the back rather than from one specific incident. Only about four percent of back injuries are associated with a single traumatic incident.

Back disorders are frequently caused by the cumulative effects of faulty body mechanics such as:

- Excessive or repetitive twisting, bending, and reaching;
- Carrying, moving, or lifting loads that are too heavy or too large;
- Staying in one position for too long;
- Poor physical condition; or
- Awkward posture.

When back muscles or ligaments are injured from these repetitive pulling and straining activities, the back muscles, disks, and ligaments can become scarred and weakened and lose their ability to support the back, making additional injuries more likely.

Prolonged sitting stresses the body, particularly the lower back and the thighs, and may cause the lower back (lumbar) region to bow outward if there is inadequate support. This abnormal curvature (called kyphosis) can lead to painful lower back problems, a common complaint among office workers.

Other factors which are contributors to back injuries include the natural degeneration of the back due to aging, inactivity both at work and at home, seasonal activity undertaken without prior physical conditioning, stress, and vibration.

1.9 SAFE LIFTING PRACTICES

Training shall be provided on proper lifting techniques. The training shall include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries. Additionally, job specific training should be given on safe lifting and work practices, hazards, and controls. Improper lifting practices can contribute to many workplace injuries, often severe. To help avoid these injuries, employees should follow these steps while lifting heavy objects:

1. Stand close to the load with feet spread shoulder width distance apart. One foot should be slightly in front of the other to help with balance.
2. Bend knees to squat down (do not bend at the waist). Tuck the chin while keeping the back as vertical as possible.
3. Ensure there is a firm grasp of the object before beginning to lift.
4. Slowly begin straightening your legs. Never twist the body during this step. If twisting is unavoidable, slowly turn using the feet.
5. Once the lift is complete, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

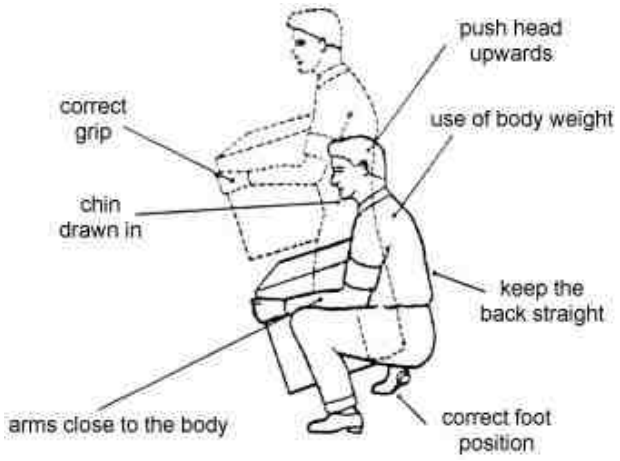
Important factors to keep in mind when evaluating an employee's lifting habits are:

- Frequency
- Duration
- Type of lifting
- Workers health, body size, age, general physical fitness
- Size, bulk, and weight of objects
- If a two-man lift is required
- If vision will be obstructed during the lift

Musculoskeletal injuries caused by improper lifting must be investigated and documented. Incorporation of investigation findings into work procedures must be accomplished to prevent future injuries.

Where use of lifting equipment is impractical or not possible, two man lifts must be used.

Supervision must periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations should be evaluated to engineer out hazards before work processes are implemented.



Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, hoists must be provided for employees. Other engineering controls such as conveyors, lift tables, and work station design should be considered.

1.10 Reporting Symptoms or Injuries

It is very important to encourage early reporting if an employee is suffering from an ergonomic injury or if they believe one might be developing. Employees may be afraid to speak up about the start of symptoms or even have fear of retribution if they were to report an injury. Remind and encourage employees that it is always best to report a symptom or injury to the appropriate personnel sooner rather than later. The sooner it is reported the sooner action can be taken to redirect the course or degree of injury.

Re assess the employees work station

Once an injury has been brought to management's attention, it is General Manager's duty to re-evaluate the employee's work station to determine what factors may be contributing to the injury. Once the root cause of the injury is determined, appropriate action must be taken to ensure the hazard is eliminated. This may include restructuring the employees tasks or workstation or even introducing tools or equipment that may aid in the comfort of the worker.

Continue to monitor for worsening/further injuries

This is the last and most crucial step. Once the problem has been identified and mitigated; it is important to monitor it to ensure that the symptoms or injury do not continue or worsen. Should that be the case, the workstation should be re-evaluated

1.11 Training

T&N Van Service must provide training at the time of hire, a quick refresher if an injury is reported, and it is recommended to review the training annually.

Training must include:

1. Review what Ergonomics is and why it is important.
2. Review Musculoskeletal Disorders (MSDs)
    a. Signs and symptoms
    b. The risk factors
3. Review the most prevalent types of ergonomics concerns at T&N Van Service and how to help prevent or reduce injuries.

ATTACHMENT A: VERIFICATION OF TRAINING

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following items must be reviewed with employees upon initial assignment and whenever new chemicals are introduced into the work environment:

- Review what Ergonomics is and why it is important.
- Review Musculoskeletal Disorders (MSD's)
    - Signs and symptoms
        - Painful joints,
        - Pain, tingling, or numbness in the hands or feet,
        - Shooting or stabbing pains in the arms or legs,
        - Swelling or inflammation,
        - Burning sensation,
        - Pain in wrists, shoulders, forearms, or knees,
        - Fingers or toes turning white,
        - Back or neck pain, and
        - Stiffness.
    - The risk factors:
        - Repetition
        - Forceful extension
        - Awkward postures
        - Contact stress
        - Vibration
        - Cold temperatures
- Review the MSD's that are prevalent in your industry.
- Explain proper body mechanics including:
    - Proper posture (Sitting)
    - Proper posture (Standing)
    - Safe Lifting Practices

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Workplace Ergonomics

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

FALL PROTECTION PROGRAM

T&N Van Service

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FALL PROTECTION PROGRAM

T&N Van Service

1.1 INTRODUCTION

This Fall Protection Plan has been prepared for the prevention of injuries associated with falls at T&N Van Service's workplace. It addresses standards established by the Occupational Safety and Health Administration (OSHA) in 29 CFR 1910 - Subpart D, Walking-Working Surfaces. A copy of this standard is provided in Attachment A of this document.

While this plan provides the generic components and parameters for fall protection, it is understood that fall protection must be project-specific, where control measures must be developed and implemented for each identified project and/or job function. In many cases, the fall protection controls are unique to that project and/or job function.

The purpose of this plan is to:

A. supplement our standard safety policy by providing safety standards specifically designed to cover fall protection, and
B. ensure that each employee is trained and made aware of the safety provisions which are to be implemented by this plan prior to the start of each job.

Definitions used in this plan can be found in 29 CFR 1910.21 (Attachment A)

1.2 RESPONSIBILITY

PROGRAM ADMINISTRATOR - GENERAL MANAGER

- Administer, oversee, and maintain this plan.
- Conduct continual observational safety checks of work operations.
- Enforce safety policies and procedures.
- Review and approve any changes or revisions to this plan.

MANAGEMENT & SUPERVISORS

- Provide fall protection systems for employees in work areas where injury from a fall to a lower level is a recognized hazard
- Ensure that fall protection systems meet OSHA's requirements
- Provide all necessary training to employees
- Correct any unsafe acts or conditions immediately

EMPLOYEES

- Alert management of any unsafe/hazardous convictions in order to prevent injury to either themselves or any other employees.
- Properly use and maintain provided fall protection systems provided

1.3 GENERAL REQUIREMENTS FOR FALL PROTECTION

Each employee on a walking-working surface with an unprotected side or edge that is 4 feet (1.2 meters) or more above a lower level will be protected from falling by one or more of the following measures:

- Guardrail systems
- Safety net systems
- Personal fall protection systems such as fall arrest, travel restraint, or positioning systems.

If T&N Van Service establishes that it is not feasible to use one of the above measures, or that it creates a greater hazard to use a guardrail, safety net, or personal fall protection system on residential roofs, T&N Van Service will develop and implement a fall protection plan that meets the requirements of 29 CFR 1926.502(k) and training that meets the requirements of 29 CFR 1926.503(a) and (c).

Additionally, if T&N Van Service determines that the use of fall protection systems is not feasible on the working side of a platform used at a loading rack, loading dock, or teeming platform, the work may be completed without a fall protection system, provided:

- The work operation for which fall protection is infeasible is in process
- Access to the platform is limited to authorized employees; and,
- The authorized employees are trained in accordance with 1910.30.

In order to comply with OSHA's general requirements covering walking and working surfaces, as outlined in 29 CFR 1910.22 (Attachment A), T&N Van Service will ensure the following are maintained appropriately:

- All places of employment, passageways, storerooms, service rooms, and walking-working surfaces are kept in a clean, orderly, sanitary condition.
- The floor of every workroom is maintained in a clean and, to the extent feasible, dry condition.
- Where wet processes are used, drainage is maintained and false floors, platforms, mats, or other dry standing places are provided where practicable.
- Walking-working surfaces are maintained free from hazards such as sharp or protruding, loose boards, corrosion, leaks, spills, snow, and ice.
- Each walking-working surface must be able to support the maximum intended load for the surface.
- Safe means of access and egress to and from walking-working surfaces are maintained and are required to be used by each employee.

- Walking-working surfaces are inspected regularly and as necessary, and they are maintained in a safe condition.
    - Hazardous conditions on walking-working surfaces are corrected or repaired before an employee uses the surface again. If the correction or repair cannot be made immediately, the hazard will be guarded to prevent employees from using the surface until the hazard is corrected or repaired.
    - When any correction or repair involves the structural integrity of the walking-working surface, a qualified person performs or supervises the correction or repair.

1.4 FALL PROTECTION SYSTEMS

GUARDRAIL SYSTEMS

Guardrail systems will meet OSHA's requirements, as outlined in 1910.29(b), including, but not limited to, the following:

- Top rail installed 39-45 inches above the walking/working level.
- Mid-rail (or suitable alternative) located 21 inches above walking/working level.
- Able to withstand a force of at least 200 pounds in any outward or downward direction.
- Smooth-surfaced to protect employees from injury such as puncture, laceration, or catching/snagging of clothing.
- Designed so as not to constitute a projection hazard.
- Installed on all unprotected sides or edges when used around holes
- When guardrail systems are used around holes that serve as points of access (such as ladderways), the guardrail system opening:
    - Has a self-closing gate that slides or swings away from the hole, and is equipped with a top rail and midrail or equivalent intermediate member, or
    - Is offset to prevent an employee from walking or falling into the hole.
- Guardrail systems on ramps and runways are installed along each unprotected side or edge
- Manila or synthetic rope used for top rails or midrails are inspected as necessary to ensure that the rope continues to meet the strength requirements in 29 CFR 1910.29(b)(3) & (5).

SAFETY NET SYSTEMS

Safety Net Systems will meet OSHA's requirements, as outlined in 29 CFR 1926, Subpart M, including, but not limited to, the following:

- Installed as close as practicable under the walking/working surface, but in no case more than 30 feet (9.1 meters) below such level.
- Extend outward from outermost projection of the work surface.
- Installed with sufficient clearance under them to prevent contact with the surface due to impact on the net.

- Capable of absorbing an impact force equal to that produced by the drop test specified in OSHA's fall protection standard.
- Inspected at least weekly for wear, damage, and/or deterioration defective components removed.
- Mesh opening not to exceed 36 square inches (230 square centimeters) nor be longer than 6 inches (15 centimeters) on any side.

Personal Fall Arrest Systems

Personal fall arrest systems are used in general industry if fall hazards of 4 feet or more cannot be controlled with standards rails or covers or if the work cannot be performed with scaffolds, lifts, or ladders. T&N Van Service will ensure that personal fall protection systems meet OSHA's outlined requirements.

- Connectors, D-rings, snap-hooks, lanyards, lifelines and anchorage are designed, constructed and installed according to specifications addressed in OSHA's fall protection standard.
- Limit maximum arresting force on an employee to 900 pounds when used with a body belt, 1,800 pounds when used with a body harness.
- Rigged such that employees can neither free fall more than 6 feet (1.8 meters) nor contact any lower level.
- Body belts and related components may be used only for employee positioning and not for fall protection.
- Personal fall arrest systems and components subject to impact loading shall be removed from service until inspected and approved for use by the Competent Person.
- Prompt rescue of employees in the event of a fall.
- Inspected prior to each use for wear, damage and/or deterioration with defective components removed.
- Not to be attached to guardrail systems.
- Components of a fall arrest system must be used only for employee fall protection or positioning and not to hoist materials.

Harness Inspection

Belts and Rings: For harness inspections begin at one end, hold the body side of the belt toward you, grasping the belt with your hands six to eight inches apart. Bend the belt in an inverted "U." Watch for frayed edges, broken fibers, pulled stitches, cuts or chemical damage. Check D-rings and D-ring metal wear pads for distortion, cracks, breaks, and rough or sharp edges. The D-ring bar should be at a 90-degree angle with the long axis of the belt and should pivot freely.

Attachments of buckles and D-rings should be given special attention. Note any unusual wear, frayed or cut fibers, or distortion of the

buckles. Rivets should be tight and un-removable with fingers. Body side rivet base and outside rivets should be flat against the material. Bent rivets will fail under stress.

Inspect frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut or burnt stitches will be readily seen.

TONGUE BUCKLE: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Rollers should turn freely on the frame. Check for distortion or sharp edges.

FRICTION BUCKLE: Inspect the buckle for distortion. The outer bar or center bars must be straight. Pay special attention to corners and attachment points of the center bar.

LANYARD INSPECTION

When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Hardware should be examined under procedures detailed below.

HARDWARE

1. *Snaps*: Inspect closely for hook and eye distortion, cracks, corrosion, or pitted surfaces. The keeper or latch should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper rocks must provide the keeper from opening when the keeper closes.

2. *Thimbles*: The thimble (protective plastic sleeve) must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble should be free of sharp edges, distortion, or cracks.

LANYARDS

1. *Steel Lanyards*: While rotating a steel lanyard, watch for cuts, frayed areas, or unusual wear patterns on the wire. The use of steel lanyards for fall protection without a shock-absorbing device is not recommended.

2. *Web Lanyard*: While bending webbing over a piece of pipe, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Due to the limited elasticity of the web lanyard, fall protection without the use of a shock absorber is not recommended.

3. *Rope Lanyard*: Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period. When a rope lanyard is used for fall protection, a shock-absorbing system should be included.

SHOCK-ABSORBING PACKS

1. The outer portion of the shock-absorbing pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to the D-ring, belt or lanyard should be examined for loose strands, rips and deterioration.

VISUAL INDICATION OF DAMAGE TO WEBBING AND ROPE LANYARDS

HEAT - In excessive heat, nylon becomes brittle and has a shriveled brownish appearance. Fibers will break when flexed and should not be used above 180 degrees Fahrenheit.

CHEMICAL - Change in color usually appears as a brownish smear or smudge. Transverse cracks appear when belt is bent over tight. This causes a loss of elasticity in the belt.

ULTRAVIOLET RAYS - Do not store webbing and rope lanyards in direct sunlight, because ultraviolet rays can reduce the strength of some material.

MOLTEN METAL OR FLAME - Webbing and rope strands may be fused together by molten metal or flame. Watch for hard, shiny spots or a hard and brittle feel. Webbing will not support combustion, nylon will.

PAINT AND SOLVENTS - Paint will penetrate and dry, restricting movements of fibers. Drying agents and solvents in some paints will appear as chemical damage.

CLEANING OF EQUIPMENT

Basic care for fall protection safety equipment will prolong and endure the life of the equipment and contribute toward the performance of its vital safety function. Proper storage and maintenance after use is as important as cleaning the equipment of dirt, corrosives or contaminants. The storage area should be clean, dry and free of exposure to fumes or corrosive elements.

NYLON AND POLYESTER - Wipe off all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion. Then wipe the belt dry with a clean cloth. Hang freely to dry but away from excessive heat.

DRYING - Harness, belts and other equipment should be dried thoroughly without exposure to heat, steam or long periods of sunlight.

System consists of:

- Anchorage Connector
- Shock Absorbing Lanyard
- Full Body Harness

REQUIREMENTS:

- Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
- Be rigged so that an employee can neither free fall more than 6 feet (1.8 meters) nor contact any lower level;
- Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07 meters); and
- Have sufficient strength to withstand twice the potential impact energy of a person who is free falling a distance of 6 feet (1.8 meters) or the free fall distance permitted by the system, whichever is less.
- The anchorage connector must be attached to a suitable and strong attachment point
- Effective January 1, 1998, body belts are prohibited as a fall arrest device.
- Body belts can still be used as a positioning device.

1.5 LADDERS

All ladders used by T&N Van Service must meet OSHA & ANSI specifications, and ladder use must comply with OSHA's requirements for ladders, which are covered under 29 CFR 1910.23. These sections prescribe rules and provide requirements for the construction, care, and use of the common types of ladders. See Attachment A for a copy of these standards.

Ladder Inspections

Ladders are inspected before initial use in each work shift and more frequently as necessary, in order to identify any visible defects that could cause employee injury, including, but not limited to, the following:

- Defects such as broken side rails, missing steps, or corrosion corroded components, structural defects
- Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced when the ladder is in position for use.
- Ensure that the ladder is not loaded beyond its maximum intended load for which it was built, nor beyond the manufacturer's rated capacity
- Ensure that rungs and steps are not coated with any material that may obscure structural defects, and are free of oil, grease, dirt, etc.
- Ladder surfaces must be free of puncture and laceration hazards
- Confirm that fittings are tight
- Make sure that spreaders or other locking devices are in place
- Non-skid safety feet are not damaged
- If a ladder is found to be unsafe, inform your supervisor. If the unsafe condition is found to be valid, the ladder must be immediately tagged "Dangerous: Do Not Use" and remove from service until repaired or replaced.
- Portable ladder rungs must be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize the possibility of slipping.

- Stepladders and combination ladders are equipped with a metal spreader or locking device to securely hold the front and back sections in an open position while in use

Ladder Set Up & Storage

The following precautions must be followed when setting up a ladder for use:

1. Assess the job and determine the proper ladder type that is needed for the task. Ladders shall be used only for the purpose for which they were designed, and may not be loaded beyond their maximum capacity.
2. Determine the best placement for the ladder. Consider surroundings such as piping, traffic, electric lines, and other workers in the area. Do not block closed doors that might interfere with the ladder. If a ladder must be placed in a location where they can be displaced by other activities or traffic, the ladder must be secured to prevent accidental displacement or be guarded by a temporary barricade.
3. Inspect the ladder to ensure there are no defects. (see Ladder Inspections)
4. Place ladder on a stable and level surface or stabilize the ladder to prevent accidental displacement. Ladders may not be placed on boxes, barrels, or other unstable bases to obtain additional height.
5. If using an extension ladder, make sure that the base of the ladder is ¼ the height of the ladder from the wall.
6. Portable ladders used to gain access to an upper landing surface must have the side rails extended at least 3 feet above the upper landing surface.
7. Fully open and lock spreaders for stepladders in place.
8. Never tie ladders together to make longer sections, unless designed for such use

The following precautions will be followed when storing ladders:

- Store ladders in areas where they cannot be damaged (warping or sagging)
- Do not hang anything on ladders that are in storage

Safe Climbing Procedures

- If you have a fear of heights – do not climb a ladder.
- Wear shoes or boots with heels to prevent slippage through the rungs
- Do not carry anything in the hands when climbing a ladder. Carry tools on belt or raise and lower with hand line.
- Never allow more than one person on a ladder.
- Climb and descend ladders cautiously.
- Face the ladder and hold on with both hands maintaining 3 points of contact at all times
- Never reach too far to either side. Do not lean to the side further than your belt buckle
- Never use second step from the top on a step ladder or the third step from the top for a straight/extension ladder
- Never attempt to move, shift, or extend ladder while in use

Ladder Safety Systems

Ladder safety systems will meet the following requirements:

- Each ladder safety system allows the employee to climb up and down using both hands and does not require that the employee continuously hold, push, or pull any part of the system while climbing;
- The connection between the carrier or lifeline and the point of attachment to the body harness or belt does not exceed 9 inches (23 cm);
- Mountings for rigid carriers are attached at each end of the carrier, with intermediate mountings spaced, as necessary, along the entire length of the carrier so the system has the strength to stop employee falls;
- Mountings for flexible carriers are attached at each end of the carrier and cable guides for flexible carriers are installed at least 25 feet (7.6 m) apart but not more than 40 feet (12.2 m) apart along the entire length of the carrier;
- The design and installation of mountings and cable guides does not reduce the design strength of the ladder; and
- Ladder safety systems and their support systems are capable of withstanding, without failure, a drop test consisting of an 18-inch (41-cm) drop of a 500-pound (227-kg) weight.

FIXED LADDERS

Fixed ladders that extend more than 24 feet (7.3 m) above a lower level will meet the following requirements:

- **Existing fixed ladders**. Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well;
- **New fixed ladders**. Each fixed ladder installed on and after November 19, 2018, is equipped with a personal fall arrest system or a ladder safety system;
- **Replacement**. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and
- **Final deadline**. On and after November 18, 2036, all fixed ladders must be equipped with a personal fall arrest system or a ladder safety system.
- When a one-section fixed ladder is equipped with a personal fall protection or a ladder safety system or a fixed ladder is equipped with a personal fall arrest or ladder safety system on more than one section, T&N Van Service will ensure:
    - The personal fall arrest system or ladder safety system provides protection throughout the entire vertical distance of the ladder, including all ladder sections; and
    - The ladder has rest platforms provided at maximum intervals of 150 feet (45.7 m).
- Ladder sections having a cage or well will be offset from adjacent sections and have landing platforms provided at maximum intervals of 50 feet (15.2 m).

- A cage or well may be used in combination with a personal fall arrest system or ladder safety system provided that the cage or well does not interfere with the operation of the system.

Cages, wells, and platforms used with fixed ladders will meet the following criteria:

- Cages and wells installed on fixed ladders are designed, constructed, and maintained to permit easy access to, and egress from, the ladder that they enclose (see Figures D-14 and D-15 of this section);
- Cages and wells are continuous throughout the length of the fixed ladder, except for access, egress, and other transfer points;
- Cages and wells are designed, constructed, and maintained to contain employees in the event of a fall, and to direct them to a lower landing; and
- Platforms used with fixed ladders provide a horizontal surface of at least 24 inches by 30 inches (61 cm by 76 cm).

1.6 HOLES

T&N Van Service will ensure that each employee is protected from falling, tripping, or stepping through:

- any hole (including skylights) that is 4 feet (1.2 m) or more above a lower level by one or more of the following: covers, guardrail systems, travel restraint systems, or personal fall arrest systems.
- any hole that is less than 4 feet (1.2 m) above a lower level by covers or guardrail systems.
- a stairway floor hole by a fixed guardrail system on all exposed sides, except at the stairway entrance. However, for any stairway used less than once per day where traffic across the stairway floor hole prevents the use of a fixed guardrail system (e.g., holes located in aisle spaces), the employer may protect employees from falling into the hole by using a hinged floor hole cover that meets the criteria in § 1910.29 and a removable guardrail system on all exposed sides, except at the entrance to the stairway.
- a ladderway floor hole or ladderway platform hole by a guardrail system and toeboards erected on all exposed sides, except at the entrance to the hole, where a self-closing gate or an offset must be used.

- a hatchway and chutefloor hole by:
    - A hinged floor-hole cover that meets the criteria in § 1910.29 and a fixed guardrail system that leaves only one exposed side. When the hole is not in use, the employer must ensure the cover is closed or a removable guardrail system is provided on the exposed sides;
    - A removable guardrail system and toeboards on not more than two sides of the hole and a fixed guardrail system on all other exposed sides. The employer must ensure the removable guardrail system is kept in place when the hole is not in use; or
    - A guardrail system or a travel restraint system when a work operation necessitates passing material through a hatchway or chute floor hole.

1.7 OPENINGS

Each employee on a walking-working surface near an opening, including one with a chute attached, where the inside bottom edge of the opening is less than 39 inches (99 cm) above that walking-working surface and the outside bottom edge of the opening is 4 feet (1.2 m) or more above a lower level is protected from falling by the use of guardrail systems, safety net systems, travel restraint systems, or personal fall arrest systems.

1.8 STAIRWAYS

T&N Van Service will ensure that all stairways meet OSHA's requirements for stairways (29 CFR 1910.25), including:

- Each employee exposed to an unprotected side or edge of a stairway landing that is 4 feet (1.2 m) or more above a lower level is protected by a guardrail or stair rail system;
- Handrails, stair rail systems, and guard rail systems are provided in accordance with 1910.28.
- Handrails and stair rail systems are installed
- Vertical clearance above any stair tread to any overhead obstruction is at least 6 feet, 8 inches (203 cm), as measured from the leading edge of the tread. Spiral stairs must meet the vertical clearance requirements outlined below.
- Stairs have uniform riser heights and tread depths between landings.
- Stairway landings and platforms are at least the width of the stair and at least 30 inches (76 cm) in depth, as measured in the direction of travel.
- When a door or a gate opens directly on a stairway, a platform is provided, and the swing of the door or gate does not reduce the platform's effective usable depth to:
    - Less than 20 inches (51 cm) for platforms installed before January 17, 2017;
    - Less than 22 inches (56 cm) for platforms installed on or after January 17, 2017.
- Each stair can support at least five times the normal anticipated live load, but never less than a concentrated load of 1,000 pounds (454 kg) applied at any point.
- Standard stairs are used to provide access from one walking-working surface to another when operations necessitate regular and routine travel between levels, including access to operating

platforms for equipment. Winding stairways may be used on tanks and similar round structures when the diameter of the tank or structure is at least 5 feet (1.5 m).

- Spiral, ship, or alternating tread-type stairs are used only when T&N Van Service has demonstrated that it is not feasible to provide standard stairs. These types of stairs will be installed, used, and maintained in accordance with manufacturer's instructions.
- T&N Van Service will refer to 1910.25 & 1910.28(b) for additional specifications regarding stair angles, riser height, tread depth, and stair height.
-

1.9 PROTECTION FROM FALLING OBJECTS

When an employee is exposed to falling objects, T&N Van Service will ensure that each employee wears head protection that meets the requirements of 29 CFR 1910, Subpart I. In addition, employees will be protected from falling objects by one or more of the following:

- Erect toe boards, screens, or guardrail systems to prevent objects from falling from higher levels.
- Toeboards used for falling object protection must:
    - Be erected along the exposed edge of the overhead walking-working surface for a length that is sufficient to protect employees below.
    - Have a minimum vertical height of 3.5 inches (9 cm) as measured from the top edge of the toeboard to the level of the walking-working surface.
    - Not have more than a 0.25-inch (0.5-cm) clearance or opening above the walking-working surface.
    - Be solid or do not have any opening that exceeds 1 inch (3 cm) at its greatest dimension.
    - Have a minimum height of 2.5 inches (6 cm) when used around vehicle repair, service, or assembly pits. Toeboards may be omitted around vehicle repair, service, or assembly pits when the employer can demonstrate that a toeboard would prevent access to a vehicle that is over the pit.
    - Be capable of withstanding, without failure, a force of at least 50 pounds (222 N) applied in any downward or outward direction at any point along the toeboard.
- Erect a canopy structure and keep potential fall objects far enough from edge of the higher level so that those objects would not go over the edge if they were accidentally displaced.
- Barricade the area where objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.
- Where tools, equipment, or materials are piled higher than the top of the toeboard, paneling or screening is installed from the toeboard to the midrail of the guardrail system and for a length that is sufficient to protect employees below. If the items are piled higher than the midrail, the employer also must install paneling or screening to the top rail and for a length that is sufficient to protect employees below; and

- All openings in guardrail systems must be small enough to prevent objects from falling through the opening.
- Canopies used for falling object protection must be strong enough to prevent collapse and to prevent penetration by falling objects.

SLIPS, TRIPS, AND FALLS

- Keep floors clean and dry. In addition to being a slip hazard, continually wet surfaces promote the growth of mold, fungi, and bacteria that can cause infections.
- Provide warning signs for wet floor areas.
- Where wet processes are used, maintain drainage and provide false floors, platforms, mats, or other dry standing places where practicable, or provide appropriate waterproof footgear.
- Keep all places of employment clean and orderly and in a sanitary condition.
- Keep aisles and passageways clear and in good repair, with no obstruction across or in aisles that could create a hazard. Provide floor plugs for equipment, so power cords need not run across pathways.
- Keep exits free from obstruction. Access to exits must remain clear of obstructions at all times.
- Ensure spills are reported and cleaned up immediately.
- Use no-skid waxes and surfaces coated with grit to create non-slip surfaces in slippery areas such as toilet and shower areas.
- Use waterproof footgear to decrease slip/fall hazards.
- Use only properly maintained ladders to reach items. Do not use stools, chairs, or boxes as substitutes for ladders.
- Re-lay or stretch carpets that bulge or have become bunched to prevent tripping hazards.
- Aisles and passageways should be sufficiently wide for easy movement and should be kept clear at all times. Temporary electrical cords that cross aisles should be taped or anchored to the floor.
- Eliminate cluttered or obstructed work areas.
- Use prudent housekeeping procedures such as cleaning only one side of a passageway at a time, and provide good lighting for all halls and stairwells, to help reduce accidents.
- Provide adequate lighting especially during night hours. You can use flashlights or low-level lighting when entering patient rooms.
- Instruct workers to use the handrail on stairs, to avoid undue speed, and to maintain an unobstructed view of the stairs ahead of them even if that means requesting help to manage a bulky load.
- Eliminate uneven floor surfaces.
- Promote safe work in cramped working spaces. Avoid awkward positions, and use equipment that makes lifts less awkward.

1.10 TRAINING

Each employee who may be exposed to fall hazards will be trained, including each employee who uses personal fall protection systems or who is required to be trained as outlined in 29 CFR 1910 Subpart D. This plan enables each employee to recognize fall hazards. Employees will be trained in the procedures to be followed in order to minimize these hazards.

TRAINING CURRICULUM

Each employee is trained, as necessary, by the Program Administrator or their qualified designate, covering the following topics, at minimum:

- Fall Hazards:
    - The nature of fall hazards in the work area and how to recognize them.
    - The procedures to be followed to minimize those hazards.
    - The correct procedures for installing, inspecting, operating, maintaining, and disassembling the personal fall protection systems that are used.
    - The correct use of personal fall protection systems and equipment, including, but not limited to, proper hook-up, anchoring, and tie-off techniques, and methods of equipment inspection and storage, as specified by the manufacturer.
    - Prevention and avoidance of slip/trip/fall hazards.
    - General ladder requirements including inspection, erecting, and securement.
- Equipment Hazards:
    - proper care, inspection, storage, and use of equipment covered by this subpart before an employee uses the equipment.
    - Each employee who uses a dockboard must be trained to properly place and secure it to prevent unintentional movement.
    - Each employee who uses a rope descent system must be trained in proper rigging and use of the equipment in accordance with § 1910.27.
    - Each employee who uses a designated area must be trained in the proper set-up and use of the area.

CERTIFICATION OF TRAINING

Management verifies compliance with the training requirements via the Training Log in Attachment F. Management shall maintain a record of the latest training certification for each employee, and that record shall contain:

- The name, and identification number of person being trained
- Signature of person being trained
- The date(s) of the training
- Identification of person conducting training (i.e., Program Administrator)

RETRAINING

Documented refresher training will be annually and more frequently when T&N Van Service has reason to believe the employee does not have the understanding and skill outlined above. In addition, training will be provided and documented under the following circumstances:

- When changes to the workplace render previous training obsolete;
- When changes in the types of fall protection systems or equipment to be used render previous training obsolete or inadequate; or
- When inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee no longer has the requisite understanding or skill necessary to use equipment or perform the job safely.
- Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill

1.11 ENFORCEMENT

Constant awareness of and respect for fall hazards and compliance with this plan (and all company safety rules) are considered conditions of employment. Management reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this plan.

1.12 ACCIDENT INVESTIGATION REPORTING AND ANALYSIS

All fall-related incidents shall be documented using the Accident Investigation Report (Attachment C). Each incident will be subsequently investigated using this form. Management shall review each form and provide feedback regarding necessary corrective action. All incidents falling under the parameters of this plan are analyzed at least annually to determine trends and recurring problems and the need for further control measures.

1.13 FALL PROTECTION PLAN AUDIT

An annual management audit of T&N Van Service's fall protection plan is conducted in order to evaluate the plan's effectiveness and the need for revision and upgrade.

The Fall Protection Plan Audit form (Attachment E) may be used to evaluate the input of the Program Administrator and other representatives of supervision, along with feedback from the employees. This information will be used to gauge the effectiveness of the plan and incorporate the necessary improvements.

ATTACHMENT A: OSHA STANDARDS COVERING WALKING-WORKING SURFACES

Walking-Working Surfaces - 29 CFR 1910 Subpart D

Scope and definitions	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.21
General requirements	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.22
Ladders	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.23
Step bolts and manhole steps.	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.24
Stairways	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.25
Dockboards	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.26
Scaffolds and rope descent systems	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.27
Duty to have fall protection and falling object protection	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.28
Fall protection systems and falling object protection – criteria and practices	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.29
Training Requirements	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.30

ATTACHMENT B: INSPECTION CHECKLISTS

- Walking/Working Surfaces
- Fall Arrest Harness

Walking-Working Surfaces Inspection Checklist

General Work Environment	Comments
Is a documented, functioning housekeeping program in place?	
Are all worksites clean, sanitary, and orderly?	
Are working surfaces kept dry, or is appropriate means taken to assure the surfaces are slip-resistant?	
Are all spilled hazardous materials or liquids, including blood and other potentially infectious materials, cleaned up immediately and according to proper procedures?	
Is combustible scrap, debris and waste stored safely and removed from the worksite properly?	
Is all regulated waste, as defined in the OSHA bloodborne pathogens standard (1910.1030), discarded according to federal, state, and local regulations?	
Are accumulations of combustible dust routinely removed from elevated surfaces including the overhead structure of buildings, etc.?	
Is combustible dust cleaned up with a vacuum system to prevent the dust from going into suspension?	
Is metallic or conductive dust prevented from entering or accumulating on or around electrical enclosures or equipment?	
Are covered metal waste cans used for oily and paint-soaked waste?	

Walkways	Comments
Are aisles and passageways kept clear?	
Are aisles and walkways marked as appropriate?	
Are wet surfaces covered with non-slip materials?	
Are holes in the floor, sidewalk or other walking surface repaired properly, covered or otherwise made safe?	
Is there safe clearance for walking in aisles where motorized or mechanical handling equipment is operating?	
Are materials or equipment stored in such a way that sharp projecting objects will not interfere with the walkway?	
Are spilled materials cleaned up immediately?	
Are changes of direction or elevation readily identifiable?	
Are aisles or walkways that pass near moving or operating machinery, welding operations or similar operations arranged so employees will not be subjected to potential hazards?	
Is adequate headroom provided for the entire length of any aisle or walkway?	
Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground?	
Are bridges provided over conveyors and similar hazards?	

Floor and Wall Openings	Comments
Are floor openings guarded by a cover, a guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?	
Are toeboards installed around the edges of permanent floor openings (where persons may pass below the opening)?	
Are skylight screens of such construction and mounting that they will withstand a load of at least 200 pounds?	
Is the glass in the windows, doors, glass walls, etc., which are subject to human impact, of sufficient thickness and type for the condition of use?	
Are grates or similar type covers over floor openings such as floor drains of such design that foot traffic or rolling equipment will not be affected by the grate spacing?	
Are unused portions of service pits and pits not actually in use either covered or protected by guardrails or equivalent?	
Are manhole covers, trench covers and similar covers, plus their supports designed to carry a truck rear axle load of at least 20,000 pounds when located in roadways and subject to vehicle traffic?	
Are floor or wall openings in fire resistive construction provided with doors or covers compatible with the fire rating of the structure and provided with a self-closing feature when appropriate?	

Stairs and Stairways	Comments
Are standard stair rails or handrails on all stairways having four or more risers?	
Are all stairways at least 22 inches wide?	
Do stairs have landing platforms not less than 30 inches in the direction of travel and extend 22 inches in width at every 12 feet or less of vertical rise?	
Do stairs angle no more than 50 and no less than 30 degrees?	
Are step risers on stairs uniform from top to bottom?	
Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?	
Are stairway handrails located between 30 and 34 inches above the leading edge of stair treads?	
Do stairway handrails have at least 3 inches of clearance between the handrails and the wall or surface they are mounted on?	
Where doors or gates open directly on a stairway, is there a platform provided so the swing of the door does not reduce the width of the platform to less than 21 inches?	
Where stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees stepping into the path of traffic?	
Do stairway landings have a dimension measured in the direction of travel, at least equal to the width of the stairway?	

Elevated Surfaces	Comments
Are signs posted, when appropriate, showing the elevated surface load capacity?	
Are surfaces elevated more than 30 inches above the floor or ground provided with standard guardrails?	
Are all elevated surfaces (beneath which people or machinery could be exposed to falling objects) provided with standard 4-inch toeboards?	
Is a permanent means of access and egress provided to elevated storage and work surfaces?	
Is required headroom provided where necessary?	
Is material on elevated surfaces piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading?	
Are dock boards or bridge plates used when transferring materials between docks and trucks or rail cars?	

Fall Arrest Harness Inspection Report

Department/Location: _____

Equipment: _____ ID No.: _____

Item	**Satisfactory**	**Needs Action**	**Follow Up**
1. Harness Inspection (Belts and Rings)			
2. Harness Inspection (Buckles and 3. D-Ring)			
4. Harness Inspection (Tongue Buckle)			
5. Harness Inspection (Friction Buckle)			
6. Lanyard Inspection (Snaps)			
7. Lanyard Inspection (Thimbles)			
8. Steel Lanyard			
9. Web Lanyard			
10. Rope Lanyard			
11. Shock Absorbing Packs			

Please provide additional comments/recommendations below for all items noted in the "Needs Action" column. Document completion of recommendations and/or "Needs Action" items in "Follow Up" column.

Comments/Recommendations: _____

_____

Inspected By: _____ Date: _____

Reviewed By: _____ Date: _____

ATTACHMENT C: FALL PROTECTION ACCIDENT INVESTIGATION REPORT

Fall Protection Accident Investigation Report

Location: _____

Injured: _____ Age: _____
Department: _____

Date of Accident: _____ Time: _____ AM/PM

Nature of Injury/Illness/Property Damage: _____
_____
_____
_____

Medical treatment By: _____

Location of Treatment: _____

Description of Accident: _____
_____
_____
_____

Contributing Factors: _____
_____
_____

Loss Severity Potential: High/Major: _____ Med./Serious ____ Low/Minor: _____

Probable Reoccurrence Rate: Frequent: _____ Occasional _____ Rare: _____

Actions Taken to Prevent Reoccurrence: _____
_____
_____
_____

Supervisor (Print): _____

Signature: _____ Date: _____

Investigated By: _____ Date: _____

Reviewed By: _____ Date: _____

ATTACHMENT D: FALL PROTECTION SAFETY MEETING REPORT

Fall Protection Safety Meeting Report

Department/Location: _____ Date of Meeting _____
Number of Employees Present _____ Incidents Reviewed: _____
Subjects Presented and Discussed: _____

Comments/Suggestions/Recommendations:

_____
_____
_____
_____
_____
_____

Action Taken:

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

Additional Comments:

_____
_____
_____
_____
_____
_____

Supervisor (print): _____

_____ _____
(Signature) (Date)

ATTACHMENT E: FALL PROTECTION SAFETY AUDIT CHECKLIST

Fall Protection Plan Safety Audit Checklist

Location: _____

Instructions: Support each "unsatisfactory" component with appropriate plan for corrective action in "Comments" section. Insert “N/A” for any aspect which does not apply.

PROGRAM COMPONENTS	Satisfactory	Unsatisfactory
Statement of Company Policy	_____	_____
Fall Protection Systems		
Management Responsibility	_____	_____
Walking/Working Surfaces	_____	_____
Protection from Falling Objects	_____	_____
Criteria and Practices	_____	_____
Guardrail System	_____	_____
Safety Net Systems	_____	_____
Personal Fall Arrest Systems	_____	_____
Positioning Device Systems	_____	_____
Warning Line Systems	_____	_____
Controlled Access Zones	_____	_____
Safety Monitoring Systems	_____	_____
Covers	_____	_____
Training Requirements	_____	_____
Training Curriculum	_____	_____
Certification of Training	_____	_____
Retraining	_____	_____
Interim Training	_____	_____
Program Enforcement	_____	_____
Accident Investigation, Reporting and Analysis	_____	_____
Fall Protection Plan Audit	_____	_____

COMMENTS/CORRECTIVE ACTION:

_____

_____

_____

_____

AUDITED BY: (PRINT) _____ TITLE: _____

SIGNATURE: _____ DATE: _____

ATTACHMENT F: TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

ATTACHMENT G: NEW HIRE TRAINING DOCUMENTATION

OSHA's Employee Responsibilities

- Read the OSHA Poster at the workplace.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the supervisor.
- Report any work-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

New Hire Training Summary:

The following items must be reviewed with employees upon hire.

- Discuss employee roles in this fall protection plan
- Convey company-specific fall safety rules
- The nature of fall hazards in the work area
    - Slips, Trips, & Falls
    - Elevated work surfaces in the workplace (Discuss: Platforms, Wall and Floor Openings, Roofs, Scaffold, Ladders, Man lifts, Other)
- Address appropriate & safe use of ladders
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones and other protection to be used
    - Fall protection and/or prevention is required when working 4-feet (if General Industry) or 6-feet (if Construction) above a lower surface.
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection
    - Toeboards, when used as falling object protection, must be erected along the edge of the overhead walking/working surface for a distance sufficient to protect employees below.
    - Guardrail systems, when used as falling object protection, must have all openings small enough to prevent passage of potential falling objects.
    - While performing roof work, materials and equipment must not be stored within 6 feet of a roof edge unless guardrails are erected at the edge.

Upon completing the review of the above information, have new employees sign the new hire training log on the following page.

New Hire Training Log: Fall Protection

I have read the information contained in this document and understand the health and safety policies and procedures contained herein. I have been advised of my OSHA required employee responsibilities and hereby pledge to abide by them. I also understand that it is my responsibility to work safely and to notify my supervisor regarding any questions I have or unsafe working conditions that I observe.

PRINT NAME	SIGNATURE	DATE

JOBSITE SAFETY & HEALTH MANUAL

T&N Van Service

TABLE OF CONTENTS

- 3.6 Vacuum Trucks
- 3.7 Vehicles And Mobile Equipment
- 3.8 Hand-Signaling Control
- 3.9 Electrical safety
- 3.10 Ground-Fault Circuit Interrupters (GFCI)
- 3.12 Ergonomics & Manual Lifting

Tab 4: Safety Meetings & Trainings

- 4.1 Safety Meetings
  - ♦ Safety Meeting Minutes
- 4.2 Training & Education
- 4.3 New Hire Orientation

Tab 5: Toolbox Talks

- ♦ Insert Toolbox Talks

Tab 6: Injury & Illness Reporting & Prevention

- 6.1 Accident & Incident Investigation
- 6.2 Near miss reporting
  - ♦ Accident/Incident/Near Miss Report & Investigation Form
- 6.3 Employee Access to Medical Records
- 6.4 OSHA Reporting & Recordkeeping
- 6.5 OSHA Poster
  - ♦ OSHA Recordkeeping Packet

Tab 7: Discipline & Enforcement

- 7.1 Safety rules and procedures
- 7.2 Disciplinary Policy
  - ♦ Disciplinary Action Form

Tab 8: Miscellaneous Jobsite Information

Note: Handouts & Forms are designated by diamonds (♦) for quick reference

TAB 1: SAFETY & HEALTH RESPONSIBILITIES, POLICIES, & PROCEDURES

1.1 POLICY STATEMENT

It is T&N Van Service's belief that our employees are our most important asset and the preservation of employee Safety and Health must remain a constant consideration in every phase of our business. We will provide the resources necessary to manage, control, or eliminate all safety and health hazards.

All employees are responsible for working safely and productively, as well as recognition and awareness of hazards in their work areas. Employees are also responsible for following safe work practices, including the use of Personal Protective Equipment (PPE) where necessary.

It is our belief that any safety and health program must have total employee involvement.

Therefore, this program has management's highest priority, support, and participation.

PRODUCTION IS NOT SO URGENT THAT WE CANNOT TAKE TIME TO PERFORM OUR WORK SAFELY.

Russel Taddei Jr.

T&N Van Service Owner

1.2 EMPLOYEE RESPONSIBILITIES

Although OSHA does not cite employees for violations of their responsibilities, each employee "shall comply with all occupational safety and health standards and all rules, regulations, and orders issued under the Act" that are applicable. Employee responsibilities and rights in states with their own occupational safety and health programs are generally the same as for workers in states covered by Federal OSHA. An employee should do the following:

- Read the OSHA Poster at the jobsite.
- Comply with all applicable OSHA standards.
- Follow all lawful employer safety and health rules and regulations, and wear or use prescribed protective equipment while working.
- Report hazardous conditions to the Supervisor.
- Report any job-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the Act in a responsible manner.

♦ Employee Responsibilities Acknowledgement

I have read and understand my responsibilities under the OSHA standards and T&N Van Service's policies and procedures and agree to abide by them. I have also had the duties of the position which I have accepted explained to me, and I understand the requirements of the position. I understand that any violation of the above policies is reason for disciplinary action up to and including termination.

_____

Employee Name (Print)

_____ _____

Employee Signature Date

1.3 GOAL

Safety begins at the top and progresses downward throughout the company. The primary goal of T&N Van Service is to continue operating a profitable business while protecting employees from workplace-related injuries, illness, or harm. This can be achieved in part by delegating responsibility and accountability to all involved in this company's operation as follows:

- **Responsibility**: Having to answer for activities and results.
- **Accountability**: The actions taken by management to insure the performance of responsibilities.

In other words, to reach our goal of a safe workplace everyone needs to take responsibility and be held accountable.

Benefits of achieving our goals are:

- Minimizing of injuries and accidents
- Minimizing the loss of property and equipment
- Elimination of potential fatalities
- Elimination of potential permanent disabilities
- Elimination of potential OSHA citations and fines
- Reductions in workers' compensation costs
- Reductions in operating costs
- Having the best Safety and Health conditions possible in the workplace.

1.4 MANAGEMENT COMMITMENT

The management of T&N Van Service is committed to the company's safety policy, and providing direction and motivation by:

- Appointing a Safety Coordinator.
- Establishing company safety goals and objectives.
- Developing and implementing written Safety and Health programs.
- Ensuring total commitment to our Safety and Health programs.
- Facilitating employees' safety training.
- Establishing responsibilities for management and employees to follow.
- Ensuring that management and employees are held accountable for performance of their safety responsibilities.
- Establishing and enforcing disciplinary procedures for employees violating safety rules.
- Reviewing the Safety and Health program annually, and revising or updating as needed.

1.5 ASSIGNMENT OF RESPONSIBILITY

SAFETY COORDINATOR

T&N Van Service has designated: _____ as Safety Coordinator. The Safety Coordinator's office and cell phone numbers are:

Office: _____ **Cell: _____**

It is the duty of the Safety Coordinator to assist the Supervisor and all other levels of Management in the initiation, education, and execution of an effective safety program including the following:

- Introducing the safety program to new employees.
- Following up on recommendations, suggestions, etc., made at toolbox talks (safety meetings). All topics of safety concerns must be documented accordingly.
- Assisting personnel in the execution of standard policies.
- Conducting safety inspections on a periodic basis.
- Addressing all hazards or potential hazards as needed.
- Performing accident investigations and preparing accident reports.
- Maintaining adequate stock of first aid supplies and other safety equipment to insure their immediate availability.
- Making sure there is an adequate number of qualified first aid certified people on the work site.
- Becoming thoroughly familiar with OSHA regulations and local and state safety codes.
- Defining the responsibilities for safety and health of all subordinates and holding each person accountable for their results through the formal appraisal system and where necessary, disciplinary procedures.
- Emphasizing to employees that accidents create unnecessary personal and financial losses.

SUPERVISORS

The Supervisors are responsible for establishing an operating atmosphere that ensures that safety and health is managed in the same manner and with the same emphasis as production, cost, and quality control.

- Regularly emphasizing that accident and health hazard exposure prevention are not only moral responsibilities, but also a condition of employment.
- Identifying operational oversights that could contribute to accidents which often result in injuries and property damage.
- Participating in safety and health related activities, including routinely attending safety meetings, reviews of the facility, and correcting employee behavior that can result in accidents and injuries.
- Spending time with each person hired to explain the hazards and safety policies relating to his/her particular work.
- Ensuring that initial orientation of "new hires" is carried out by the Safety Coordinator.
- Making sure that, if a "Competent Person" is required, one is present to oversee operations and instruct employees when necessary.

- Never short-cut safety for expediency, nor allow workers to do so.
- Enforcing safety rules consistently, and following company's discipline and enforcement procedures.
- Conducting a daily, jobsite safety inspection and correcting noted safety violations.

EMPLOYEES

It is the duty of each and every employee to know the safety rules, and conduct his work in compliance with these rules. Disregard of the safety and health rules shall be grounds for disciplinary action up to and including termination. It is also the duty of each employee to make full use of the safeguards provided for their protection. Every employee must receive an orientation when hired and receive a copy of the Company Safety and Health Program. Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures.
- Signing the Policies and Procedures Acknowledgement (see form above).
- Wearing Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury.
- Wearing suitable work clothes as determined by the Supervisor.
- Performing all tasks safely as directed by their supervisor.
- Reporting ALL injuries, no matter how slight to their supervisor immediately, and seeking treatment promptly.
- Knowing the location of first aid, firefighting equipment, SDS log, and other safety devices.
- Attending any and all required safety and health meetings.
- Not performing potentially hazardous tasks, or using any hazardous material until properly trained, and following all safety procedures when performing those tasks.
- Stopping and asking questions if ever in doubt about the safety of any operation

1.6 PROJECT SAFETY & HEALTH COORDINATION

General/Prime Contractor Responsibilities – The prime or general contractor on a jobsite must ensure that procedures are in place to ensure that all subcontractors and/or other employers provide adequate protection from hazards for their employees. In addition, subcontractors must be monitored in order to determine conformance with the jobsite safety plan.

According to OSHA, factors that affect how frequently and closely a prime or general contractor must inspect the jobsite to meet its standard of reasonable care include the following:

- The scale of the project.
- The nature and pace of the work, including the frequency with which the number or types of hazards change as the work progresses.
- How much the prime or general contractor knows both about the safety history and safety practices of the employer it controls and about that employer's level of expertise.
- More frequent inspections are normally needed if the prime or general contractor knows that the subcontractor has a history of non-compliance. Greater inspection frequency may also be needed, especially at the beginning of the project, if the prime or general contractor had never before worked with this subcontractor and does not know its compliance history.
- Less frequent inspections may be appropriate where the prime or general contractor sees strong indications that the subcontractor has implemented effective safety and health efforts. The most important indicator of an effective safety and health effort by the subcontractor is a consistently high level of compliance.

Other indicators include the use of an effective, graduated system of enforcement for non-compliance with safety and health requirements coupled with regular jobsite safety meetings and safety training.

At a minimum, T&N Van Service may require that other employers under their control identify, provide, and/or implement the following:

- a health & safety program, including written procedures for controlling job-related hazardous operations such as cranes, scaffolding, trenches, confined space, hot work, explosives, hazardous materials, leading edges, etc.
- a Safety Coordinator and Competent Person
- a project safety analysis for the job
- list of work activities requiring planning, design, inspection, or supervision by an engineer, competent person, or other professional
- documentation for required health & safety training
- signed independent contractor agreement
- hazardous chemicals to which jobsite workers may be exposed to while in the workplace along with SDSs, measures to minimize the possibility of exposure, and procedures to follow if workers are exposed
- an emergency response plan
- other documentation such as permits, hazard reports, inspections, uncorrected hazards, accident/incident/near miss reports, etc.

Use the independent contractor agreement on the following page to document subcontractor responsibility for OSHA compliance.

♦ Subcontractor Prequalification Form

Company Information	
Legal Company Name	
Address:	
City, State, Zip	
Federal ID #	
Contact Person	
Telephone	
Fax	
Email	

Safety Performance Statistics

		Year to Date	**Last year** _____	**2 years ago** _____	**3 years ago** _____
Experience Modification Rating (EMR)					
Average number of employees					
Hours worked					
# of Recordable cases					
(G) # of deaths					
(H) # of cases with days away from work					
(I) # cases with job transfer or restriction					
(J) # other recordable cases					
(K) # of days away from work					
(L) # days on job transfer or restriction					
3-year TRIR		(Total # of cases for all 3 years) x 200,000 Total number of employee hours for all 3 years			

Safety Questionnaire

Does your company have a written safety program? If yes, please attach as PDF or .doc file	☐ Yes ☐No
Does your company perform safety training for all employees? If yes, is documentation available?	☐ Yes ☐No ☐ Yes ☐No
Does your company have a new hire orientation process for all new hires?	☐ Yes ☐No
Do you hold safety meetings? If yes, how frequently?	☐ Yes ☐No _____

OSHA Inspections

Have you had an OSHA inspection in the past 5 years? If yes, were citations issued?	☐ Yes ☐No ☐ Yes ☐No

Please provide any additional details regarding citations issued, inspection numbers, etc.

Safety Program Overview

Please provide any additional information that is pertinent to your safety program below or attach additional documentation.

Certification

Name:	
Signature:	
Title	
Date	

♦ Subcontractor Agreement

_____(Company Name)_____ hereby acknowledges that they are a subcontractor of T&N Van Service, and therefore agrees to comply with all local, state, and federal laws and regulations, along with policies and procedures that have been established by T&N Van Service

It is further understood that in the event of an OSHA site inspection, as related to the work that is being performed, it is the responsibility of _____(Company Name)_____ to immediately correct any safety violations and/or pay any fines that may be levied by OSHA for safety violations.

Agreed by (Print): _____

Signature: _____ Date: _____

1.7 EMERGENCY PLANNING

The purpose of an Emergency Action Plan (EAP) is to facilitate and organize employer and employee actions during workplace emergencies. Before starting a job, site-specific emergency procedures covering the items listed below need to be established and communicated to employees. Please also refer to T&N Van Service's master Emergency Action Plan & Fire Safety program for additional information.

- Evacuation procedures and emergency escape route assignments.
- Procedures to be followed by employees who remain to operate critical operations before they evacuate.
- Procedures to account for all employees after an emergency evacuation have been completed.
- Rescue and medical duties for those employees who are to perform them.
- Means of reporting fires and other emergencies.
- Names or job titles of persons who can be contacted for further information or explanation of duties under the plan.

Before implementing the site EAP, a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees will be designated and trained. The plan will be reviewed with each employee covered by the plan at the following times:

- Initially when the plan is developed or upon initial assignment.
- Whenever the employee's responsibilities or designated actions under the plan change.
- Whenever the plan is changed.
- The plan will be kept at the worksite and made available for employee review

For small jobsites, the following plan has been established. A more detailed plan will be established for larger jobsites. Contact the Safety Coordinator for further information or explanation of duties under the plan.

For those employers with 10 or fewer employees the emergency action plan may be communicated orally to employees and the employer need not maintain a written plan. For more information regarding the company's EAP, please refer to the written Fire Safety & Emergency Action Plan program binder, which includes a copy of the OSHA standards.

It is T&N Van Service's responsibility to review their jobsites to address all potential emergency situations.

FIRE:

The person who discovers the fire should immediately:

- Shout "fire, fire, fire" to alert others of the situation.
- If trained and authorized, attempt to extinguish the fire with appropriate equipment if it can be done without personal risk.
- If possible, shut off the generator/temporary power source on the way out, otherwise evacuate.

- Immediately leave the building/jobsite through the closest practical exit. Assemble at the foremen's truck or pre-determined point.
- Dial 911 on a cell phone, report the location of the emergency and provide directions to the responders.
- Remain at the meeting area unless instructed otherwise. The jobsite Supervisor is to account for all employees after emergency evacuation has been completed and assign duties as necessary.

TORNADO:

When a warning is issued by sirens or other means, seek shelter inside. Stay away from outside walls and windows, duck to protect head and neck. Consider the following locations:

- Small interior rooms on the lowest floor and without windows,
- Hallways on the lowest floor away from doors and windows, and
- Rooms constructed with reinforced concrete, brick, or block with no windows.
- Do not stay in a mobile job trailer or vehicle during a tornado.

If you are caught outside during a tornado and there is no adequate shelter immediately available--

- Avoid areas with many trees.
- Crouch for protection beside a strong structure or lie flat in a ditch or low-lying area
- Protect your head with an object or with your arms.

If you're in a vehicle, try to drive to the closest sturdy shelter.

- If the tornado is visible, far away, and the traffic is light, you may be able to drive out of its path by moving at right angles to the tornado. Seek shelter in a sturdy building, or underground if possible.
- If flying debris occurs while you are driving, pull over and park.
    - If you can safely get noticeably lower than the level of the roadway, leave your car and lie in that area, covering your head with your hands.
    - Stay in the car with the seat belt on. Put your head down below the windows; cover your head with your hands and a blanket, coat, or another cushion if possible.
- Avoid seeking shelter under bridges, which can create deadly traffic hazards while offering little protection against flying debris.

Remain sheltered until the tornado threat is announced to be over.

HURRICANE:

Once a hurricane watch has been issued:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Moor any boats securely, or move to a safe place if time allows.
- Continue to monitor local TV and radio stations for instructions.
- Move early out of low-lying areas or from the coast, at the request of officials.
- If you are on high ground, away from the coast and plan to stay, secure the building, moving all loose items indoors and boarding up windows and openings.
- Collect drinking water in appropriate containers.

Once a hurricane warning has been issued:

- Be ready to evacuate as directed by the Emergency Coordinator and/or the designated official.

- Leave areas that might be affected by storm tide or stream flooding.

During a hurricane:

- Remain indoors and consider the following:
    - Small interior rooms on the lowest floor and without windows,
    - Hallways on the lowest floor away from doors and windows, and
    - Rooms constructed with reinforced concrete, brick, or block with no windows.

EARTHQUAKE:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Keep away from overhead fixtures, windows, filing cabinets, and electrical power.
- Assist people with disabilities in finding a safe place.
- Evacuate as instructed by the Emergency Coordinator and/or the designated official.

FLOOD:

- Be ready to evacuate as directed designated official.
- Follow the recommended primary or secondary evacuation routes.
- If outdoors:
    - Climb to high ground and stay there.
    - Avoid walking or driving through flood water.
    - If car stalls, abandon it immediately and climb to a higher ground.

BLIZZARD:

If indoors:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Stay indoors!
- If there is no heat:
    - Close off unneeded rooms or areas.
    - Stuff towels or rags in cracks under doors.
    - Cover windows at night.
- Eat and drink. Food provides the body with energy and heat. Fluids prevent dehydration.
- Wear layers of loose-fitting, light-weight, warm clothing, if available.

If outdoors:

- Find a dry shelter. Cover all exposed parts of the body.
- If shelter is not available:
    - Prepare a lean-to, wind break, or snow cave for protection from the wind.
    - Build a fire for heat and to attract attention. Place rocks around the fire to absorb and reflect heat.
    - Do not eat snow. It will lower your body temperature. Melt it first.

If stranded in a car or truck:

- Stay in the vehicle!
- Run the motor about ten minutes each hour. Open the windows a little for fresh air to avoid carbon monoxide poisoning. Make sure the exhaust pipe is not blocked.
- Make yourself visible to rescuers.
    - Turn on the dome light at night when running the engine.
    - Tie a colored cloth to your antenna or door.
    - Raise the hood after the snow stops falling.

- Exercise to keep blood circulating and to keep warm.

MEDICAL:

1. Contact the appropriate medical emergency phone number (see Emergency Contact list). Provide the following information:
    a. Nature of emergency
    b. Location (address, jobsite, building, etc.)
    c. Caller's name and phone number
2. Do not move the victim unless absolutely necessary.
3. Alert personnel who have been trained in Frist Aid (see First Aid section) on the jobsite to provide assistance prior to the arrival of the professional medics.

SPILL PREVENTION & RESPONSE

Chemicals whether liquid, solid, or gas can spill or leak and be harmful to both personnel and the environment. All chemical substances must be stored in proper containers (preferably closed) and not exposed to storm water. Areas where chemicals may be used or stored must be maintained using good housekeeping best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary. A proper spill kit will be maintained in an easily accessible area and will contain the appropriate supplies for materials that may be spilled.

In the event of a spill or chemical release, the following procedures will be initiated:

- Once discovered, all employees must leave the area immediately and notify their Supervisor.
- Consult the SDS for the spilled or leaking material to identify potential hazards, protective equipment required, and correct procedures for clean-up.
- Shut off ignition sources, flames, spark producing or heat producing equipment, and provide adequate ventilation.
- If the spill or leak is too big to handle with available equipment, an emergency response team should be notified.

- Emergency Information

THIS FORM IS TO BE FILLED OUT BEFORE THE START OF EACH NEW JOB.

JOBSITE INFORMATION	
Jobsite Name	
Address	
Subdivision (if applicable)	
Directions to Jobsite	
Job Phone Contact	
EMERGENCY CONTACT NUMBERS/DIRECTIONS	
Fire Department	
EMS	
Ambulance Service	
Nearest Hospital	
Address	
Directions to Hospital	

1.8 FIRST AID

Before a job starts, T&N Van Service will ensure that arrangements are in place to render prompt first aid treatment for injured employees either by providing for the availability of a trained first aid provider at the worksite or by ensuring that emergency treatment services are within reasonable proximity of the worksite. First aid refers to medical attention that is usually administered immediately after the injury occurs and at the location where it occurred. It often consists of a one-time, short-term treatment and requires little technology or training to administer. First aid can include the following:

- Cleaning minor cuts, scrapes, or scratches
- Treating a minor burn
- Applying bandages and dressings
- The use of non-prescription medicine
- Draining blisters
- Removing debris from the eyes
- Massage
- The use of hot/cold therapy
- Drinking fluids to relieve heat stress

If medical attention is not available within 4 minutes, then a person who holds a valid certificate in first aid training from the American Red Cross or equivalent must be available on the jobsite at all times. Proper equipment for prompt transportation of the injured person to a physician or hospital shall be provided. In the event that the victim is not able to be moved safely, contact the local ambulance service. Please refer to the Emergency Information page of this manual for local ambulance services and emergency contact information.

First aid kits on the jobsite will be kept in a weatherproof container with individual sealed packages for each type of item that has been determined to be appropriate for the environment in which they are to be used.

At minimum, each first aid kit will contain the following:

Item	Size	Minimum Quantity
Absorbent compress	32 in^2	1
Adhesive bandages	1x3 inches	16
Adhesive tape	5 yards	1 roll
Antiseptic	0.5 g (0.14 fl oz.)	10 packets
Burn treatment	0.5 g (0.14 fl oz)	6 applications
Medical exam gloves	N/A	2 pair
Sterile pads	3x3 inches	4
Triangular bandage	40x40x56 inches	1
Bloodborne pathogens kit		1

Whenever employees may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided for immediate emergency use.

1.9 STOP WORK AUTHORITY

As part of our health & safety policy, it is the responsibility of every employee performing work for T&N Van Service to exercise this Stop Work Authority Policy whenever any person in the work area is at risk of injury. T&N Van Service strives to provide a culture where this Stop Work Authority program is exercised freely.

Key elements of this program include:

- Employees will receive Stop Work Authority training before initial assignment. Training will be documented including the employee's name, the dates of training, and the subject.
- Employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of health & safety may exist.
- Employees are responsible to initiate a Stop Work intervention when warranted and management is responsible to create a culture where Stop Work Authority is exercised freely
- Employees will not face any form of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority.
- This Stop Work Authority program will be executed in a positive manner.

The following procedure must be initiated whenever an unsafe condition is identified:

- The Stop Work Intervention will be initiated and coordinated through the Supervisor
- All affected personnel and supervision will be notified of the Stop Work Issue
- Once work has been stopped, no work may resume until all stop work issues and concerns have been adequately addressed.
- Work may resume only when it has been deemed safe to continue
- After the Stop Work Intervention has been initiated and closed, a follow-up will be completed to assess the effectiveness of the program.

Stop Work Issuance Documentation

- A Stop Work Issuance document will be completed to document the circumstances leading to the Stop Work Intervention.
- Stop Work reports will be reviewed by supervision in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learning

♦ Stop Work Report

Section 1: Stop Work Issuance			
Location of operation		Date / time	
Supervisor		Phone	
Individual initiating stop work			
Individual performing work			
Work operation or condition (include names of individuals performing work)			
Hazard (as stated by individual initiating stop work)			
Additional observations			

Section 2: Date / Time Informed			
Supervisor		Directorate ESH coordinator	
Building / area manager		Associate laboratory director	
Division / department head		Chief safety officer	
Facility manager			

Section 3: Follow-up Action

Section 4: Restart Concurrence			
Supervisor		Date	
Owner Client		Date	

Section 5: Restart Authorization			
General		Date	

Section 6: Restart Release			
Owner Client		Date	

1.10 OSHA MULTI-EMPLOYER WORKSITE POLICY

On multi-employer worksites, more than one employer may be citable for a hazardous condition that violates an OSHA standard. The following explains how OSHA views multi-employer worksites.

- **THE CREATING EMPLOYER:** The employer that caused the hazardous condition that violates an OSHA standard. Employers must not create conditions that violate OSHA standards. Any employer that does so is citable, even if the only employees exposed are those of other employers at the site.
- **THE EXPOSING EMPLOYER**: The employer whose own employees are exposed to the hazard. Exposure could be observed by an inspector or unobserved (but determined through witness statements or other evidence). In addition, citations may be issued when the possibility exists that an employee could be exposed to a hazard because of work patterns, past circumstances, or anticipated work requirements.
- **THE CORRECTING EMPLOYER**: An employer who is engaged in a common undertaking as the exposing employer, and is responsible for correcting the hazard. This usually occurs where an employer is given the responsibility of installing and/or maintaining particular safety/health equipment or devices. The correcting employer must exercise reasonable care in preventing and discovering violations and meet its obligations of correcting the hazard
- **THE CONTROLLING EMPLOYER**: An employer who has general Supervisory authority over the worksite, and has the power to correct safety and health violations or require others to correct them. Control can be established by contract or, in the absence of explicit contractual provisions, by the exercise of control in practice. A controlling employer must exercise reasonable care to prevent and detect violations on the site. The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own employees. This means that the controlling employer is not normally required to inspect for hazards as frequently or to have the same level of knowledge of the applicable standards or of trade expertise as the employer it has hired.

If the employer falls into one of these categories, they have obligations with respect to OSHA requirements. OSHA inspectors must determine if employer actions are sufficient to meet those obligations. The extent of the actions required of employers varies based on which category applies. Note that the extent of the measures that a controlling employer must take to satisfy its duty to exercise reasonable care to prevent and detect violations is less than what is required of an employer with respect to protecting their own employees.

1.11 OSHA INSPECTION GUIDELINES

SUPERVISOR:

- Ask to see the OSHA inspector(s) official government identification
- Contact the appropriate Company official immediately
- Name of the authorized Company official: _____
    - Office phone: _____ Extension: _____
    - Cell phone: _____
- Ask the OSHA inspector(s) to wait until the representative above has been reached.
- **Note**: "The inspection shall not be delayed unreasonably to await the arrival of the employer representative. This delay should not exceed one hour." (*OSHA Field Inspection Reference Manual*, Section 6, Chapter II, A 2.b. (2))

COMPANY REPRESENTATIVE:

- Contact Lancaster Safety Consulting Inc. at (888) 403-6026 if you desire. A Lancaster Safety consultant can speak with the OSHA official(s) by phone for the purpose of providing an overview of your occupational health and safety program.
- After meeting the OSHA official(s), an opening conference (sit-down meeting) shall be held. The OSHA official(s) should explain the basis of the inspection, (Accident investigation, complaint, referral, follow-up, or planned local/national emphasis program). You should be advised if the inspection is partial or complete. The opening conference is an important opportunity for the employer to demonstrate the company's "Good Faith" efforts to provide a safe workplace. Discuss safety policies and practices with the compliance officer(s). Present the safety manuals. Emphasize the worker training verification logs, and your new hire training procedures. You should also present OSHA 300 logs, safety committee paperwork, and any other written materials that demonstrate your company's "Good Faith" efforts to comply with the applicable OSHA standards.
- Upon completion of the opening conference, accompany the OSHA inspector(s) on a walk-through inspection of your facility. (Advise the inspector(s) on any areas of your facility that have been predetermined as "trade secret" areas, if applicable). During this walk-through, the inspector(s) will advise you of potential health and safety violations. If possible, take immediate, corrective action to correct hazards while the inspector(s) are present. NOTE: The inspector(s) have the right to interview workers.
- After the walk-through, a closing conference shall be held. The inspector(s) will provide an overview of their findings, and advise you if citations are likely to be issued. (No citations are issued on the same day of an OSHA inspection. OSHA has up to 6-months to issue citations.) The closing conference provides the employer with another opportunity to demonstrate "good faith". Take notes on the inspector(s) closing comments.
- Contact Lancaster Safety Consulting, Inc. at **(888) 403-6026** upon conclusion of the inspection.

TAB 2: JOBSITE HAZARD PREVENTION

2.1 HAZARD IDENTIFICATION

A critical element of any effective safety and health program is a comprehensive worksite analysis that identifies current and potential hazards. This includes a thorough baseline survey to identify unsafe acts and conditions; a job hazard analysis; a self-inspection program, including a system for reporting identified hazards; accident and incident investigation; and analysis of injuries and illnesses.

In addition, OSHA requires that all employers must instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to their work environment to control or eliminate any hazards or other exposure to illness or injury. It is important that T&N Van Service review each jobsite scope to identify all hazards associated with the work to be performed. This should be completed prior to starting each job.

It is necessary to consider certain general guidelines for assessing the foot, head, eye and face, and hand hazard situations that exist in an occupational or educational operation or process, and to match the protective devices to the particular hazard. It should be the responsibility of the Safety Coordinator to exercise common sense and appropriate expertise to accomplish these tasks. In order to assess the need for PPE and other controls, a survey of the jobsite should be performed. The purpose of the survey is to identify sources of hazards to workers and co-workers. At a minimum, consideration should be given to the following basic hazard categories.

- Impact
- Penetration
- Compression (roll-over)
- Chemical
- Heat
- Harmful dust
- Light (optical) radiation

During the survey the Safety Coordinator should observe:

- sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects;
- sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc.;
- types of chemical exposures;
- sources of harmful dust;
- sources of light radiation, i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.;
- sources of falling objects or potential for dropping objects;
- sources of sharp objects which might pierce the feet or cut the hands;
- sources of rolling or pinching objects which could crush the feet;
- layout of workplace and location of co-workers; and (j) any electrical hazards.

In addition, injury/accident data should be reviewed to help identify problem areas.

♦ Jobsite Inspection Checklist

Project Name:	**Inspected by:**	
Project Location:	**Date of Inspection:**	
Manual Material Handling	**Yes**	**No**
Are mechanical devices being used in place of manual handling of material?		
Are ropes, slings, chains, hook, cables, and chokers in good condition?		
Proper staging of materials to minimize lifting and carrying?		
Rigging equipment inspected regularly and in good condition?		
Is the handling of bagged material limited to 50 lbs?		
Are carrying handles being used when a single worker is carrying sheeted materials?		
Housekeeping: Slips, Trips and Falls	**Yes**	**No**
Are walking and working surfaces clear and free of debris?		
Are waste and trash containers provided, and used?		
Is there regular removal of waste and trash from the containers?		
Does each worker clean up after themselves?		
Is adequate temporary lighting provided?		
Fire Protection and Prevention	**Yes**	**No**
Are all flammable liquid containers clearly identified?		
Are all flammable liquid containers UL of FM listed?		
Have proper storage practices for flammables been observed?		
Are extinguishers readily accessible and serviced regularly?		
Are hydrants clear and accessible for fire department personnel?		
Have gas cylinders been chained upright with valve caps securely fastened?		
Has there been proper segregation between flammable gasses?		
Proper labeling of full and empty cylinders?		
Are temporary heaters located at a safe distance from combustibles?		
Is ventilation adequate for temporary heaters?		
Electrical	**Yes**	**No**
Are all switch gear, panels, and devices that are energized marked and/or guarded?		
Lockout devices available/used on circuits that could become energized while being worked?		
Are all temporary circuits properly guarded and grounded?		
Are extension cords in continuous lengths without splice?		
Are GFCI's and/or Assured Equipment Grounding Conductor Program being used?		
If temporary lighting is provided, are bulbs protected against accidental breakage?		
Are working surfaces clear of cords so as not to create a tripping hazard?		
Are there a sufficient number of temporary outlets on the job site?		
Any visual signs of outlet overloading?		
Hazard Communication	**Yes**	**No**
Are safety data sheets available on the jobsite?		
Are all containers appropriately labeled with their contents and hazard warnings?		
Have all employees been trained on the specific chemicals in the workplace?		

Barricading	**Yes**	**No**
Are floor openings planked and secured or barricaded?		
Are direction signs used to inform the public of upcoming construction work?		
Is the sidewalk protection effective?		
Is a flag person provided to direct traffic when needed?		
Has the person been trained on how to direct traffic and the public?		
Are open excavations, road drop offs, manholes, uneven surfaces barricaded?		
Ladders	**Yes**	**No**
Is the proper ladder for the job being used?		
Are ladders in good condition (no missing or broken rungs)?		
Are there safety shoes/cleats on the bottom of ladders? Are they needed?		
Are non-conductive ladders available for use around live wiring?		
Are ladders tied-off at top or otherwise secured?		
Do side rails extend 36 inches above top of landing?		
Rungs or cleats uniformly spaced 10 - 14 inches apart?		
Are step ladders fully open when in use?		
Personal Protective Equipment	**Yes**	**No**
Is hearing protection available for personnel that may be exposed to noisy conditions?		
Is respiratory protection available to personnel and being used when conditions require them?		
Are safety harnesses, lifelines and shock absorbing lanyards available and being used?		
Are personnel using gloves when handling sharp or rough material?		
Where required, rubber gloves with protectors-insulators being used.		
Is lifesaving equipment available for work over or near water?		
Medical	**Yes**	**No**
Are first-aid kits available and properly stocked?		
Are all emergency phone numbers posted?		
Are employees aware of the address of the site/ capable of giving directions to emergency crew?		
Is anyone trained in first aid and CPR?		
Floor, Wall Openings, Stairways	**Yes**	**No**
Floor and roof openings guarded by guardrails and toe boards or a secured cover.		
Open-sided floors/platforms 6 feet or higher guarded are with railing and toe boards.		
Are stairs with four or more risers equipped with standard hand rail protection.		
Runways four feet or more above ground properly guarded.		
Anchor posts and framing capable of withstanding 200lb load in any direction.		
Tools: Hand and Power	**Yes**	**No**
Are tools free of any obvious physical damage?		
Are tools inspected for frayed or damaged cords?		
Are tools and cords properly grounded (ground pins are in good condition?		
Are double insulated tools in use and in good condition?		
Are the handles on all tools in good condition (not bent, splintered or broken)?		
Are all hoses on air or hydraulic tools in good condition?		
Are all shields and guards in place on the tools and in good condition?		
Operator qualified and instructed to use powder actuated tools?		

Welding and Cutting	Yes	No
Are non-combustible enclosures, (screens/shields) provided and used when welding?		
Welding goggles, gloves, and clothing being used by welder?		
Inspection for fire hazards after welding stops?		
Are gas cylinder, hoses, regulators, torches, torch tips and welding carts, in good condition?		

Hoist, Cranes and Derricks	Yes	No
Are cables and sheaves checked?		
Are slings, hooks, eyelets, chokes inspected?		
Are load capacities posted in cab?		
Are power lines at a safe distance?		
Do cranes have proper barricades around swing radius?		
Are crane inspection logs with crane?		

2.2 CONTROL OF HAZARDS

Where feasible, workplace hazards are prevented by effective design of the jobsite and/or supervision of the job. Where it is not feasible to eliminate such hazards, they must be controlled to prevent unsafe and unhealthy exposure. Once a potential hazard is recognized, the elimination or control must be done in a timely manner. These procedures include measures such as the following:

- Maintaining all extension cords and equipment in good working order.
- Ensuring all guards and safety devices are in place and working.
- Periodically inspecting the worksite for safety hazards.
- Establishing a medical program that provides applicable first aid to the site, as well as nearby physician and emergency phone numbers.
- Addressing any and all safety hazards with employees.
- In addition, T&N Van Service must address the hazards noted in the jobsite specific hazard assessment (see above)

Pinch Points - To avoid these pinch point injuries, appropriate attire should be worn while at work.

- Pants and sleeves should not be too long or too loose.
- Shirts should be fitted or tucked in.
- Avoid wearing loose and dangling jewelry.
- Tie back long hair and tuck braids and ponytails behind you or into your clothing.
- Wear the appropriate, well-fitting gloves for your job.

Before starting a task, take the time to plan out your actions and decide on the necessary steps to work safely. Give your work your full attention. Don't joke around, daydream, or try to multi-task on the job – most accidents occur when workers are distracted. Read and follow warning signs posted on equipment.

Moving Parts - Machinery can pose a hazard with moving parts, conveyors, rollers and rotating shafts. NEVER reach into a moving machine. Properly maintain and always use the machine and tool guards provided with your equipment; they act as barriers between the moving parts and your body. Don't reach around, under or through a guard and always report missing or broken barriers to your

Supervisor. Turn equipment off and use lockout/tag out procedures before adjusting, clearing a jam, repairing, or servicing a machine.

Caught/crush hazards are not limited to machinery. Vehicles, powered doors, and forklifts can pose a crush hazard unless they have been blocked or tagged out. Never place your body under or between powered equipment unless it is de-energized. Doors, file drawers, and heavy crates can pinch fingers and toes. Take care where you place your fingers. Test the weight before lifting, carrying, and placing boxes; an awkward or heavy load can slip and pinch your hands or feet. Get help or use tools to move large and/or heavy items.

Struck-by - Other workers can avoid danger from moving equipment by staying alert, out of the way, and by never walking under, alongside moving equipment or near power take offs.

2.3 PERSONAL PROTECTIVE EQUIPMENT

PPE 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."

Workers must use personal protective equipment (PPE) where necessary. However, personal protective equipment is not a substitute for taking all other safety measures. Workers still need to avoid hazards using administrative and engineering controls. Provided below is a summary of jobsite PPE requirements. For further details, see the company's written personal protective equipment program. This program includes a copy of the OSHA Personal Protective Equipment standards (29 CFR 1926 Subpart E).

Refer to the PPE Hazard Assessment.

HEAD PROTECTION

- Workers must wear hard hats when overhead, falling, or flying hazards exist or when danger of electrical shock is present.
- Inspect hard hats routinely for dents, cracks, or deterioration.
- If a hard hat has taken a heavy blow or electrical shock, you must replace it even when you detect no visible damage.
- Maintain hard hats in good condition, do not drill, clean with strong detergents or solvents, paint, or store them in extreme temperatures.

EYE AND FACE PROTECTION

- Workers must wear safety glasses or face shields for welding, cutting, nailing (including pneumatic), or when working with concrete and/or harmful chemicals.
- Eye and face protectors are designed for particular hazards so be sure to select the type to match the hazard.
- Replace poorly fitting or damaged safety glasses.

FOOT PROTECTION

- Shoes or boots with slip-resistant and puncture-resistant soles should be worn while on jobsites (to prevent slipping and puncture wounds).
- Safety-toed shoes are recommended to prevent crushed toes when working with heavy rolling equipment or falling objects.

HAND PROTECTION

- High-quality gloves can prevent injury.
- Gloves should fit snugly.
- Glove gauntlets should be taped for working with fiberglass materials.
- Workers should always wear the right gloves for the job (for example, heavy-duty rubber for concrete work, welding gloves for welding).

FALL PROTECTION

- Use a safety harness system for fall protection.
- Use body belts only as positioning devices—not for fall protection.

FIRE PREVENTION

Fire prevention is an important part of protecting employees and company assets. Fire hazards must be controlled to prevent unsafe conditions. Once a potential hazard is recognized, it must be eliminated or controlled in a timely manner. At a minimum, the following fire prevention requirements must be met for each site:

- One conspicuously located 2A fire extinguisher (or equivalent) for every floor.
- One 2A conspicuously located fire extinguisher (or equivalent) for every 3000 ft^2.
- No obstructions or combustible materials piled in the exits.

The objective of T&N Van Service's fire prevention plan is to prevent a fire from occurring in a workplace. It describes the fuel sources (hazardous or other materials) on-site that could initiate or contribute to the spread of a fire, as well as the building systems, such as fixed fire extinguishing systems and alarm systems in place to control the ignition or spread of a fire.

For further details, see the company's written personal Fire Safety program. This program includes a copy of the OSHA standards covering standards covering fire protection and prevention.

- Keep jobsites free from accumulation of combustible materials or weeds.
- Locate generators and internal combustion engines located away from combustible materials.
- Store no more than 25-gallons of combustible liquids on site at any one time.
- Provide fire extinguishers near all welding, soldering, or other sources of ignition.
- Keep fire extinguishers easy to see and reach in case of an emergency.
- Maintain a conspicuously located Class B fire extinguisher for each location more than 5-gallons of flammable liquids or gas are stored.
- Provide a minimum of one fire extinguisher per floor. Fire extinguishers should be located within 100 feet of employees for each 3,000 square feet of floor space.
- Don't store flammable or combustible materials in areas used for stairways or exits.
- Avoid spraying of paint, solvents, or other types of flammable materials in rooms with poor ventilation. Build-up of fumes and vapors can cause explosions or fires.
- Store gasoline and other flammable liquids in a safety can outdoors or in an approved storage facility.
- Don't store LP gas tanks inside buildings or enclosed spaces.
- Keep temporary heaters at least 6 feet away from any LP gas container.
- Ensure that leaks or spills of flammable or combustible materials are cleaned up promptly.
- Secure all LP & other gas containers to prevent tip-over.

Classes of Fire

Fires are classified based on the types of fuel (combustibles) that are involved in the fire. The type of fire extinguisher that can be used to fight a fire is dependent on the types of combustibles involved.

CLASS A - combustibles include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in non-specialized areas such as offices. Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

CLASS B - Class B combustibles include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols.

Water should *not be* used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents can be used on for Class B combustibles: carbon dioxide & multi-purpose dry chemical (ABC).

CLASS C - Class C fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires since the risk of electrical shock is far too great!

Class D - Class D fires involve combustible metals, such as magnesium, titanium, potassium, and sodium.

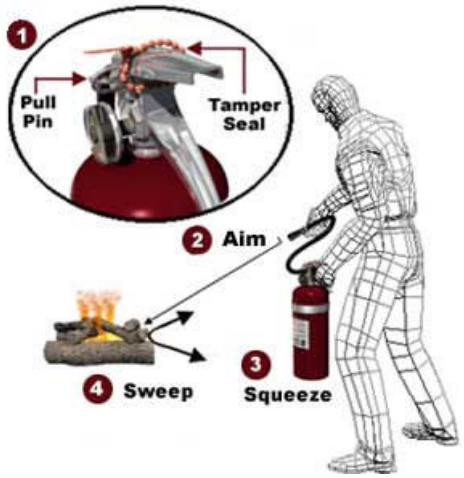
Fire Extinguishers

DO NOT attempt to fight a fire in the following situations:

- You have *ANY DOUBT* that you can extinguisher the fire safely
- The fire is spreading beyond the place where it started
- The fire could spread between you and the nearest fire exit (*ALWAYS* keep your back to the nearest fire exit!)
- You do not have an adequate number of fire extinguishers
- A flammable liquid is burning and not physically contained

When using a fire extinguisher to facilitate safe exit, use the P-A-S-S Method:

1. **PULL**... Pull the pin. This will also break the tamper seal.
2. **AIM**... Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire. Note: Do not touch the plastic discharge horn on CO2 extinguishers, it gets very cold and may damage skin.
3. **SQUEEZE**... Squeeze the handle to release the extinguishing agent.
4. **SWEEP**... Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.



2.4 HOUSEKEEPING & SITE ACCESS

Good housekeeping in the workplace is more than an attempt to keep things looking presentable. It's also an important safety issue. OSHA requires that housekeeping for all jobsites during the course of construction, alteration, or repairs. A messy workplace is not only annoying and inefficient; it creates a number of potential safety hazards:

- Tripping and falling over equipment that doesn't belong on the floor, such as machines, tools, cords, hoses, scrap, and boxes.
- Getting hit by or bumping into objects: For instance, tools left perched on the edge of a roof, shelf or table, or a drawer that's left open.
- Punctures and splinters from sharp tools left lying around, or from rough pieces of wood or other sharp objects.
- Serious electrical hazards such as cords left near heat or water.
- Fire hazards, including flammable liquids or scrap left near ignition sources; dust or lint on machinery; or materials blocking fire exits or equipment.
- Chemical exposure or spills when chemical containers are left open.
- Chemical reactions from open chemical container contents exposed to other chemicals, water, or air.
- Potential fatalities if obstacles inhibit an emergency evacuation
- Potential injuries from falling objects.

The best way to prevent these dangers is assign a specific storage place for each item, and then insist that every item be kept in its assigned place whenever it is not in use.

Some basic housekeeping requirements include the following:

- Assign a specific storage place for each item, and then insist that every item be kept in its assigned place whenever it is not in use.
- Form and scrap lumber with protruding nails, and all other debris must be kept cleared from work areas, passageways, and stairs, in and around buildings or other structures.
- Keep all walkways and stairways clear of trash/debris and other materials such as tools and supplies to prevent tripping.
- Keep boxes, scrap lumber and other materials picked up. Put them in a dumpster or trash/debris area to prevent fire and tripping hazards.
- Provide enough light for workers to see and to prevent accidents.
- Containers should be provided for the collection and separation of waste, trash, oily and used rags, and other refuse.
- Containers used for garbage and other oily, flammable, or hazardous wastes, such as caustics, acids, harmful dusts, etc. must be equipped with covers.
- All garbage and other waste should be disposed of at frequent and regular intervals.

WASTE MANAGEMENT

Before starring work on a job, all project wastes, trash, and/or scrap must be taken into consideration. The waste that will be generated must be estimated and the need for containers and waste removal, if necessary, can be determined.

Waste materials must be properly stored and handled to minimize the potential for an accident or injury due to excessive clutter, the potential for a spill, or impact to the environment. During outdoor actives, receptacles must be covered to prevent dispersion of waste materials and to control potential runoff.

Before a job, employees must be instructed on the proper disposal method for wastes, including general instruction on disposal of non-hazardous wastes, trash or scrap metals. If wastes generated are classified as hazardous, employees must be trained to ensure proper disposal.

To minimize environmental impact, recycling is encouraged. All recyclable wastes should be segregated to ensure opportunities for reuse or recycling.

2.5 STAIRWAYS AND LADDERS

Stairways and ladders are pretty uncomplicated devices. But, unfortunately, they cause more than their share of accidents. These accidents happen when people select the wrong ladder for the job, don't inspect it before using it, or get careless about how they use it. The basics of stairway and ladder safety are a combination of a little bit of knowledge and a lot of common sense.

OSHA is quite specific about design, inspection, and use of stairways and ladders. Regulations covering these areas are covered under 29 CFR 1926 Subpart X. These regulations describe everything from how far apart ladder rungs should be (1 foot) to specific "do's and don'ts" when you're working on stairways and ladders. You don't have to be concerned about design, but you should know what to look for to determine if stairways and ladders are safe to use.

Provided below is a summary of safety items covering safe stairway and ladder use.

- Install permanent or temporary guardrails on stairs before stairs are used for general access between levels to prevent someone from falling or stepping off edges.
- Do not store materials on stairways that are used for general access between levels.
- Keep hazardous projections such as protruding nails, large splinters, etc. out of the stairs, treads or handrails
- Report and correct any slippery conditions on stairways before they are used.
- Keep manufactured and job-made ladders in good condition and free of defects.
- Inspect ladders before use for broken rungs or other defects so falls don't happen. Discard or repair defective ladders.
- Secure ladders near the top or at the bottom to prevent them from slipping and causing falls.
- When you can't tie the ladder off, be sure the ladder is on a stable and level surface so it cannot be knocked over or the bottom of it kicked out.
- Place ladders at the proper angle (1 foot out from the base for every 4 feet of vertical rise).
- Extend ladders at least 3 feet (3 rungs) above the landing to provide a handhold or for balance when getting on and off the ladder from other surfaces.
- Do not set up a ladder near passageways or high traffic areas where it could be knocked over.
- Use ladders only for what they were made and not as a platform, runway, or as scaffold planks.
- Always face the ladder and maintain 3 points of contact when climbing a ladder.

2.6 FALL PROTECTION IN CONSTRUCTION

Though it's obvious that anyone who works high above the ground runs the risk of falling, a surprising number of workers seem to think it can't happen to them. This is a particular problem in construction, where several workers die each day from falls and many more are injured.

The workers at a specific site may change from day to day, and each site may have workers and equipment from more than one company. In addition, construction work often takes place outdoors, where weather can add to the hazards.

FLOOR AND WALL OPENINGS

- Install guardrails around openings in floors and across openings in walls when the fall distance is 6 feet or more. Be sure the top rails can withstand a 200-lb load.
- Construct guardrails with a top rail approximately 42 inches high with a mid-rail about half that high at 21 inches.
- Install toe boards when other workers are to be below the work area.
- Cover floor openings larger than 2x2 inches with material to safely support the working load.

ALTERNATIVES

- Use other fall protection systems such as slide guards, roof anchors or alternative safe work practices when a guardrail system cannot be used.
- Wear proper slip-resistant shoes or footwear to lessen slipping hazards.
- Train workers in safe work practices before performing work on foundation walls, roofs, trusses or before they perform exterior wall erections and floor installations.

REINFORCING STEEL (REBAR)

- All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement.
    - Guard all protruding ends of steel rebar with rebar caps or wooden troughs, or
    - Bend rebar so exposed ends are no longer upright.
    - When employees are working at any height above exposed rebar, fall protection/ prevention is the first line of defense against impalement.

AERIAL LIFTS

- Only trained persons are permitted to operate an aerial lift.
- Lift controls must be tested daily before using the lift, to ensure that they are in good working condition.
- Never belt-off to an adjacent pole, structure or equipment while working from an aerial lift.
- Always stand firmly on the floor of the basket, do not sit or climb on the edge of the basket, or use planks, ladders or other devices for a work position.
- Fall protection equipment must be worn and attached to the boom or basket when working from an aerial lift.
- Boom and basket load limits specified by the manufacturer must not be exceeded.
- Brakes and positioning outriggers, when used, must be set on pads or a solid surface.
- Install wheel chocks before using an aerial lift on an incline.
- Control functions must be plainly marked.

WORKING ABOVE OR ADJACENT TO WATER

When working over or adjacent to water, all jobsites shall adhere to the following guidelines:

- Employees working over or near water, where the danger of drowning exists, shall be provided with U.S. Coast Guard-approved life jackets or buoyant work vests.
    - When continuous fall protection is used (without exception) to prevent employees from falling into the water, the drowning hazard has effectively been removed, and life jackets or buoyant work vest are not needed.
    - Prior to and after each use, the buoyant work vests or life preservers shall be inspected for defects which would alter their strength or buoyancy. Defective units shall not be used.
- Ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. The distance between ring buoys shall not exceed 200 feet.
- At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water.
    - The lifesaving skiff needs to be located on the side of the river that is nearest to the construction being performed.
    - Those who are to operate the lifesaving skiff must have an understanding as to how the boat operates.
    - The lifesaving skiff shall be inspected regularly to assure proper function of the lifesaving skiff in the event the lifesaving skiff is needed.
- The use of safety nets as fall protection during marine construction activities usually will not eliminate the drowning hazard. In many cases (such as in bridge construction) there is a risk that materials heavy enough to damage the nets may fall. In such cases the personal flotation device, ring buoys, and lifesaving skiffs are still required.
- Employees working over or near water must be adequately trained in their responsibilities and the safe work practices associated with this task. Training will be provided prior to performing job duties requiring work near water, conducted annually, and maintained in a centralized location.
- A pre-task plan is required to be completed and signed by all members of the crew that may be working over or near water before the work may begin.
- Employees who will be performing work over or near water, where the danger of drowning exists, are not permitted to work alone at any time.
- Working under the influence of alcohol or illegal drugs may impair an employee's ability to make good judgment, therefore is the use of these substances are strictly prohibited
- Personal weapons such as firearms, pocket knives, tasers, etc. are strictly prohibited from the job site.

2.7 FALL PROTECTION SYSTEMS WHEN WORKING FROM HEIGHTS

All fall protection equipment and systems will meet the requirements of applicable ANSI, ASTM, or OSHA requirements. The requirements for specific fall protection systems are outlined below.

GUARDRAIL SYSTEMS

- Top rail 42 inches above the walking/working level.
- Mid-rail (or suitable alternative) 21 inches above walking/working level.
- Ability to withstand a force of at least 200 pounds in any outward or downward direction.
- Surfaced as to prevent injury from puncture, laceration, or snagging of clothing.
- Designed so as not to constitute a projection hazard.
- Inspected at regular intervals.

SAFETY NET SYSTEMS

- Installed as close as practicable under the walking/working surface, but in not more than 30 feet (9.1 meters) below such level.
- Extend outward from outermost projection of the work surface.
- Installed with sufficient clearance under them to prevent contact with the surface due to impact on the net.
- Capable of absorbing an impact force equal to that produced by the drop test specified in OSHA's fall protection standard.
- Inspected at least weekly for wear, damage, and/or deterioration defective components removed.
- Mesh opening not to exceed 36 square inches (230 square centimeters) nor be longer than 6 inches (15 centimeters) on any side.

PERSONAL FALL ARREST SYSTEMS

A personal fall arrest system is one option of protection that OSHA requires for workers on construction sites who are exposed to vertical drops of 6 feet or more.

- Connectors, D-rings, snap-hooks, lanyards, lifelines and anchorage are designed, constructed and installed according to specifications addressed in OSHA's fall protection standard.
- Limit maximum arresting force on an employee to 900 pounds when used with a body belt (as a positioning device), 1,800 pounds when used with a body harness.
- Rigged such that employees can neither free fall more than 6 feet (1.8 meters) nor contact any lower level.
- Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07 meters); and

- Have sufficient strength to withstand twice the potential impact energy of a person who is free falling a distance of 6 feet (1.8 meters) or the free fall distance permitted by the system, whichever is less.
- The anchorage connector must be attached to a suitable and strong attachment point
- Body belts and related components may be used only for employee positioning and not for fall protection.
- Personal fall arrest systems and components subject to impact loading shall be removed from service until inspected and approved for use by the Competent Person.
- In the event of a fall, employees will be promptly rescued.
- Personal fall arrest systems and their components must be inspected prior to each use for wear, damage and/or deterioration with defective components removed.
- Never attach to a guardrail systems.
- Components of a fall arrest system must be used only for employee fall protection or positioning and not to hoist materials.

HARNESS INSPECTION

- Belts and rings:
    - For harness inspections begin at one end, hold the body side of the belt toward you, grasping the belt with your hands six to eight inches apart. Bend the belt in an inverted "U." Watch for frayed edges, broken fibers, pulled stitches, cuts or chemical damage. Check D-rings and D-ring metal wear pads for distortion, cracks, breaks, and rough or sharp edges. The D-ring bar should be at a 90 degree angle with the long axis of the belt and should pivot freely.
    - Attachments of buckles and D-rings should be given special attention. Note any unusual wear, frayed or cut fibers, or distortion of the buckles. Rivets should be tight and un-removable with fingers. Body side rivet base and outside rivets should be flat against the material. Bent rivets will fail under stress.
    - Inspect frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut or burnt stitches will be readily seen.
- Tongue Buckle:
    - Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Rollers should turn freely on the frame. Check for distortion or sharp edges.
- Friction Buckle:
    - Inspect the buckle for distortion. The outer bar or center bars must be straight. Pay special attention to corners and attachment points of the center bar.

LANYARD INSPECTION

When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Hardware should be examined under procedures detailed below.

- **HARDWARE**

    - *Snaps*: Inspect closely for hook and eye distortion, cracks, corrosion, or pitted surfaces. The keeper or latch should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper rocks must provide the keeper from opening when the keeper closes.
    - *Thimbles*: The thimble (protective plastic sleeve) must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble should be free of sharp edges, distortion, or cracks.
- Lanyards
    - *Steel Lanyards*: While rotating a steel lanyard, watch for cuts, frayed areas, or unusual wear patterns on the wire. The use of steel lanyards for fall protection without a shock-absorbing device is not recommended.
    - *Web Lanyard*: While bending webbing over a piece of pipe, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Due to the limited elasticity of the web lanyard, fall protection without the use of a shock absorber is not recommended.
    - *Rope Lanyard*: Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period. When a rope lanyard is used for fall protection, a shock-absorbing system should be included.
- Shock-Absorbing Packs
    - The outer portion of the shock-absorbing pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to the D-ring, belt or lanyard should be examined for loose strands, rips and deterioration.

VISUAL INDICATION OF DAMAGE TO WEBBING AND ROPE LANYARDS

- HEAT - In excessive heat, nylon becomes brittle and has a shriveled brownish appearance. Fibers will break when flexed and should not be used above 180 degrees Fahrenheit.
- CHEMICAL - Change in color usually appears as a brownish smear or smudge. Transverse cracks appear when belt is bent over tight. This causes a loss of elasticity in the belt.
- ULTRAVIOLET RAYS - Do not store webbing and rope lanyards in direct sunlight, because ultraviolet rays can reduce the strength of some material.
- MOLTEN METAL OR FLAME - Webbing and rope strands may be fused together by molten metal or flame. Watch for hard, shiny spots or a hard and brittle feel. Webbing will not support combustion, nylon will.
- PAINT AND SOLVENTS - Paint will penetrate and dry, restricting movements of fibers. Drying agents and solvents in some paints will appear as chemical damage.

CLEANING OF EQUIPMENT

Basic care for fall protection safety equipment will prolong and endure the life of the equipment and contribute toward the performance of its vital safety function. Proper storage and maintenance after use is as important as cleaning the equipment of dirt, corrosives or contaminants. The storage area should be clean, dry and free of exposure to fumes or corrosive elements.

- **NYLON AND POLYESTER** - Wipe off all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion. Then wipe the belt dry with a clean cloth. Hang freely to dry but away from excessive heat.
- **DRYING -** Harness, belts and other equipment should be dried thoroughly without exposure to heat, steam or long periods of sunlight. System consists of:
    - Anchorage Connector
    - Shock Absorbing Lanyard
    - Full Body Harness

POSITIONING DEVICE SYSTEMS

- Rigged such that an employee cannot fall more than 2 feet (.9 meters).
- Secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds, whichever is greater.
- Connectors, D-rings, and snap-hooks are designed, constructed, and installed according to specifications addressed in OSHA's fall protection standard.
- Inspected prior to each use to wear, damage and/or deterioration with defective components removed.

WARNING LINE SYSTEMS

- Erected around all sides of the roof work area.
- Erected not less than 6 feet (1.8 meters) from roof edge when mechanical equipment is not being used.
- Points of access, materials handling areas, storage areas and hoisting areas shall be connected to work area by an access path formed by two warning lines.
- Consist of ropes, wires or chains and supporting stanchions erected according to OSHA's fall protection standard.
- No employee allowed in area between roof edge and warning line without fall protection or dedicated safety monitor.
- Mechanical equipment on roofs used or stored only in areas where employees are protected by a warning line system, guardrail system or personal fall arrest system.

CONTROLLED ACCESS ZONES

- Defined by a control line or other means that restricts access and flagged at 6-foot intervals for visibility.
- Control line to have a minimum breaking strength of 200 pounds.
- All employees working in a CAZ must comply promptly with fall hazard warnings from safety monitors.

SAFETY MONITORING SYSTEMS

- Before using a safety monitoring system, a company official must be notified.
- A Competent Person will be designated to monitor the safety of other employees.
- The Competent Person must not have any other responsibilities that could draw attention away from the safety monitoring duties. Duties include:

- Recognizing fall hazards
- Warn employees working under unsafe conditions or performing unsafe acts
- Remain on same working surface and within visual sighting distance of employees
- Remain close enough to employees communicate orally

COVERS

- Secured when installed so as to prevent accidental displacement by wind, equipment, or employees
- Capable of supporting at least twice the maximum load to which it is exposed (i.e., vehicles, equipment, workers)

Color-coded or marked with the work "HOLE" or "COVER" to provide warning of the hazard

♦ Fall Protection Checklist

Construction work six or more feet high requires:

- ❑ Walking/working surfaces approved to hold workers safely
- ❑ Employees trained to recognize fall hazards and use protective systems
- ❑ Fall protection systems for workers
- ❑ Procedures to prevent objects from falling.

Standard fall protection systems:

1. Guardrails:

- ❑ Constructed at least 42 inches in height
- ❑ Mid-rails and screens are located where there is no wall higher than 21 inches
- ❑ Able to withstand force of at least 200 pounds
- ❑ Construction materials that can't puncture skin or snag clothes
- ❑ No steel or plastic bands for top or middle rails.

2. Safety nets:

- ❑ 30 feet or less below elevated walking/working surface
- ❑ Strong rope border, with mesh openings smaller than 36 inches-square or 6 inches per side
- ❑ Strength certified or tested by dropping a 400 pound, 30-inch diameter bag of sand
- ❑ Inspected weekly for wear, damage, and deterioration
- ❑ Removed from use if not in top condition.

3. Personal fall arrest system:

- ❑ Body harness or belt connected to fixed anchor by lanyard, lifeline, or deceleration device.
- ❑ Prevent contact with lower level and more than six feet of free fall.
- ❑ Positioning device style used on elevated vertical surface work.
- ❑ Not used to hoist materials.
- ❑ Inspected before use. Not used if inspection reveals:
    - ❑ Cuts, tears, abrasions, deterioration, undue stretching
    - ❑ Mold
    - ❑ Distorted hooks, faulty hook springs
    - ❑ Nonfunctioning parts
    - ❑ Loose or damaged mountings
    - ❑ Tongues that don't fit shoulder of buckles
    - ❑ Contact with fire, acid, or other corrosives
    - ❑ Alterations or additions that limit effectiveness.
- ❑ Self-locking, self-closing connectors preferred
- ❑ Anchor can support at least 5,000 pounds per attached employee
- ❑ Can't connect to platform supports or suspension points, guardrails, or hoists
- ❑ Avoid connecting to rough or sharp edge; tie off to "H" or "I" beam only with webbing lanyard or lifeline with wire core
- ❑ Must not connect with one-and-one sliding hitch knot; avoid any hitch knot
- ❑ Use only when rescue system is in place.

Acceptable fall protection for special defined situations:

1. Warning line system:

- ❑ Lines placed at least six feet from and all around roof edge
- ❑ Used only with guardrail, safety net, and/or personal fall arrest systems or safety monitoring system.

2. Controlled access zone:

- ❑ Area with unprotected edge set off by rope, wire, or tape lines
- ❑ Entry by authorized personnel only
- ❑ Lines run length of unprotected edge, at least 6 feet in (10 feet for overhand bricklaying) and connected to guardrail or wall at ends.

3. Safety monitoring system:

- ❑ Used when the three standard protections are not feasible or would create greater hazard and/or with warning line system
- ❑ Places monitor on elevated surface with workers, close enough to be heard
- ❑ Monitor identifies hazards and warns workers.

4. Hole covers:

- ❑ Identified by name or color.
- ❑ Secure enough not to move accidentally.
- ❑ Strong enough for twice the weight they might have to hold.

5. Fall protection plan:

- ❑ Site-specific, written by competent employer-authorized person
- ❑ Last-resort option for leading edges, precast concrete erection, or residential construction
- ❑ Explains why the three standard protections are not feasible or could create greater hazard
- ❑ Explains procedures/equipment to reduce or eliminate fall hazard
- ❑ Creates controlled access zones; names employees who can enter
- ❑ Explains when and how safety monitoring system will be used.

6. Roof work

- ❑ Safe access and egress paths have been established.
- ❑ Ladders are tied off and properly secured
- ❑ The risk for falling objects has been assessed.
- ❑ Any overhead obstructions have been identified.
- ❑ Existing overhead services crossing or adjacent to the work area have been considered.
- ❑ Ducts or air outlets on the roof have been considered and any hazards from fumes have been mitigated.
- ❑ Barriers/ edge protection are in place to prevent people/materials from falling.
- ❑ If necessary, guard rails & toe boards/anchorage points are provided for safety harnesses to prevent falls over the edge of the roof.
- ❑ Necessary PPE is available and is being worn by employees.

  Note PPE in use:

  _____

  _____

General fall prevention precautions:

- ❑ Wear sturdy shoes with nonskid soles and buckles, snaps, or short laces.
- ❑ Avoid long, loose pants.
- ❑ Walk slowly, don't run.
- ❑ Watch where you're going
- ❑ Clean up all spills promptly.
- ❑ Take special care on wet or icy surfaces.
- ❑ Carry no more materials than you can see over.
- ❑ Keep only needed materials on aboveground work areas.
- ❑ Keep materials as far away from the edge as possible.
- ❑ Dispose of trash regularly and properly.
- ❑ Stay away from edges.
- ❑ Obey all verbal warnings, signs, and barriers.
- ❑ All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement.
- ❑ Weather conditions are appropriate (no rain, snow, ice, etc.)

Protection from falling objects:

- ❑ Wear hard hat when objects might fall from above.
- ❑ Install guardrails, screens, or toeboards at least 3 1/2 inches high, plus screen or panel if nearby materials are taller than toeboard, OR
- ❑ Install canopy that will not collapse or be penetrated by falling objects, and place objects where they can't accidentally go over edge, OR
- ❑ Install barricades in area where objects could fall, keep employees out of barricaded area, and place overhead objects where they can't accidentally go over edge.
- ❑ Place only stable and self-supporting objects near roof edge.
- ❑ Store mortar and masonry equipment at least four feet from edge.
- ❑ Remove mortar scrap regularly.
- ❑ Keep roofing materials at least six feet from edge if there are no guardrails.

2.9 JOB HAZARD ANALYSIS

Hazards analysis can get pretty sophisticated and go into much detail. Where the potential hazards are significant and the possibility for trouble is quite real, such detail may well be essential. However, for many processes and operations — both real and proposed — a solid look at the operation or plans by a variety of affected people may be sufficient. The easiest and possibly most effective method is using the step-by-step process of the Job Hazard Analysis (JHA), which is sometimes referred to as a Job Safety Analysis (JSA).

Job Hazard Analysis (JHA) is based on the following ideas:

- A specific job or work assignment can be separated into a series of relatively simple steps.
- Hazards associated with each step can be identified.
- Solutions can be developed to control each hazard.

Job Hazard Analysis is a relatively simple process that involves the following four basic steps:

- Select the job to be analyzed. In performing JSA, the term "job" is used to describe a single task or operation workers do as part of their occupation; it is a definite sequence of steps or separate activities that lead to the completion of a work goal.
- Separate the job into its basic steps.
- Identify the hazards associated with each step.
- Control each hazard.

Through this process, responsible officials can determine the safest, most efficient manner of performing a given job. JHA systematically carries out the basic strategy of accident prevention: The recognition, evaluation, and control of hazards.

Once a JHA has been developed, it is prepared in chart form, listing the basic job steps and the corresponding hazards and safe procedures for each step. A completed JHA chart can then be used as a training guide for employees; it provides a logical introduction to the work, its associated hazards, and the proper and safe procedures to be followed.

For experienced workers, a JHA chart is reviewed periodically to maintain a safety-awareness on the job and to keep abreast of current safety procedures. Review is also useful for employees who have been assigned new or infrequent tasks.

♦ Job Hazard Analysis Form

Job task: _____ **Date:**

Job location: _____ **Prepared by:** _____

Supervisor: _____ **Reviewed by:** _____

Approved by:

Required and/or recommended personal protective equipment:

☐ Hard hat ☐ Safety Glasses ☐ Steel toed boots ☐ High-vis vest ☐ Fall arrest harness

☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____

Sequence of basic job steps *Beware of being too detailed. Record only the information needed to describe each job action. Rule of thumb, no more than 10 steps/tasks being evaluated.*	**Potential accidents or hazards** *Hazard Classification Categories: struck by/against; caught in/between; slip, trip, or fall; overexertion; ergonomic (awkward Postures, excessive Force, vibration, repetitive motion)*	**Recommended safe job procedure** *Hazard Control Categories: Engineer out (new way to do, change physical conductions or work procedures, adjust/modify/replace work station components/tools, decrease performance frequency); personal protective equipment (PPE); training; improve housekeeping*

♦ Risk Analysis Form

Project #:	Client Name:	Project Location:
Date of JSA:	Contractor:	Sub-Contractor:
Date of Work:	Project JSA Name:	

HAZARD RISK RATING

What are the consequences of this hazard occurring? Consider what the most probable consequence is (below) with respect to this work hazard.	What is the likelihood (below) of the hazard consequence in Step 1 occurring.	1. Take Step 1 rating and select the correct column. 2. Take Step 2 rating and select the correct line. 3. Use the risk score where the two ratings cross on the matrix below. **H = High, S = Serious, M = Medium, L = Low**
Extreme Multiple fatalities or permanent injuries **Critical** Single fatality or permanent injury **Major** Medical treatment or lost time injury **Minor** First aid treatment **Insignificant** Incident or near miss –no treatment	**Almost Certain** Is expected to occur in most circumstances **Likely** Will probably occur at least once **Possible** Event might occur at some time **Unlikely/Rare** Event not expected to occur or only in exceptional circumstances	

Likelihood	Insignificant	Minor	Major	Critical	Extreme
Almost Certain	**M**	**S**	**H**	**H**	**H**
Likely	**M**	**M**	**S**	**H**	**H**
Possible	**L**	**M**	**M**	**S**	**S**
Unlikely/ Rare	**L**	**L**	**M**	**M**	**S**

Process/Activity	**Job/Task Hazard Sub Category**	**Hazardous Element** (List the hazards relating to the work)	**Hazard Risk Rating** (prior to control)	**Controls** (List the controls to manage each of the hazards)	**Hazard Risk Rating** (After Controls)	**Comments and/or Assigned to**

2.10 HAZARD COMMUNICATION

Chemicals pose a wide range of health hazards (such as irritation, sensitization, and carcinogenicity) and physical hazards (such as flammability, corrosion, and reactivity). In order to ensure that the hazards associated with chemicals are conveyed to employers and employees, OSHA requires chemical manufacturers and importers to evaluate the hazards of the chemicals they produce or import and to provide information about them through labels on shipped containers and detailed safety data sheets.

Written Program

Construction processes and other operations performed at the various T&N Van Service jobsites sometimes require the use of hazardous materials and/or chemicals. T&N Van Service has developed a written Hazard Communication Program that describes how the criteria for labels and other forms of warning, safety data sheets, and employee information and training are addressed. A copy of this program will be kept in the main office and will be made available for review by any employee, upon request.

Safety Data Sheets (SDS)

SDSs must be retained for each hazardous chemical used in the workplace. The SDS log will be maintained in an organized fashion and will be readily available to employees. If a new chemical is used at the jobsite, the site Supervisor will ensure that the SDS is received from the distributor and appropriately filed.

The site Supervisor must provide other contractors, temporary workers, and/or employees of other employers on the jobsite who may be exposed to hazardous chemicals used by T&N Van Service with the following information:

- Location of onsite SDS for each hazardous chemical that they may be exposed to while working
- Precautionary measures that need to be taken to protect employees during normal operating conditions in foreseeable emergencies
- The labeling system used
- Procedures to follow if they are exposed

In addition, each contractor or sub-contractor must provide any information concerning chemical hazards the sub-contractor is bringing into the workplace, and vice versa.

Chemical Labeling

Each container of a hazardous chemical that is used in or around the work area must be properly labeled, tagged, or marked with a product identifier; signal word; hazard statement(s); pictogram(s); precautionary statement(s); and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party. The labels must be prominently displayed, and in English, although other languages may also be included, if necessary.

It is the responsibility of the site Supervisor to verify that each container of hazardous chemicals in the workplace is appropriately labeled. Worn and torn labels must be replaced. It is the responsibility of

employees to report inappropriate labels or the need to replace them to the foreman. Labels are not to be defaced or removed.

Alternative Labeling Systems

For hazardous chemical containers that have no labels from the manufacturer (usually secondary containers that are used when contents from a manufacturer's container are poured into another container), the site Supervisor will assure that labels that provide the required information are affixed to the container.

Alternative labeling systems such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS III) may be used to convey the hazards associated with chemicals in workplace containers. After June 1, 2016, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms.

Emergency Response to Hazardous Substances

For construction companies not normally involved in hazardous waste cleanups:
If any substance of unknown origin is found, company policy is to LEAVE IT ALONE!
Immediately evacuate the area, and contact the nearest hazardous material response team.
Do not allow employees on site until declared safe by the response team.

Hazardous Material Identification System and Labeling System

The Hazardous Material Identification System (HMIS III) provides a format for hazard determinations, complies with the OSHA Hazard Communication Standard, and simplifies the employee training and information process. This system was developed by the paint manufacturers (National Paint and Coatings Association) to address situations more common to their environment than those encountered by firefighters.

The HMIS provides clear, recognizable information to employees by standardizing the presentation of chemical information. This is accomplished by using color codes corresponding to the hazards of a product, assigning numeric ratings to indicate the degree of severity of health effects, flammability, and stability/reactivity hazards, along with providing alphabetical codes to designate appropriate personal protective equipment (PPE) employees should use while handling the material.

Hazard severity is indicated by a numerical rating that ranges from zero (0), indicating a minimal hazard, to four (4), indicating a severe hazard. The information is arranged using a color bar system as follows. A blue bar at the top provides health information, a red bar at second from the top indicates flammability, a yellow or orange bar second from the bottom physical properties or instability/reactivity, and a white bar at the bottom addresses personal protective equipment.

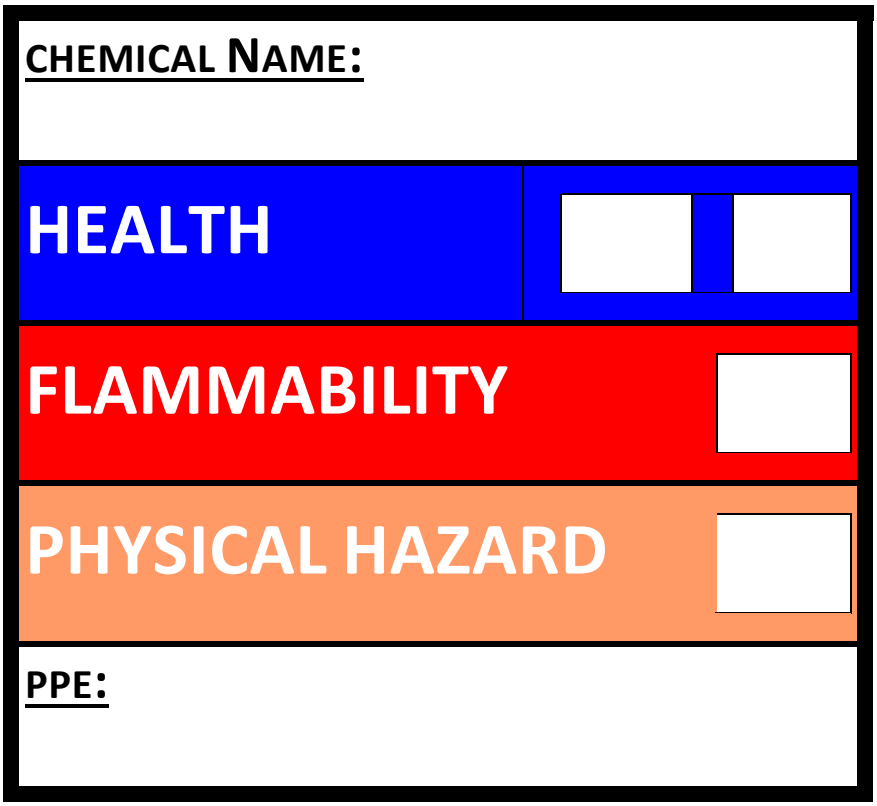
With this system, the white section is used to indicate what level of protective equipment is required. Instead of a hazard ranking, a level of protection is indicated by a letter, with each letter specifying a different level of protection. A wide variety of icons include the physical hazards, target organs, as well as the continued use of icons for PPE.

All alternative labeling must meet the GHS labeling standards.

A sample HCS label is located below:

HEALTH HAZARD  1 Carcinogen 2 Mutagenicity 3 Reproductive Toxicity 4 Respiratory Sensitizer 5 Target Organ Toxicity 6 Aspiration Toxicity	**FLAME**  1 Flammables 2 Pyrophorics 3 Self-Heating 4 Emits Flammable Gas 5 Self-Reactives 6 Organic Peroxides	**EXCLAMATION MARK**  1 Irritant (skin and eye) 2 Skin Sensitizer 3 Acute Toxicity 4 Narcotic Effects 5 Respiratory Tract Irritant 6 Hazardous to Ozone Layer (Non-Mandatory)
GAS CYLINDER  Gases Under Pressure	**CORROSION**  1 Skin Corrosion/Burns 2 Eye Damage 3 Corrosive to Metals	**EXPLODING BOMB**  1 Explosives 2 Self-Reactives 3 Organic Peroxides
FLAME OVER CIRCLE  1. Oxidizers	**ENVIRONMENT**  (Non-Mandatory) 1 Aquatic Toxicity	**SKULL & CROSSBONES**  1 Acute Toxicity (fatal or toxic)

- **HMIS LABEL & KEY**



HMIS Label - Health

The health section conveys the health hazards of the material. In the latest version of the HMIS label, the blue health bar has two spaces, one for an asterisk and one for a numeric rating.

If present the asterisk signifies a chronic health hazard, meaning that long term exposure to the material could cause a health problem such as emphysema or kidney damage.

The numeric ratings for the HMIS system are as follows.

4 - Life Threatening – Major or permanent damage may result from single or repeated overexposures.
3 - Major injury likely unless prompt action is taken and medical treatment is given.
2 - Temporary or minor injury may occur.
1 - Irritation or minor reversible injury may occur.
0 - No significant risk to health.

HMIS Label - Flammability

OSHA defines a flammable liquid as "any liquid having a flash point below 100 °F. (37.8 °C.), except any mixture having components with flash points of 100 °F. (37.8 °C.) or higher, the total of which make up 99 percent or more of the total volume of the mixture. Flammable liquids shall be known as Class I liquids." A flammable material can be a solid, liquid or gas.

The numeric ratings for the HMIS system are as follows.

4 - Flammable gases or very volatile flammable liquids with flash points below 73 °F, and boiling points below 100 °F. Materials may ignite spontaneously with air. (Class IA).
3 - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 °F and boiling points above 100° F, as well as liquids with flash points between 73° F and 100° F. (Classes IB & IC).
2 - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100° F but below 200° F. (Classes II & IIIA).
1 - Materials that must be preheated before ignition will occur. Includes liquids, solids, and semi-solids having a flash point above 200° F. (Class IIIB).
0 - Materials that will not burn.

HMIS Label - Physical Hazard (HMIS® III)

These hazards are assessed using the OSHA criterion of physical hazard. Seven such hazard classes are recognized:

- Water Reactive
- Explosives
- Pyrophoric materials
- Oxidizers
- Organic Peroxides
- Compressed gases
- Unstable Reactives

The numeric ratings for the HMIS system are as follows.

4 - Materials which are readily capable of explosive water reaction, detonation or explosive decomposition, polymerization, or self-reaction at normal temperature and pressure.
3 - Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may polymerize, decompose, self-react, or undergo other chemical change at normal temperature and pressure with moderate risk of explosion.
2 - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.
1 - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.
0 - Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HMIS Label - Reactivity or Stability (HMIS I & 2 - Now Obsolete)

"Reactive or Unstable" means a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature. The numeric ratings for the HMIS system are as follows.

4 - Materials which in themselves are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures. This degree should include materials that are sensitive to mechanical or localized thermal shock at normal temperatures and pressures.

3 - Materials which in themselves are capable of detonation or of explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation. This degree should include materials which are sensitive to thermal or mechanical shock at elevated temperatures and pressures or which react explosively with water without requiring heat or confinement.

2 - Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This degree should include materials which can undergo chemical change with rapid release of energy at normal temperatures and pressures or which can undergo violent chemical change at elevated temperatures and pressures. It should also include those materials which may react violently with water or which may form potentially explosive mixtures with water.

1 - Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently.

0 - Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

HMIS Label – Personal Protection

A	=	Safety glasses
B	=	Safety glasses, gloves
C	=	Safety glasses, gloves, chemical apron
D	=	Face shield, gloves, chemical apron
E	=	Safety glasses, gloves, dust respirator
F	=	Safety glasses, gloves, chemical apron, dust respirator
G	=	Safety glasses, gloves, vapor respirator
H	=	Splash goggles, gloves, chemical apron, vapor respirator
I	=	Safety glasses, gloves, dust and vapor respirator
J	=	Splash goggles, gloves, chemical apron, dust and vapor respirator
K	=	Air line hood or mask, gloves, full chemical suit, boots
X	=	Ask Supervisor

Note: before using any respirator contact EH&S for assistance.

TAB 3: HAZARD AWARENESS

3.1 EXTREME WEATHER CONDITIONS – HEAT & COLD

Heat Related Weather Conditions

When the body is unable to cool itself by sweating, several heat-induced illnesses can occur, and can result in death. High temperature and humidity, direct sun or heat, limited air movement, physical exertion, poor physical condition, certain medications, inadequate tolerance for hot workplaces, and insufficient water intake can all lead to heat stress.

Heat stroke is the most serious heat related disorder and occurs when the body's temperature regulation fails and body temperature rises to critical levels. It is a medical emergency that may result in death. If a person shows signs of possible heat stroke, professional medical treatment should be obtained immediately.

The primary signs and symptoms of heat stroke are:

- Dry, hot skin with no sweating.
- Mental confusion or losing consciousness.
- Seizures or convulsions

Heat Exhaustion is a result of the combination of excessive heat and dehydration. Signs and symptoms of heat exhaustion include:

- Headaches, dizziness, lightheadedness or fainting.
- Weakness and moist skin.
- Mood changes such as irritability or confusion.
- Upset stomach or vomiting

Heat Cramps are usually caused by performing hard physical labor in a hot environment

- Thirst cannot be relied on as a guide for the need for water, drink water every 15-20 minutes
- Studies have shown that drinking carbohydrate-electrolyte replacement liquids is effective in recovery

Heat Rashes are the most common problem in hot environments where the skin is persistently wetted by un-evaporated sweat.

- Heat rash looks like a red cluster of bumps or small blisters.
- It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creased.
- The best treatment is to provide a cooler, less humid environment and keep the affected area dry.

PREVENTION

Water coolers are provided for drinking water only and shall be periodically cleaned and sanitized to eliminate any build-up, prevent growth of bacteria and keep the water safe to drink. Water coolers shall be periodically cleaned with a simple solution of soap and water. Use a sponge to wash it, getting into all of the crevices. After washing, rinse and dry the cooler.

Do not store sodas, drinking bottles, or anything else in the water cooler. Your hands carry germs and bacteria that will be transferred into the drinking water when retrieving bottles and cans from inside the water cooler.

Caution: Employees under doctor orders limiting their intake of fluids and employees on low-salt diets should consult with their doctor before drinking a sports beverage or taking salt tablets.

Tips for preventing heat illness include:

- Adjust work schedules to provide workers with a rest from the heat
- Postpone nonessential tasks
- Provide cool rest areas as well as shade and water for workers
- Wear proper protective clothing
- Ensure workers are drinking enough water to stay hydrated
- Allow workers time to acclimate to the hot environment
- Educate workers and Supervisors to recognize heat illness and how to prevent it
- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Allow yourself to become acclimatized to hot weather
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning and rest regularly
- Drink lots of water; ½ your body weight in oz (i.e. – if you weight 150 lbs drink 75 oz of water.)
- Wear lightweight, light colored, loose-fitting clothes (do not remove your shirt).
- Avoid alcohol, caffeinated drinks, or heavy meals

FIRST AID FOR HEAT ILLNESS:

- Call 911 (or local emergency number) at once.
- While waiting for help to arrive:
    - Move the worker to a cool, shaded area.
    - Loosen or remove heavy clothing.
    - Provide cool drinking water.
    - Fan and mist the person with water.

Cold Related Weather Conditions

More people are dying from hypothermia in the United States, a new government report shows, raising fresh worries for a nation that has been pounded by a steady succession of winter storms this year.

Workers who are exposed to extreme cold while working in harsh environments can be at risk of cold stress or other occupational illness and injuries such as:

- Hypothermia
- Frostbite
- Trench Foot

Hypothermia is a condition in which the body uses up its stored energy and can no longer produce heat. A core temperature of the body is less than 95 degrees Fahrenheit.
It often occurs after prolonged exposure to cold temperature or if the person becomes chilled from rain, sweat, or submersion in cold water.
The primary signs and symptoms of hypothermia are:

- Early symptoms include: shivering, fatigue, loss of coordination, confusion & disorientation.
- Late symptoms include: no shivering, blue skin, dilated pupils, and loss of consciousness

Frost bite is an injury to the body caused by freezing of the skin and underlying tissues.

The primary signs and symptoms of frostbite are:

- Reddened skin develops gray/white patches
- Numbness in the affected part
- Feels firm or hard
- Blisters may occur in the affect part.

What NOT To Do for Frostbite:

- Do not rub the affected area to warm it because this action can cause more damage.
- Do not apply snow/water.
- Do not break blisters.
- Do not try to rewarm the frostbitten area before getting medical help; for example, do not place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.

Immersion/Trench Foot is caused by prolonged exposure to wet and cold temperatures, and may occur at temperatures as high as 60 degrees Fahrenheit if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet.

The primary signs and symptoms of hypothermia:

- Redness of the skin, swelling, numbness, & blisters.

PREVENTION

1. Listen to the weather forecast
2. Plan ahead
3. Dress for cold related environments.
4. Seek shelter
5. Stay dry.
6. Keep active
7. Be aware.

Effects on the Worksite

- Take time throughout the day, every day, to walk through the jobsite and look for hazards created by snow and ice.
- Ensure to take time snow-clearing equipment, de-icing equipment, heating systems, winterized vehicles and cold-weather clothing
- Carefully remove icicles, especially if temperatures are beginning to warm. If this isn't possible, rope off the area under the icicles until they are no longer a hazard.

First Aid For Cold related Injuries

- Call 911 immediately in an emergency; otherwise seek medical assistance as soon as possible.
- Move the person to a warm, dry area.
- Remove wet clothes and replace with dry clothes, cover the body (including the head and neck) with layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag). Do not cover the face.
- If medical help is more than 30 minutes away:
- Give warm sweetened drinks if alert (no alcohol), to help increase the body temperature. Never try to give a drink to an unconscious person.
- Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 911 for additional rewarming instructions.
- Give CPR if the worker is found unconscious.

3.2 OUTDOOR SAFETY

INTRODUCTION

Outdoor workers are exposed to many types of hazards that depend on their type of work, geographic region, season and duration of time that they are outside. Employees who are exposed to outdoor hazards will be trained about the hazards, including hazard identification and recommendations for preventing and controlling their exposure.

Potential outdoor hazards may include: snake bites, mosquitoes, fire ants, bees, ticks, spiders, and poisonous plants

Personal Protective Equipment

Selecting the proper personal protective equipment is a crucial part of protecting yourself against potential hazards. PPE should be selected based off of what you could be exposed to. Some suggestions include: Heat Protection, Gloves, Leather boots, & Light colored, long sleeve pants and shirt.

Depending on the types of conditions that you're working in, also remember to follow these tips:

- Keep clothing tucked in
- Avoid wearing colognes or perfumes
- Wear insect repellant containing DEET
- Expose as little skin as possible
- Conduct an all-over body check when you leave the area.

ILLNESSES FROM MOSQUITO BITES:

- Encephalitis
    - Inflammation of the brain
    - Can cause flu-like symptoms such as fever and severe headache
- West Nile Virus
- Zika Virus

STINGING INSECTS

FIRE ANTS

Fire ant venom is toxic and can be life threatening If a swarm is disturbed, a person can be stung as many as 5,000 times within a few seconds Nests can be found under buildings, utility boxes, field mounds and piles of dirt. DO NOT attempt to remove a colony yourself. Call an exterminator.

BEE STINGS

The most common bees are the yellow jacket and the honey bee. Yellow jackets sting repeatedly while honey bee stings remain in your skin. If you are stung while on the jobsite, it is important to notify an employee of the company. Seek shelter immediately if there is a swarm of bees. The following tips should be utilized for prevention and response:

- Look out for swarms
- Keep food and drinks in vehicles
- Avoid hollow trees and branches
- If attacked, seek shelter immediately
- Notify a co-workers and call 911

TICKS

Ticks are mostly active in the months of May-July. In order to protect yourself from coming into contact with ticks, high grass areas should be avoided and clothes should be treated with permethrin. Further protection should include using repellent with at least 20% DEET and conducting a full body check when returning from infested areas. Coming in contact with ticks can cause:

Lyme Disease

- Red bulls-eye skin rash
- Flu-like symptoms: headache, fatigue
- Can result in a heart abnormalities, nervous system damage and joint disorders
- Can last years after exposure
- Also carried by deer, mice, black bears, raccoons, squirrels and foxes

Rocky Mountain Spotted Fever

- Flu-like symptoms
- Mental confusion
- Potentially fatal
-

SPIDERS

The two most dangerous types of spiders are the Black Widow and Brown Recluse. Black Widow bites are 15 times more poisonous than that of a rattlesnake. Symptoms of this bite include heavy abdominal pain which can last up to 48 hours. A bite from a Brown Recluse can result in body tissue damage.

VENOMOUS SNAKES:

- Northern Copperheads
- Timber Rattlesnake
- Eastern Massasauga

RODENTS AND VIRUSES:

HANTAVIRUSES

Hantavirus is the result from exposure to rodent droppings which can result in respiratory failure. If droppings or nesting material are swept into the air, the virus is able to be breathed in. Farm workers, Animal Lab workers and Construction workers are the most frequently exposed. Symptoms of Hantavirus include flu-like fever, chills and aches. If droppings are found:

- Drench droppings with a 1:10 water to bleach ratio and pick up with a damp towel
- Use latex/vinyl gloves and a HEPA filter air purifying respirator

POISONOUS PLANTS:

POISON IVY is the most commonly found urushiol plant and has many different species ranging in a variety of habitats. It typically has three shiny green leaves; however, leaves may be red in the fall.

POISON OAK can be found in a variety of soils and contains three leaves, similar to that of poison ivy.

POISON SUMAC is most commonly found in swamps and bogs where soil is acidic and wet. It contains 7-13 leaves arranged in pairs.

Poison Ivy

Poison Oak

Poison Sumac

Additional Facts:

- Urushiol poisonings are the single most common Worker's Comp. Claim in the US
- The most common way to avoid is the folk saying "Leaflets three, let it be."
- Poison Sumac is the only plant without three leaves. It can have up to 13 leaflets, usually in an odd number.
- Wearing long sleeves and pants can usually help avoid the common rash symptoms. Tools and clothing can remain contaminated for years.
- Wash rigorously with cold water and soap

FIRST AID PROCEDURES:

The following first aid procedures shall be followed if employees are to come in contact with any of the following hazards:

Mosquito Bites	**Bee Stings**	**Fire Ants**
• Watch for flu-like symptoms • If symptoms persist, seek medical attention	• Watch for reactions such as Anaphylactic Shock • Never squeeze stingers • Remove stingers horizontally with a knife • Wash with soap and water • Apply ice •	• Watch for blisters. If breathing becomes difficult, call 911
Ticks	**Spiders**	**Snake Bites**
• If a tick is found, remove it with tweezers; not your fingers • Do not twist the ticks body, pull straight out • Do not use a match • Watch for symptoms of Lyme Disease	• Watch for symptoms such as red swollen areas • If you experience high blood pressure, seek medical attention	• Use a belt/rope to constrict the poison • Do not raise the wound - keep below your heart • Get to a hospital immediately

3.3 DRIVING SAFETY

According to the Bureau of Labor Statistics' *National Census of Fatal Occupational Injuries*, roadway incidents accounted for 57% of the fatal work injury total for 2014. That number is 57 percent of the annual number of fatalities from occupational injuries. The following Driving Safety rules and procedures have been established.

SAFETY RULES:

- Only authorized employees may drive a motor vehicle in the course and scope of work or operate a company-owned vehicle.
- Drivers must have a valid and current license to operate the vehicle.
- Operating a vehicle while under the influence of alcohol, illegal drugs, or certain medications that may impair driving skills is prohibited.
- Seatbelts must be worn by all vehicle occupants at all times whenever a vehicle is in motion.
- Authorized drivers must follow safe driving practices including, but not limited to:
    - Practice defensive driving techniques
    - Do not use any electronic equipment that my cause distraction
    - Obey all posted traffic and speed limit signs
    - Maintain a safe distance between vehicles at all times
    - Report all traffic violations and accidents to Supervisors
- All collisions and traffic violations that have occurred while driving on company duties must be reported.
- All vehicles used for company business must be fit for purpose and maintained in a safe working order.
- Loads must be secure and shall not exceed the manufacturer's specifications and legal limits for the vehicle.

DEFENSIVE DRIVING TECHNIQUES

Following the rules of the road can help you concentrate on what you should be doing…driving. Stay out of the other vehicle's blind spot and avoid tailgating. Instead, keep a safe distance from other drivers by maintaining a safety cushion of driving space between your vehicle and those around you. As an extra precaution, know the condition of the weather and road and drive only as fast as those conditions allow.

Be cautious by staying alert and expecting the unexpected. Watch out for and anticipate other drivers, pedestrians or children on or near the road. Safe drivers scan constantly for hazards, predicting how they may be affected by a hazard and pre-determining how to avoid or reduce them.

The ever-changing variable of the road and other vehicles can make drivers instantly vulnerable to accidents. If drivers don't practice these safe practices on the road, they might personally discover why vehicle deaths and serious injuries now total more than all the wartime wounded and fatalities since 1776. Be aware of the following items while driving:

- Know and observe all traffic rules and regulations
- Constantly be alert for the illegal acts and driving errors of other drivers. Make timely adjustments in your own driving so that these illegal acts and errors will not involve you in an accident.

- Know your vehicle and be aware of special hazards presented by abnormal, unusual, or changing conditions.
- Be aware of the rules of right of way and be willing to yield to the right of way to the other driver whenever necessary

The following outlines general principles of defensive driving:

- **See the hazard**—when driving, think about what is going to happen or what might happen as far ahead of encountering a situation as possible. You should never assume everything will be "all right."
- **Understand the defense**—specific situations require specific ways of handling. Become familiar with the unusual conditions which you may face and learn them well so that you can apply them when the need arises.
- **Act in time**—once you've noted a hazard and understand the defense against it, act! Never take a "wait and see" attitude.

Taking these three steps and keeping good driving techniques in mind, you'll learn to "give in" a little; to tailor your driving behavior to the unexpected actions of other drivers and pedestrians; the unpredictable and ever-changing factors of light, weather, road, and traffic conditions; and the mechanical condition of your vehicle.

3.4 TOOLS AND EQUIPMENT

Hand and power tools are a common part of our everyday lives and are present in nearly every industry. These tools help us to easily perform tasks that otherwise would be difficult or impossible. However, these simple tools can be hazardous and have the potential for causing severe injuries when used or maintained improperly. Special attention toward hand and power tool safety is necessary in order to reduce or eliminate these hazards.

Hand and power tools are addressed in specific standards for the construction industry. General OSHA requirements state that all hand and power tools and similar equipment, whether furnished by the employer or the employee, be maintained in a safe condition. They establish standards for guarding, personal protective equipment, and switches. Specific standards apply to hand tools; power-operated hand tools; abrasive wheels and tools; woodworking tools; jacks; air receivers; and mechanical power-transmission apparatus. The items below summarize safe practices for use of hand and power tools.

- Maintain all hand tools and equipment in a safe condition and check them regularly for defects. Identify broken or damaged tools and equipment by tagging or locking the controls until they can be repaired or disposed of.
- Follow the manufacturer's requirements for safe use of all tools.
- Use double insulated tools, or ensure that the tools are grounded.
- Equip all power saws (circular, skill, table, etc.) with blade guards.
- Make sure guards are in place before using power saws. Don't use power saws with the guard tied or wedged open.
- Turn off saws before leaving them unattended.
- Raise or lower tools by their handles, not by their cords.
- Don't use wrenches when the jaws are sprung to the point of slippage. Replace them.
- Don't use impact tools with mushroomed heads. Replace them.
- Keep wooden handles free of splinters or cracks and be sure the handles stay tight in the tool.
- Workers using powder-activated tools must receive proper training prior to using the tools.
- Always be sure that hose connections are secure when using pneumatic tools.
- Never leave cartridges for pneumatic or powder-actuated tools unattended. Keep equipment in a safe place, according to the manufacturer's instructions.
- Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases will be provided with particular PPE necessary to protect them from the hazard.

HAND TOOLS

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

Some examples of misused hand tools:

- Using a screwdriver as a chisel may cause the tip of the screwdriver to break and fly, hitting the user or other employees.
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker.

- A wrench must not be used if its jaws are sprung, because it might slip.
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.

Saw blades, knives, or other tools are to be directed away from aisle areas and other employees working in close proximity. Knives and scissors must be kept sharp. Dull tools can be more hazardous than sharp ones.

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

PNEUMATIC POWER TOOLS

Pneumatic tools are powered by compressed air; they include chippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools. The main hazard is the danger of getting hit by one of the tool's attachments, or some kind of fastener the worker is using with the tool. Noise is another hazard associated with pneumatic tools.

Pneumatic tools that shoot nails, rivets, or staples, and operate at more than 100 pounds per square inch (psi), must be equipped with a special device to keep fasteners from being ejected unless the muzzle is pressed against the work surface. Eye protection is required and face protection is recommended for employees working with pneumatic tools. Noise is another hazard. Working with noisy tools such as jackhammers requires proper, effective use of ear protection.

When using pneumatic tools, employees must check to see that they are fastened securely to the hose by a positive means to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.

Airless spray guns which atomize paints and fluids at high pressures (1,000 psi or more) must be equipped with automatic or visual manual safety devices which will prevent pulling the trigger until the safety device is manually released.

If an air hose is more than one–half inch in diameter, a safety excess flow valve must be installed at the source of the air supply to shut off the air automatically in case the hose breaks. In general, the same precautions should be taken with an air hose that are recommended for electric cords, since the hose is subject to the same kind of damage or accidental striking and presents tripping hazards. The manufacturer’s safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded. In addition, the use of hoses for hoisting or lowering is not permitted.

A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel. Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

Compressed air guns should never be pointed toward anyone. The user should never "dead–end" it against him or herself or anyone else. Compressed air shall not be used to blow dirt, debris, or similar material off of your clothing, unless reduced to less than 30 psi. If using less than 30 psi for cleaning

purposes, effective chip guarding and personal protective equipment meeting the requirements of 29 CFR 1926, Subpart E must be used.

Heavy jackhammers can cause fatigue and strains; heavy rubber grips reduce these effects by providing a secure handhold. Workers operating a jackhammer must wear safety glasses and safety shoes, which protect against injury if the hammer slips of falls. A face shield should also be used.

ELECTRIC TOOLS

Employees using electric tools must be aware of several dangers; the most serious is the possibility of electrocution. Among the chief hazards of electric–powered tools are burns and slight shocks which can lead to injuries or even heart failure. Under certain conditions, even a small amount of current can result in fibrillation of the heart and eventual death. A shock also can cause the user to fall off a ladder or another elevated work surface.

To protect the user from shock, tools must either have a three–wire cord and be grounded, be double insulated, or be powered by a low–voltage isolation transformer. Three–wire cords contain two current–carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Anytime an adapter is used to accommodate a two–hole receptacle, the adapter wire must be attached to a known ground. The third prong should never be removed from the plug.

Double insulation is more convenient. The user and the tools are protected in two ways: by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.

The following general practices should be followed when using electric tools:

- Electric tools should be operated within their design limitations.
- Gloves and safety footwear are recommended during use of electric tools.
- When not in use tools should be stored in a dry place.
- Electric tools should not be used in damp or wet locations.
- Work areas should be well lighted.

ABRASIVE WHEELS

Abrasive wheels are power tools used to grind, cut, polish, and buff materials and surfaces. There are different types of wheels, depending upon their uses, but they all have one thing in common: hazards are involved. Refer to 29 CFR 1910.215.215 for exact language and specific details about abrasive wheels.

The tasks abrasive wheels are used for involve the hazards of flying particles. As the wheels begin spin material is applied against them to achieve the desired results, whether it is to grind, cut, polish, or buff. There is also a risk that, while the wheel is spinning at high speeds, it could fly apart.

Before an abrasive wheel is mounted, it should be inspected closely and ring tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non–metallic

implement. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or "ring."

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, but not tight enough to distort the flange. Follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel specifications.

Due to the possibility of a wheel disintegrating (exploding) during start–up, the employee should never stand directly in front of the wheel as it accelerates to full operating speed.

In addition, when using a powered grinder:

- Always use eye protection.
- Turn off the power when not in use.
- Never clamp a hand–held grinder in a vise.

To help prevent injuries, closely inspect the wheels to ensure they have not been damaged. Do not mount a wheel if there are signs of damage or defects. The spindle speed of the machine must be checked before mounting the wheel to be certain that it does not exceed the maximum operating speed marked on the wheel. Use only wheels marked with the type of wheel and maximum speed in revolutions per minute. Always select the right wheel for the job. A wheel is dangerous when used for work for which it was not designed.

Abrasive wheels need to be handled and stored carefully; avoid dropping or bumping them. Transport wheels in containers designed to provide support for the wheels if they are too heavy to carry by hand. When storing abrasive wheels, do not allow other items, such as tools, to be piled on top. Place them in racks or bins with dividers for different types of wheels. This will help with quick and safe identification. Place straight or tapered wheels on end in a cradle or chocked position to prevent them from rolling.

Never store wheels near excessive heat or cold, in contact with oil or moisture, or in drawers with loose tools. This may cause them to bump together and may cause the wheels to crack. Follow the manufacturer’s instructions for length of time a wheel should be stored and how to store thin wheels.

Maintain grinding machines in good working condition. Make sure that only qualified employees provide maintenance on grinding machines.

Abrasive wheels greater than 2 inches can only be used on machines with safety guards. Because of the hazards involved, safety guards must be installed and located so as to be between the operator and the wheel during use. Adjustment of the guard must be done so pieces of an accidentally broken wheel will be deflected away from the operator. The top half of the wheel should be enclosed at all times.

GUARDING

Hazardous moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed to contact by employees.

Guards, as necessary, should be provided to protect the operator and others from the following:

- Point of operation
- In-running nip points
- Rotating parts, and
- Flying chips and sparks.

Safety guards must never be removed when a tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

When power tools are designed to accommodate guards, they will be equipped with such guards at all times when in use. All power saws (circular, skill, table, etc.) will be equipped with blade guards. Ensure that guards are in place before using a piece of equipment that is equipped with guards. Do not use power saws with the guard tied or wedged open.

Portable grinding tools need to be equipped with safety guards to protect workers, not only from the moving wheel surface, but also from flying fragments in case of breakage.

Guarding shall meet the requirements set forth in ANSI B15.1. Guards may not be manipulated in such a way that will compromise its integrity or the protection in which intended.

3.5 COMPRESSED GAS AWARENESS

Hazards associated with compressed gases include oxygen displacement, fires, explosions, and toxic gas exposures, as well as the physical hazards associated with high pressure systems. Special storage, use, and handling precautions are necessary in order to control these hazards

Compressed gas is defined as:

- A material or mixture in a container with an absolute pressure of 40 psi (pounds per square inch) at 70 °F.
- A material or mixture in a container with an absolute pressure exceeding 104 psi at 130 °F
- A liquid material having a vapor pressure exceeding 40 psi absolute at 100 °F.

Absolute pressure is the pressure reading on the gauge plus local atmospheric pressure (14.7 psi at sea level).

COMPRESSED GAS HAZARDS

Gases may be hazardous because they are:

- Under high pressure: When a high-pressure cylinder accidentally ruptures or when a valve assembly breaks off, rocketing can occur. If the pressure of the contents increases enough, it can drive the cylinder, turning it into a missile that can blast its way right through a concrete wall.
- Flammable: Flammable gases catch fire easily and burn quickly. Hydrogen, acetylene, ethylene, propane, and natural gas are some examples. If you were to add flammability to a compression hazard, you would have some extremely dangerous materials.
- Asphyxiant (inert): Inert gases displace oxygen for breathing and can lead to suffocation of the exposed employee.
- Oxidizing: Oxidizing gases can explode violently when they react with organic and combustible materials. It is important that containers of oxidizing gases or oxygen and associated equipment be free of oils, greases, and other hydrocarbon-based materials. In addition, clothing which has been exposed to an oxygen-rich atmosphere is a fire hazard.
- Corrosive: Corrosive gases attack tissue and other materials. Employees should be aware that they will be required to wear special PPE and a self-contained breathing apparatus when handling these gases. Eyewashes and emergency showers must be available. Point out their location.
- Toxic or highly toxic: Poison (toxic) gases such as arsine, diborane, methyl bromide, nitric oxide, nitrogen dioxide, phosgene, and phosphine can only be handled by specially trained personnel. Workers must be fully aware of the potential hazards involved and must wear the appropriate PPE to handle them.
- Cryogenic (extremely cold): A cryogenic liquid has a boiling point colder than -150 degrees Fahrenheit at 14.7 psia. Besides causing frostbite or burning the skin on contact, such a liquid has an asphyxiation hazard associated with it, too. Cryogenic liquids require a higher level of PPE than other substances contained in pressurized tanks.

STORAGE, MAINTENANCE, & HANDLING

Employees must be trained on the proper use, handling and storage of compressed gas cylinders. The following is a list of recommendations for storage, maintenance, and handling of compressed gas cylinders:

- Make sure the contents of the compressed gas cylinder are clearly stenciled or stamped on the cylinder or on a durable label.
- Do not identify a gas cylinder by the manufacturer's color code.
- Never use cylinders with missing or unreadable labels.
- Visually inspect all cylinders for damage before use.
- Be familiar with the properties and hazards of the gas in the cylinder before using.
- Wear appropriate protective eyewear when handling or using compressed gases.
- Use the proper regulator for each gas cylinder.
- Do not tamper with or attempt to repair a gas cylinder regulator.
- Never lubricate, modify, or force cylinder valves.
- Open valves slowly using only wrenches or tools provided by the cylinder supplier directing the cylinder opening away from people.
- Check for leaks around the valve and handle using a soap solution, "snoop" liquid, or an electronic leak detector.
- Leaking cylinders should be 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.
- Close valves and relieve pressure on cylinder regulators when cylinders are not in use. Label empty cylinders "EMPTY" or "MT" and date the tag; treat in the same manner that you would if it were full.
- Always attach valve safety caps when storing or moving cylinders.
- Transport cylinders in a vertical secured position with an approved cart with a safety chain; never move or roll gas cylinders by hand.
- Securely attach all gas cylinders (empty or full) to a wall or laboratory bench with a clamp or chain, or secure in a metal base in an upright position.
- Store cylinders by gas type, separating oxidizing gases from flammable gases by either 20 feet or a 30-minute firewall that is 5 feet high.
- Store gas cylinders in cool, dry, well-ventilated areas away from incompatible materials and ignition sources.
- Do not subject any part of a cylinder to a temperature higher than 125 °F or below 50 °F.
- Store empty cylinders separately from full cylinders.
- When a cylinder cap cannot be removed by hand, cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.
- Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.
- Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

RESOURCES

With so many compressed gas hazards, OSHA developed general compressed gas regulations as well as gas-specific regulations to eliminate and prevent injury and illness associated with compressed gases, regardless of content or packaging (cylinder, portable tank, or standing tank). General compressed gas requirements are outlined in 29 CFR 1910.101, and are summarized below:

- Each compressed gas cylinder under the employer's control must be maintained in a safe condition as determined by a visual inspection
- The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in Sec. 1910.6.
- Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained in accordance with Compressed Gas Association Pamphlets S-1.1-1963 and 1965 addenda and S-1.2-1963, which is incorporated by reference as specified in Sec. 1910.6.

3.6 VACUUM TRUCKS

Vacuum truck owners and operators, as well as facility personnel, should be aware of the numerous potential hazards associated with vacuum truck operations in petroleum facilities, including but not limited to: sources of ignition, flammable atmospheres, potential hazards associated with the surrounding area, toxic vapors and their PEL's and STEL's, additional hazards such as slips and falls, spills and releases, fires and explosions, and accidents within the facility or on the highway.

Before beginning operations, vacuum truck operators shall obtain any required permits and inspect vacuum trucks, equipment, and loading/off loading sites to assure safe operations.

The areas where vacuum trucks will operate must be free of hydrocarbon vapors in the flammable range. The areas where the vacuum truck operator and others work without respirators must also be at or below air -contaminant PEL's/STEL's. If there is any question whether the area is vapor-or toxic gas-free, atmospheric testing shall be performed by a qualified person using properly calibrated and adjusted detectors. Testing shall be conducted prior to starting any operations, and if necessary, during operations, including but not limited to the following: When operations in the area are subject to change such as automatic pump start-up or product receipt into, or transfer out of, a tank located in the vicinity of the transfer operations; when off-loading; when atmospheric conditions change such as wind direction, when an emergency situation, such as product release, occurs in within the facility that may affect atmospheric conditions in the transfer area.

Vacuum hose constructed of conductive material or thick walled hose with imbedded conductive wiring, shall be used when transferring flammable and combustible liquids when the potential for a flammable atmosphere exists in the area of operations. Conductive hose shall provide suitable electrical conductance less than or equal to 1 mega ohm per 100 feet (as determined by the hose manufacturer). Thin walled metallic spiral-wound conductive hoses should not be used because of the potential for electrical discharge through the thin plastic that covers the metal spiral.

The complete vacuum transfer system needs to be bonded so that there is a continuous conductive path from the vacuum truck through the hose and nozzle to the tank or source container and grounded to dissipate stray currents to earth (ground). Prior to starting transfer operations, vacuum truck need to be grounded directly to the earth or bonded to another object that is inherently grounded (due to proper contact with the earth) such as a large storage tank or underground piping. A safe and proper ground to earth may be achieved by connecting to any properly grounded object including but not limited to any one or more of the following examples: a metal frame of a building, tank, or equipment that is grounded. An existing facility grounding system such as that installed at a loading rack. Fire hydrants metal light posts, or underground metal piping with at least 10' of contact with earth. A corrosion free metal ground rod of suitable length and diameter (approximately 9' long and 5/8-in. diameter), driven 8' into the earth (or to the water table, if less).

Under normal conditions, the absence of oxygen minimizes the risk of ignition in a vacuum truck. However, operating rotary lobe blowers and vacuum pumps at high speeds creates high air movement and high vacuum levels, resulting in high discharge air temperatures and high discharge vapor concentrations that can present potentially ignitable conditions.

A number of methods can be used by vacuum truck operators to safely vent vacuum pump exhaust vapors, including but not limited to the following: Operators can prevent dieseling by locating the vacuum truck upwind of vapor sources and by extending the vacuum pump discharge away from the diesel engine air intake; vapors may be returned to the source container using conductive and closed connections; vapors may be vented into the atmosphere to a safe location using a safety venturi; Vacuum truck operators may provide vertical exhaust stacks, extending approximately 12' above the vacuum truck (or higher if necessary), to dissipate the vapors before they reach ignition sources or other potential hazards and personnel; Vacuum truck operators may attach a length of exhaust hose to the vacuum exhaust that is long enough to reach an area that is free from potential hazards, sources of ignition, and personnel. The hose should be preferably extended 50' downwind of the truck and away from the source of the liquids.

Vacuum truck personnel working in petroleum facilities shall be: trained in the safe operation of the vacuum equipment; familiar hazards of the petroleum products, by-products, wastes and materials being transferred, aware of relevant government and facility safety procedures and emergency response requirements; MSDS; appropriate PPE; all personnel shall leave the vacuum truck cab during loading and off-loading operations; when transferring flammable liquids or hazardous materials, vacuum truck operators shall remain positioned between the vacuum truck and the source or receiving tank, vessel, or container and within 25' of the vacuum truck throughout the duration. Vacuum truck operators shall monitor the transfer operation and be ready to quickly close the product valve and stop the pump in the event of a blocked line or release of material through a broken hose or connection; smoking, or any other source of ignition, shall not be permitted within at least 100' (depending on local procedures and atmospheric conditions) of the truck, the discharge of the vacuum pump, or any other vapor source.

Vacuum truck operators shall be trained and properly licensed in accordance with applicable regulations: Vacuum trucks shall not enter into tank dike area until such areas have been checked/monitored and rendered safe: Vacuum trucks cargo tanks shall be depressurized: Vacuum truck operators must be aware of the effect of speeds, turns and the changing center of gravity: Vacuum truck operators shall maintain proper distances when operating vacuum trucks inside facilities with restricted clearances.

3.7 VEHICLES AND MOBILE EQUIPMENT

If vehicle safety practices are not observed, employees risk being pinned between construction vehicles and walls, struck by swinging backhoes, crushed beneath overturned vehicles, or other similar accidents. In addition, work near public roadways present the risk being struck by trucks or cars.

Provided below are suggested practices for operations involving vehicles and mobile equipment. For further details, refer to the OSHA standards covering motor vehicles and mechanized equipment.

- Only authorized employees are allowed to operate mobile equipment.
- Employees must be instructed to stay clear of backing and turning vehicles and equipment with rotating cabs.
- All off-road equipment used on site must be equipped with rollover protection (ROPS) (Figure 21).
- Back-up alarms for equipment with limited rear view or use someone to help guide them back must be maintained.
- Conduct pre-shift inspections on the assigned equipment to verify that the equipment is in working order.
- Be sure that all vehicles have fully operational braking systems, brake lights, and a working backup alarm.
- Use seat belts when transporting workers in motor and construction vehicles.
- Maintain at least a 10-foot clearance from overhead power lines when operating equipment.
- Block up the raised bed when inspecting or repairing dump trucks.
- Know the rated capacity of the crane and use accordingly.
- Ensure the stability of the crane.
- Use a tag line to control materials moved by a crane.
- Verify experience or provide training to crane and heavy equipment operators.
- Passengers are not permitted to ride on equipment unless the equipped to accommodate passengers.
- The equipment operator shall use access provided to get on and off equipment.
- If the mobile equipment does not have an enclosed cab, eye protection must be used when in operation.
- Vehicles and mobile equipment must only be used in the manner in which it was designated and intended for.
- Before fueling, the operator of a gasoline or diesel vehicle must shut off the engine 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.

3.8 HAND-SIGNALING CONTROL

The primary function of traffic control procedures is to move vehicles and pedestrians safely and expeditiously through or around temporary traffic control zones while protecting on- site workers and equipment.

QUALIFICATIONS FOR FLAGGERS

Because flaggers are responsible for public safety and make the greatest number of public contacts of all highway workers, they should have the following minimum qualifications:

- Sense of responsibility for the safety of the public and workers
- Training in safe traffic control practices
- Average intelligence
- Good physical condition, including sight and hearing
- Mental alertness and the ability to react in an emergency
- Courteous but firm manner
- Neat appearance

HIGH-VISIBILITY CLOTHING

For daytime work, the flagger's vest, shirt, or jacket shall be orange, yellow, strong yellow green or fluorescent versions of these colors. For nighttime work, similar outside garments shall be retro-reflective. The retro-reflective material shall be orange, yellow, white, silver, strong yellow-green, or a fluorescent version of one of these colors and shall be visible at a minimum distance of 1,000 feet. The retro-reflective clothing shall be designed to identify clearly the wearer as a person and be visible through the full range of body motions.

Uniformed law enforcement officers may be used as flaggers in some locations, such as an urban intersection, where enforcement of traffic movements is important. Uniformed law enforcement officers may also be used on freeways where traffic is channeled around work sites and it is necessary to assure that advisory and regulatory speeds are being enforced. For nighttime work and in low-visibility situations, a retro-reflective garment as described above should be worn.

HAND-SIGNALING DEVICES

Hand-signaling devices, such as STOP/SLOW paddles, lights, and red flags are used to control traffic through temporary traffic control zones. The STOP/SLOW paddle, which gives drivers more positive guidance than red flags, should be the primary hand-signaling device. The standard STOP/SLOW sign paddle shall be 18 inches, square with letters at least 6 inches high. A rigid handle should be provided. This combination sign should be fabricated from light semi-rigid material, and shall have an octagonal shape. The background of the STOP face shall be red with white letters and border. To improve conspicuity, the STOP/SLOW paddles may be supplemented by one or two symmetrically positioned alternately flashing white high-intensity lamps on each side. The background of the SLOW face shall be orange with black letters and border. When used at night, the STOP/SLOW paddle shall be retro-reflectorized in the same manner as signs.

Flag use should be limited to emergency situations and at low-speed and/or low-volume locations which can best be controlled by a single flagger. Flags used for signaling shall be a minimum of 24 inches square, made of a good grade of red material, and securely fastened to a staff about 3 feet long. The free edge should be weighted so the flag will hang vertically, even in heavy winds. When used at night, flags shall be retro-reflective red.

HAND-SIGNALING PROCEDURES

STOP/SLOW paddle and flag use are illustrated in the figure on the next page. The following methods of signaling with STOP/SLOW paddles should be used:

- To Stop Traffic-The flagger shall face traffic and extend the STOP sign paddle in a stationary position with the arm extended horizontally away from the body. The free arm should be raised with the palm toward approaching traffic.
- To Direct Stopped Traffic to Proceed-The flagger shall face traffic with the SLOW paddle held in a stationary position with the arm extended horizontally away from the body. The flagger should motion with the free hand for traffic to proceed.
- To Alert or Slow Traffic-The flagger shall face traffic with the SLOW sign paddle held in a stationary position with the arm extended horizontally away from the body. The flagger may motion up and down with the free hand, palm down, indicating that the vehicle should slow down.

The following methods of signaling with a flag should be used:

- To Stop Traffic-The flagger shall face traffic and extend the flag staff horizontally across the traffic lane in a stationary position, so that the full area of the flag is visible hanging below the staff. The free arm should be raised with the palm toward approaching traffic.
- To Direct Stopped Traffic to Proceed. The flagger shall face traffic with the flag and arm lowered from view of the driver. With the free hand, the flagger should motion traffic to proceed. Flags shall not be used to signal traffic to proceed.
- To Alert or Slow Traffic. The flagger shall face traffic and slowly wave the flag in a sweeping motion of the extended arm from shoulder level to straight down, without raising the arm above a horizontal position.

FLAGGER STATIONS

Flagger stations shall be located far enough ahead of the work space so that approaching traffic has sufficient distance to stop before entering the work space. Table VI-1 in the Manual on Universal Traffic Control Devices (Guidelines for Length of Longitudinal Buffer Space), may be used for locating flagger stations in advance of the work space. This distance is related to approach speeds, friction factors, and pavement and tire conditions. These distances may be increased for downgrades.

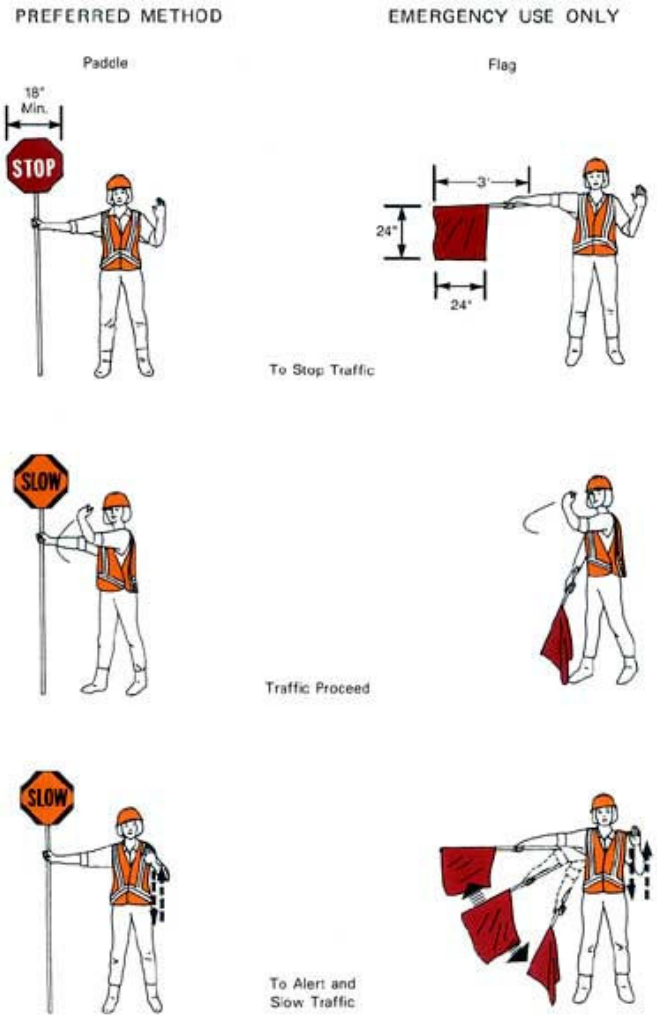
The flagger should stand either on the shoulder adjacent to the traffic being controlled or in the barricaded lane. At a "spot" obstruction, a position may have to be taken on the shoulder opposite the barricaded section to operate effectively. A flagger should stand only in the lane being used by moving traffic after traffic has stopped, and the flagger needs to be visible to other traffic or to communicate

with drivers. Because of the various roadway geometrics, flaggers should be clearly visible to approaching traffic at all times. For this reason, the flagger should stand alone.

Other workers should not be permitted to congregate around the flagger station. The flagger should be stationed far enough ahead of the work force to warn them (for example with horns, whistles etc.) of approaching danger, such as vehicles out of control.

Flagger stations should be visible far enough ahead to permit all vehicles to stop. Table VI-1 in the Manual on Universal Traffic Control Devices (Guidelines for Length of Longitudinal Buffer Space), may be used in selecting the location of flaggers. This distance is related to approach speeds, friction factors, and pavement and tire conditions. These distances may be increased for downgrades. These distances are calculated in a manner similar to those calculated in the first paragraph of 6E-6. Flagger stations should be preceded by proper advance warning signs. Under certain geometric and traffic situations, more than one flagger station may be required for each direction of traffic. At night, flagger stations should be illuminated.

At two-way, unusually low-volume and/or unusually low- speed short lane closings where adequate sight distance is available for the safe handling of traffic, the use of one flagger may be sufficient.



USE OF HAND SIGNLALING DEVICES BY FLAGGER

3.9 ELECTRICAL SAFETY

Electrical current exposes workers to a serious, widespread occupational hazard; practically all members of the workforce are exposed to electrical energy during the performance of their daily duties, and electrocutions occur to workers in various job categories. Many workers are unaware of the potential electrical hazards present in their work environment, which makes them more vulnerable to the danger of electrocution.

Electrical injuries consist of four main types: electrocution (fatal), electric shock, burns, and falls caused as a result of contact with electrical energy.

Safety and health programs must address electrical incidents and the variety of ways electricity becomes a hazard. In general, OSHA requires that employees not work near any part of an electrical power circuit unless protected. The following hazards are the most frequent cause of electrical injuries:

- Contact with power lines
- Lack of Ground-Fault Protection
- Path to Ground Missing or Discontinuous
- Equipment Not Used in Manner Prescribed
- Improper Use of Extension and Flexible Cords

Provided below is a summary of jobsite safety practices that will help guide T&N Van Service in avoiding common electrical hazards. For exact language and specific details Occupational Safety and Health Administration's (OSHA) Electrical Safety Standards for the Construction Industry refer to 29 CFR 1926 Subpart K.

- Prohibit work on new and existing energized (hot) electrical circuits until all power is shut off and a positive Lockout/Tagout System is in place.
- Don't use frayed or worn electrical cords or cables.
- Use only 3-wire type extension cords designed for hard or junior hard service. (Look for any of the following letters imprinted on the casing: S, ST, SO, STO, SJ, SJT, SJO, SJTO.)
- Maintain all electrical tools and equipment in safe condition and check regularly for defects.
- Remove broken or damaged tools and equipment from the jobsite.
- Protect all temporary power (including extension cords) with ground fault circuit interrupters (GFCIs). Plug into a GFCI-protected temporary power pole, a GFCI protected generator, or use a GFCI extension cord to protect against shocks (Figure 22).
- Don't bypass any protective system or device designed to protect employees from contact with electrical current.
- Locate and identify overhead electrical power lines. Make sure that ladders, scaffolds, equipment or materials never come within 10 feet of electrical power lines.

3.10 GROUND-FAULT CIRCUIT INTERRUPTERS (GFCI)

T&N Van Service uses Ground Fault Circuit Interrupters whenever feasible. A ground-fault occurs when there is a break in the low-resistance grounding path from a tool or electrical system. The electrical current may then take an alternative path to the ground through the user, resulting in serious injuries or death. The ground-fault circuit interrupter, or GFCI, is a fast-acting circuit breaker designed to shut off electric power in the event of a ground-fault within as little as 1/40 of a second. It works by comparing the amount of current going to and returning from equipment along the circuit conductors. When the amount going differs from the amount returning by approximately 5milliamperes, the GFCI interrupts the current.

The GFCI is rated to trip quickly enough to prevent an electrical incident. If it is properly installed and maintained, this will happen as soon as the faulty tool is plugged in. If the grounding conductor is not intact or of low-impedance, the GFCI may not trip until a person provides a path. In this case, the person will receive a shock, but the GFCI should trip so quickly that the shock will not be harmful.

The GFCI will not protect you from line contact hazards (i.e. a person holding two "hot" wires, a hot and a neutral wire in each hand, or contacting an overhead power line). However, it protects against the most common form of electrical shock hazard, the ground-fault. It also protects against fires, overheating, and destruction of wire insulation.

Because GFCIs are so complex, they require testing on a regular basis. Test permanently wired devices monthly, and portable-type GFCIs before each use. All GFCIs have a built-in test circuit, with test and reset buttons, that triggers an artificial ground-fault to verify protection. Ground-fault protection, such as GFCIs provide, is required by OSHA in *addition* to (not as a substitute for) general grounding requirements.

RECEPTACLE TYPE: The Receptacle Type incorporates a GFCI device within one or more receptacle outlets. Such devices are becoming popular because of their low cost.

PORTABLE: Portable Type GFCIs come in several styles, all designed for easy transport. Some are designed to plug into existing non-GFCI outlets, or connect with a cord and plug arrangement. The portable type also incorporates a no-voltage release device that will disconnect power to the outlets if any supply conductor is open. Units approved for outdoor use will be in enclosures suitable for the environment. If exposed to rain, they must be listed as waterproof.

CORD-CONNECTED: The Cord-Connected Type of GFCI is an attachment plug incorporating the GFCI module. It protects the cord and any equipment attached to the cord. The attachment plug has a non-standard appearance with test and reset buttons. Like the portable type, it incorporates a no-voltage release device that will disconnect power to the load if any supply conductor is open.

3.12 ERGONOMICS & MANUAL LIFTING

Ergonomic injury risk factors include forceful movements, repetitive motions, awkward postures, and lack of rest. Rest periods give the body time to recover from work; break time exercises and stretches strengthen the body. Workers should think of themselves as Industrial Athletes; athletes wouldn't participate in a sport without proper rest and warm-up, so use the same preparation on the job.

Breaks - Pay attention to signs of discomfort and fatigue on the job; these are warning signs from your body. As muscles tire during a work task, slouching can lead to poor posture, sloppy, uncontrolled movements, and injuries. Rest breaks mean recovery for the body. During a job task, take micro-breaks lasting 10-15 seconds every ten minutes. Take periodic mini-breaks lasting 3-5 minutes. These short breaks give the body a rest, reduce discomfort, and improve your performance.

Rest Periods - Alternate your work activities and postures throughout the day. Rotating tasks may seem inefficient, but the rest and use of different muscle groups increases energy and maintains productivity. For example, if you are a landscaper, don't trim all of the shrubs, sweep up the trimmings, and then leaf-blow the whole area; work in sections and trim, sweep, and leaf-blow in alternating tasks. If you work at a single workstation and job task all day, move into different postures while you work: first standing, then standing with one foot resting on a stool, then sitting.

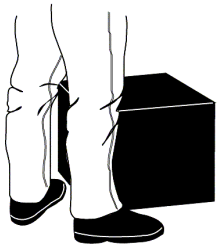
Stretches - Stretches help you to warm-up before work and relax during breaks; they increase flexibility and boost blood flow and oxygen to muscles. Perform stretches slowly and gently; avoid extreme postures and stop stretching if you feel pain or discomfort. Physical and Occupational Therapists are the most qualified individuals to generate a specific stretching and warm-up program.

Proper Lifting Techniques - There are a wide variety of injuries that can happen to the back. Some injuries are serious enough to require surgery. Some injuries lead to permanent disability. Any back injury can limit all of your activities, both on and off of the job. By using the correct lifting posture, you can avoid back injury.

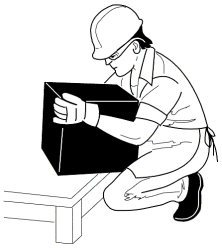
The basic rules of good lifting are:

- Size up the load before you lift. Test by lifting one of the corners or pushing. If it's heavy or feels too clumsy, get a mechanical aid or help from another worker. When in doubt, don't lift alone.
- Bend the knees. Note that this item is the single, most important aspect of lifting.
- Place your feet close to the object and center yourself over the load.
- Get a good handhold.
- Lift straight up, smoothly, and let your legs do the work, not your back.
- Do not twist or turn your body once you have made the lift.
- Make sure beforehand that you have a clear path to carry the load.
- Set the load down properly.
- Always push, not pull, the object when it's on a cart or dolly.
- If it's a long load, get some help.
- Split the load into several smaller ones when you can.

Safe Lifting Techniques



1. Stand close to the load with feet spread apart about shoulder width, with one foot slightly in front of the other for balance.



2. Squat down bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.

3. Get a firm grasp of the object before beginning the lift.

4. Begin slowly lifting with your LEGS by straightening them. Never twist your body during this step.

5. Once the lift is complete, keep the object as close to the body as possible. As the load's center of gravity moves away from the body, there is a dramatic increase in stress to the lumbar region of the back.

TAB 4: SAFETY MEETINGS & TRAININGS

4.1 SAFETY MEETINGS

Safety meetings are an important part of jobsite safety. They are an opportunity for employees and their Supervisor to discuss specific hazards encountered at the jobsite and how best to address them.

Meetings will focus on situations faced by the workers in the current work environment. Prior to each shift, Supervisors should address the hazards that will face the workers on the particular jobsite. Individual workers should be encouraged to provide input on their observations of hazards that exist or will be encountered during the shift that is about to begin.

Effective safety meetings should incorporate the following:

- Discuss safety policies and procedures with management and making recommendations for improvements.
- Review accident investigation reports on all accidents and "near-misses".
- Identify unsafe conditions and work practices and making recommendations for corrections.
- Discuss problems that have arisen or that are anticipated shall be discussed along with any other safety and health topics.

The meeting should be kept a valuable educational experience by:

- Keep the discussion flowing and on-topic
- Start and stop the meetings on time
- Use illustrated material and demonstrations to make the point
- Discuss each topic thoroughly
- Review accidents, injuries, property losses, and near misses
- Evaluate accidents, injuries, property losses, and near misses for trends and similar causes to initiate corrective actions.

Safety meetings may also incorporate various training topics in the form of toolbox talks which are brief discussions regarding areas of safety applicable to a particular task or jobsite. Tool box talks that include subject matter applicable to construction are included in the training section of this document.

Each safety meeting will be documented on the form on the following page.

♦ Safety Meeting Minutes

Jobsite: _____ Date: _____

Supervisor: _____

Topics Discussed:

_____
_____
_____
_____
_____

Action Items:

_____
_____
_____
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Meeting Attended by (print name):

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4.2 TRAINING & EDUCATION

Training is an essential component of an effective safety and health program addressing the responsibilities of both management and employees at the site. Training is most effective when incorporated into other education on performance requirements and job practices.

Training programs should be provided as follows:

- Initially when the safety and health plan is developed
- For all new employees before beginning work
- When new equipment, materials, or processes are introduced
- When procedures have been updated or revised
- When experiences/operations show that employee performance must be improved
- At least annually

Besides the standard training, employees should also be trained in the recognition of hazards – be able to look at an operation and identify unsafe acts and conditions. A list of typical hazards employees should be able to recognize may include:

- **Fall hazards** - falls from- floors, roofs and roof openings, ladders (straight and step), scaffolds, wall openings, tripping, trenches, steel erection, stairs, chairs
- **Electrical hazards** - appliances, damaged cords, outlets, overloads, overhead high voltage, extension cords, portable tools (broken casing or damaged wiring), grounding, metal boxes, switches, ground fault circuit interrupters(gfci)
- **Caught between** – cave-ins, unguarded machinery, equipment, confined spaces
- **Struck by** – vehicles, machinery, flying/falling objects, concrete/masonry walls
- **Housekeeping issues** - exits, walkways, floors, trash, storage of materials (hazardous and non-hazardous), protruding nails, exits (blocked), trips/slips, stairs, un-even flooring, electrical cords, icy walkways, etc.
- **Fire hazards** - oily-dirty rags, combustibles, fuel gas cylinders, exits (blocked)
- **Health hazards** - silicosis, asbestos, loss of hearing, eye injury due to flying objects, chemical exposures, poison ivy, stagnant water

Employees trained in the recognition and reporting of hazards and Supervisors trained in the correction of hazards will substantially reduce the likelihood of a serious injury.

4.3 NEW HIRE ORIENTATION

Whenever a new employee comes on board, there is a period of training and learning in which the new employee learns about the company's safety and health programs, emergency action plans, fire protection policy, and any other safety-related issues that the employee must know. This is also an opportunity to influence the new employee on the safety culture of the company, and positively influence that employee to keep safety always in mind.

The employee orientation will be started during the employee's first day on the job. A qualified company representative will conduct the new hire orientation. The entire orientation program may be broken up over a period of a few days, but when it is complete, employees should know the following safety information:

- The organization's safety objectives and goals.
- The function of the corporate safety committee.
- What employees should do if they are injured on the job.
- The procedures for reporting accidents, near-miss incidents, hazards, injuries, and illness.
- What to do in case of an emergency.
- The facility's use of warning signs and tags.
- OSHA's recordkeeping requirements and employee access to exposure and medical records.
- The safety rules and safe procedures that apply to their jobs (especially for tasks with OSHA-required training).

As part of the new hire orientation process, the following topics, at minimum, will be covered:

- OSHA's Employee Responsibilities
- Personal Protective Equipment
- Hazard Communication
- Emergency Evacuation & Fire Safety
- Bloodborne Pathogens

TAB 5: TOOLBOX TALKS

- Insert Toolbox Talks

TAB 6: INJURY & ILLNESS REPORTING & PREVENTION

6.1 ACCIDENT & INCIDENT INVESTIGATION

Thorough accident investigations will help to determine why accidents occur, where they happen, and any trends that might be developing. Such identification is critical to preventing and controlling hazards and potential accidents. All incidents will be investigated to the appropriate level with regards to incident severity using a root cause analysis process or other similar method.

When an incident occurs, the following sequence of reporting events will be followed:

1. If medical attention is required, call 911 or alert the first responder
2. Alert the Supervisor on site
3. Alert all personnel necessary to control further loss
4. Report all fatalities to OSHA within 8 hours of the incident.
5. Report all work-related inpatient hospitalizations, amputations, or losses of an eye to OSHA within 24 hours of the incident.
6. If working at another company's location, report all incidents to the owner client within 24 hours of the incident.

After an incident has occurred, proper actions must be taken to prevent further loss. Proper equipment to assist in conducting an incident investigation will be available to persons responsible for conducting the investigation.

Individual responsibilities for incident investigation must be assigned prior to the occurrence of an incident. Personnel are trained in their roles and responsibilities for incident response and investigation techniques. Employees who are assigned the role of first responder must be trained and qualified in first aid techniques to control the degree of loss during the immediate post-incident phase.

SUPERVISORS

- Provide first aid, call for emergency medical care if required.
- If further medical treatment is required, arrange to have an employer representative accompany the injured employee to the medical facility.
- Secure area, equipment and personnel from injury and further damage.
- Contact Safety Coordinator.

SAFETY COORDINATOR

- Investigate, identify, and document all of the evidence involved with the incident. Collect, preserve, and secure all facts, employee and witness statements; take pictures and physical measurements of incident site and equipment involved.
- Complete an incident investigation report form (see following pages), a detailed narrative, and the necessary workers' compensation paperwork within 24 hours whenever possible.
- Ensure that corrective action to prevent a recurrence is taken, assign responsibilities for corrective actions, and track the corrective actions to closure.
- Discuss incident, where appropriate, in safety and other employee meetings with the intent to prevent a recurrence.
- Discuss incident with the Supervisor and other management.

- If the injury warrants time away from work, ensure that the absence is authorized by a physician and that you maintain contact with your employee while he/she remains off work.
- Monitor status of employee(s) off work, maintain contact with employee and encourage return to work even if restrictions are imposed by the physician.
- When injured employee(s) return to work they should not be allowed to return to work without "return to work" release forms from the physician. Review the release carefully and ensure that you can accommodate the restrictions, and that the employee follows the restrictions indicated by the physician.

Documentation of the incident is an important step in preventing future occurrences. Gathering facts, witness statements, and taking photos and sketches of the accident site provides a solid base to begin the review process. Once all documentation is gathered and the accident report has been written, management will assess the results, and place any necessary changes to processes into effect to prevent a reoccurrence of similar events. Any lessons learned and changes to processes will be communicated to employees.

6.2 NEAR MISS REPORTING

A near miss is similar to an accident; however, a near miss does not result in an injury or property damage. No matter how trivial they are, near misses should be reported to the Supervisor in the same manner as accidents are reported. Reporting near misses in a timely manner can help to determine how to prevent a recurrence that could result in a serious injury.

Nothing is learned from unreported near misses. Hazards, causes and contributing factors are lost if not reported. Employees who don't take the time to report near misses they experience may not learn from them and neither will others who were not involved. The fact that many near misses come within inches of being disabling injury accidents makes failing to report them all the more serious.

Reasons that employees typically do not report near misses:

- Fear of Supervisor's disapproval
- Production time
- Desire to not have the near miss documented on the employee's records
- Embarrassment from coworkers' ridicule or sarcasm
- Failure to understand the importance of near miss reporting
- Inability to recognize the damage that could have resulted

Important questions to ask when investigating a near miss include:

- What are the circumstances surrounding the near miss?
- Is there a safety rule covering the situation?
- If so, did the person involved know the rule?
- Were any safety devices or PPE/clothing not used or used incorrectly?
- Have there been other near misses of the same type?
- Was the employee aware of the hazard?
- Did the employee know the safe and proper procedure?

Taking the opportunity to report near misses can mean a much safer and healthier work environment for you and your coworkers and can also mean going home as you came in, in one piece! Employees are required as part of their job duties to report all near misses to their Supervisor.

♦ Accident/Incident/Near Miss Report & Investigation Form

1. This form must be used to report any accident, incident, or near miss that has occurred at the workplace. A separate form must be completed by each party involved.
2. The form should be completed by the person involved and immediately forwarded to the Supervisor for review and action.
3. The Supervisor will complete this form if the involved party is not able to do so.

Incident Details

Location:	**Date of incident:**
Reported by:	**Time of incident:**

Description of Incident:

What was the activity at the time of incident? Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"

Explain how the incident occurred and what object directly harmed the employee (if applicable). Examples: "When ladder slipped on wet floor, worker fell 20 feet to a concrete floor"; "Worker was sprayed with chlorine when gasket broke during replacement".

Other Relevant Information (attach photos, sketch of incident scene, etc.)**:**

**** If no parties were injured, proceed to page 3. ****

Injured Person

Name:	**Title:**
Address:	**Hire Date**
City, State	**Length of time in current position:**
Phone:	**Supervisor:**
Employee Classification: ❑ Full Time ❑ Part Time ❑ Contract ❑ Temporary	

Description of Injury:

Nature of Injury/Injured Part of Body:

❑ Bruising ❑ Dislocation ❑ Strain/Sprain ❑ Scratch/Abrasion ❑ Internal

❑ Fracture ❑Foreign Body ❑ Laceration/Cut ❑ Burn/Scald ❑ Chemical Reaction

❑ Amputation ❑ Death ❑ Other (describe): _____

Treatment Provided:

❑ First Aid - If First Aid was provided, please indicate the treatment performed:

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

❑ Other treatment, please describe:

❑ Emergency Room ❑ Physician's Office ❑ Hospitalization	**Treating Physician/Facility:**	
	Address	

Root Cause Analysis (check all that apply)

Conditions:	**Work Practices**	**Disciplinary Infraction:**
☐ Unsafe Conditions ☐ Poor work area design or layout ☐ Congested work area ☐ Hazardous substances ☐ Fire or explosion hazard ☐ Inadequate ventilation ☐ Slippery conditions ☐ Excessive noise ☐ Improper material storage ☐ Improper loading or placement	☐ Improper work technique ☐ Improper PPE or PPE not used ☐ Hazards not identified ☐ Guards not used ☐ Improper lifting ☐ Poor housekeeping ☐ Servicing machinery in motion ☐ Inadequate workplace inspection ☐ Improper tool or equipment ☐ Improper maintenance ☐ Defective tools/equipment	☐ Lack of written procedures or policies ☐ Operating without authority ☐ Safety rules not enforced ☐ Safety rule violation ☐ Operating at improper speeds ☐ Horseplay ☐ Drug or alcohol use ☐ Unsafe act of others ☐ By-passing safety devices ☐ Unsafe Acts
Planning & Training ☐ PPE unavailable ☐ Failure to warn or secure ☐ Inadequate job planning ☐ Inadequate guarding of hazards ☐ Inadequate equipment ☐ Unsafe design or construction ☐ Insufficient lighting ☐ Inadequate fall protection	☐ Poor process design Insufficient worker training ☐ Insufficient foreman training ☐ Insufficient knowledge of job Management Deficiencies ☐ Inadequate supervision ☐ Inadequate hiring practices Unrealistic scheduling ☐ Unnecessary haste	Other: ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____

Corrective Actions

Contributing Factor	**Corrective Action**	**Responsible Party**	**Completion Date**

Lessons Learned

Management Review

Initial Report Completed by:	
Printed Name:	Date:
Signature:	Job Title:
Management Review:	
Printed Name:	Date:
Signature:	Job Title:
Final Review:	
I certify that all Corrective Actions have been completed.	
Printed Name:	Date:
Signature:	Job Title:

6.3 EMPLOYEE ACCESS TO MEDICAL RECORDS

The purpose of this program is to provide employees with information of their right to access relevant exposure records to toxic substances or harmful physical agents in their workplace. Under OSHA's standard, Access to Employee Exposure and Medical Records (1910.1020) all employees have the right to obtain these records to prevent or identify potential occupational illnesses. Employees have the right to obtain exposure records as follows:

- A current or former employee who is or may have been exposed to toxic substances or harmful physical agents.
- An employee who was assigned or transferred to work involving toxic substances or harmful physical agents.
- The legal representative of a deceased or legally incapacitated employee who was or may have been exposed to toxic substances or harmful physical agents.
- Designated employee representatives may access employee medical or exposure records and analyses created from those records only in very specific circumstances. Designated employee representatives include any individual or organization to whom an employee has given written authorization to exercise a right of access

TYPES OF EXPOSURES

- Metals and dusts, such as lead, cadmium, and silica.
- Biological agents, such as bacteria, viruses, and fungi.
- Physical stress, such as noise, heat, cold, vibration, repetitive motion, and ionizing and non-ionizing radiation.

DEFINITIONS

Access - The right and opportunity to examine and copy

Designated Representative - Any individual or organization to whom an employee gives written authorization to exercise a right of access. For the purposes of access to employee exposure records and analyses using exposure or medical records, a recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Employee Exposure Record - May contain any of the following:

- Monitoring results of workplace air or measurements of toxic substances or harmful physical agents in the workplace, including personal, area, grab, wipe, or other forms of sampling results.
- Biological monitoring results, such as blood and urine test results.
- Material safety data sheets (MSDSs) containing information about a substance's hazards to human health.

Employee Medical Record:

- Medical and employment questionnaires or histories.
- Results of medical examinations and laboratory tests.
- Medical opinions, diagnoses, progress notes, and recommendations.
- Descriptions of treatments and prescriptions.
- Employee medical complaints.

EMPLOYER RESPONSIBILITIES

- Preserve and maintain accurate medical and exposure records for each employee.3
- Inform workers of the existence, location, and availability of those medical and exposure records.
- Provide information regarding the standard to all employees and where records are available
- Provide records to employees or designated representatives
- Maintain employee records for the duration of employment, plus 30 years
- Exemptions from keeping records:
    - Physical specimens, such as blood and urine samples
    - Records concerning health insurance claims if they are (1) maintained separately from your medical program and its records, and (2) not accessible by employee name or other personal identifier (e.g., social security number or home address).
    - Records created only for use in litigation that are privileged from discovery.
    - Records created as part of voluntary employee assistance programs, such as records for alcohol and drug abuse or personal counseling, if they are maintained separately from your medical program and its records.
    - Trade secret information involving manufacturing processes or a percentage of a chemical substance in a mixture, as long as you inform health professionals and employees and their designated representatives that you have deleted that information from medical and exposure records. If the exclusion of the trade secret information substantially impairs the evaluation of when and where the exposure occurred, however, you must provide alternative information to the employee consistent with the requirements of 29 CFR Part 1910.1020.

6.4 OSHA REPORTING & RECORDKEEPING

OSHA EMERGENCY REPORTING

All incidents must be reported to an appointed company official immediately.

Company Official: _____

Office: _____ Cell: _____

Depending on the nature and severity of the incident, the company official will ensure that the necessary actions are taken (outlined below).

Type of Incident	Reporting/Recordkeeping	Time Frame
• Fatality (On the job death)	Report to OSHA @ 1-800-321-OSHA (6742)	Within 8 hours of the incident
• Work-related inpatient hospitalization • Amputations • Loss of an eye	Report to OSHA @ 1-800-321-OSHA (6742)	Within 24 hours of the incident
• All incidents	Conduct an accident investigation	Immediately
• OSHA-recordable injuries/illnesses (as outlined below)	Complete OSHA 301 (or equivalent) Enter a log entry on OSHA Form 300.	Within 7 days of the injury or illness

OSHA RECORDKEEPING

OSHA recordkeeping is required for any employer with 11 or more employees at any time within the year. If an injury or accident should ever occur, it must be reported to the Supervisor as soon as possible. An OSHA 300 log entry and summary report (OSHA 301 form or equivalent) must be maintained for every recordable injury and illness. The entry should be completed within 7 days after the injury or illness has occurred.

An OSHA recordable injury or illness is defined as an injury resulting in loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid. First Aid includes:

- Tetanus shots
- Applying Band-Aids or butterfly bandages
- Cleaning, flushing or soaking wounds
- Applying Ace bandages and wraps
- Taking non-prescription drugs at non-prescription strength (aspirin, Tylenol, etc.)
- Drilling fingernails/toenails
- Eye patches, eye flushing and foreign body removal from eye with Q-tips
- Finger guards
- Hot or cold packs
- Drinking fluids for heat stress
- Removing of a splinter (other than from the eye)

An annual summary of recordable injuries and illnesses (OSHA 300A) must be posted at a conspicuous location in the workplace from February 1 to April 30 and contain the following information: calendar year, company name, establishment name, establishment address, certifying signature of the highest-ranking company official, title, and date. If no injury or illness occurred in the year, zeroes must be entered on the total line.

The OSHA logs should be evaluated by the employer to determine trends or patterns in injuries in order to appropriately address hazards and implement prevention strategies. OSHA recordkeeping forms must be maintained for a period of 5 years.

Note: The OSHA 300 and 301 logs must be kept confidential.

6.5 OSHA POSTER

OSHA®
Occupational Safety and Health Administration

Job Safety and Health
IT'S THE LAW!

All workers have the right to:

- A safe workplace.
- Raise a safety or health concern with your employer or OSHA, or report a work-related injury or illness, without being retaliated against.
- Receive information and training on job hazards, including all hazardous substances in your workplace.
- Request an OSHA inspection of your workplace if you believe there are unsafe or unhealthy conditions. OSHA will keep your name confidential. You have the right to have a representative contact OSHA on your behalf.
- Participate (or have your representative participate) in an OSHA inspection and speak in private to the inspector.
- File a complaint with OSHA within 30 days (by phone, online or by mail) if you have been retaliated against for using your rights.
- See any OSHA citations issued to your employer.
- Request copies of your medical records, tests that measure hazards in the workplace, and the workplace injury and illness log.

This poster is available free from OSHA.

Employers must:

- Provide employees a workplace free from recognized hazards. It is illegal to retaliate against an employee for using any of their rights under the law, including raising a health and safety concern with you or with OSHA, or reporting a work-related injury or illness.
- Comply with all applicable OSHA standards.
- Report to OSHA all work-related fatalities within 8 hours, and all inpatient hospitalizations, amputations and losses of an eye within 24 hours.
- Provide required training to all workers in a language and vocabulary they can understand.
- Prominently display this poster in the workplace.
- Post OSHA citations at or near the place of the alleged violations.

FREE ASSISTANCE to identify and correct hazards is available to small and medium-sized employers, without citation or penalty, through OSHA-supported consultation programs in every state.

Contact OSHA. We can help.

1-800-321-OSHA (6742) • TTY 1-877-889-5627 • www.osha.gov

- OSHA Recordkeeping Packet

TAB 7: DISCIPLINE & ENFORCEMENT

7.1 SAFETY RULES AND PROCEDURES

The following safety rules & procedures have been set forth by T&N Van Service as minimum guidelines. If a situation arises that there is not a pre-established rule, the employee is expected to take all precautions and measures available to them to act in a safe manner.

General:

- Follow all safety rules
- Always wear all prescribed personal protective equipment
- Utilize safety guards on power tools. Do not remove guards
- Enter confined spaces or trenches only when trained and when instructed to
- Do not use damaged cords.
- Stay 10 feet away from power lines
- Only qualified trained personnel are permitted to operate machinery or equipment.
- Report all accidents, incidents, and near misses immediately to the Supervisor
- Use chemicals properly and obey all hazard warnings
- All hand and power tools and similar equipment must be maintained in a safe condition; replace broken or damaged tools.
- Keep the workplace clean and orderly; promptly remove trash.
- Read and follow all warning signs
- Manufacturer's specifications, limitations, & instructions shall be followed.
- Do not remove or deface warning labels or signage

Training & Work procedures:

- Do not attempt to undertake a job until you have received training on all potential hazards associated with the job and the methods/procedures necessary to protect yourself
- Particular attention should be given to new employees and to employees moving to new jobs or doing non-routine tasks.
- No employee is required to work under conditions which are unsanitary, dangerous or hazardous to their health.
- All employees shall be trained on every potential hazard that they could be exposed to and how to protect themselves.

Postings:

- All OSHA posters shall be posted in a visible location.
- Emergency numbers shall be posted and reviewed with employees

Construction equipment:

All equipment left unattended at night, adjacent to a highway in normal use, or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, to identify the location of the equipment.

- No construction loads shall be placed on a concrete structure or portion of a concrete structure unless the employer determines, based on information received from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.
- A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more, and no ramp, runway, sloped embankment, or personnel hoist is provided.

Housekeeping:

- All places of employment shall be kept clean, the floor of every workroom shall be maintained, so far as practicable, in a dry condition; standing water shall be removed. Where wet processes are used, drainage shall be maintained and false floors, platforms, mats or other dry standing places or appropriate waterproof footgear shall be provided.
- To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, and holes and openings.
- All floor openings, open sided floor and wall openings shall be guarded by a standard railings and toe boards or cover.
- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.

7.2 DISCIPLINARY POLICY

T&N Van Service's disciplinary policy is comprised of a corrective action process aimed to document and correct undesirable employee behavior, including violations of safety rules. The safety coordinator, Supervisors, and management are responsible for enforcement of this disciplinary policy.

Major elements of this policy include:

- Physical inspections by company officials indicating violations showing overall lack of commitment to company safety goals shall be under the same level of disciplinary actions.
- Constructive criticism/instruction by the Supervisor to educate and inform employees of appropriate safety performance and behavior.
- Correcting employee's negative behavior to the extent required.
- Informing the employee that continued violation of company safety policies may result in termination.
- Written documentation of disciplinary warnings and corrective action taken.

Safety violations include, but are not limited to:

- Not following safety procedures, guidelines or rules
- Horse play
- Failure to wear selected PPE
- Abuse of selected PPE

Depending on the facts and circumstances involved with each situation, the company may choose any corrective action including immediate termination. However, in most circumstances the following steps will be followed:

1. ***Verbal Warning*** informally documented (note to project or Supervisor file), by a Supervisor or safety coordinator for minor infractions of company safety rules. A Supervisor or safety coordinator must inform the employee what safety rule or policy was violated and how to correct the problem.
2. ***Written Warning***, documented in employee's file. Repeated minor infractions or a more substantial safety infraction requires issuance of a written warning. Every attempt should be made to re-educate the employee on the desired performance. The employee should acknowledge the warning by signing the document before it is placed in their personnel file.
3. ***Suspension*** for three (3) working days. If employee fails to appropriately respond or management determines the infraction is sufficiently serious.
4. ***Termination*** for repeated or serious safety infractions.

♦ Disciplinary Action Form

Employee Name: _____ Employee Job Title: _____

Supervisor Name: _____ Today's Date: _____

Date/Time of Incident:	**Location:**
Description of incident:	
Witnesses if any:	
Policy/Policies violated:	
Disciplinary action to be taken:	
Consequence(s) if employee repeats this offense:	
If the employee has offered an explanation of his/her conduct, detail explanation here:	

I have read the above, and I understand the consequences if I repeat my offense.

_____ _____

Signature of Employee Date

_____ _____

Signature of Supervisor Date

TAB 8: MISCELLANEOUS JOBSITE INFORMATION