



City Of Round Rock

Safety Manual

***ALWAYS THINK SAFETY NO MATTER WHAT YOUR
JOB IS!***

Date Implemented: 3 Jun 2013

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SECTION 1- COMPONENTS OF THE SAFETY PROGRAM:

City of Round Rock Safety Program

Purpose

The purpose of the safety program is to have a system designed to prevent workplace related incidents, accidents and occupational illnesses. The overall safety program is made up of the City's Safety Policy (*located in the City's Human Resources Policy and Procedure Manual*), City's Safety Manual and Department's Risk Management Plan. The Safety Manual will cover administrative policies/procedures, general safety guidelines and safe work practices for all Departments. The department's Risk Management Plan will cover specific policies, procedures, safety guidelines and exposures unique to the Department. A department's Risk Management Plan may supplement and provide greater protections for the employee but will not override policies contained herein. OSHA has no jurisdiction over municipalities in Texas. However, OSHA standards were used as a guideline in this manual and may be used in department specific risk management plans. -

Process

- Identify, track, and investigate the direct and indirect causes of workplace accidents
- Accident investigation
- Identify and correct potential hazards – unsafe conditions in the work environment
- Identify and control exposures which may cause work related illnesses
- Address and change unsafe behaviors/unsafe procedures which may lead to accidents
- Supervisor leadership

Goal

- Reduce our accident rate
- Reduce our workers compensation insurance premiums, direct and indirect costs and loss of assets
- Create an effective and perceptible secure and safe culture
- Create a safe living, learning and working environment for employees

General Duty Clause

The City of Round Rock shall:

- (1) Furnish to each of its employees a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to our employees.
- (2) Comply with established occupational safety and health standards.
- (3) Have each employee comply with established occupational safety and health standards and all rules, regulations, and orders issued which are applicable to their own actions and conduct.

CITY OF ROUND ROCK



HEALTH, SAFETY, SECURITY, AND ENVIRONMENT MANAGEMENT SYSTEM

The City of Round Rock will continuously promote Health, Safety, Security, and Environment awareness by bringing positive attitudes into alignment with responsible behaviors.

HEALTH, SAFETY, SECURITY, AND ENVIRONMENT POLICY STATEMENT

Health, Safety, Security, and Environment protection is an integral part of all our operations and services. The City of Round Rock strives to prevent accidents, incidents, injuries, occupational illnesses, and losses, and will make continuous effort to protect the environment through active participation of employees, contractors, and citizens.

On Health, the City will conduct all operations in such a manner to avoid harm to the health of employees and other involved persons;

On Safety, the City will plan for operations, establish safe practices, and provide training in a manner consistent with the best applicable practices to minimize risks and potential hazards to employees, other persons, and our resources;

On Security, the City makes all efforts to maintain secure operations to safeguard employees, customers, resources, and assets through ongoing risk assessment, loss prevention strategies, and site security of all facilities while respecting civil rights and fundamental freedom;

On Environment, the City will consistently and progressively promote the protection of the environment and encourage the efficient use of water, energy and protecting our natural resources.

By accepting mutual responsibility for health, safety, security, and environment, we contribute to the well – being of one another and to the accomplishment of our mission.

I. SAFETY RESPONSIBILITIES:

A. Management Safety Responsibilities:

Managers are responsible for providing a place of employment that is reasonably free from recognized hazards that could result in injuries or accidents. Since it is impossible for managers to personally observe all employee activities, they must ensure that all supervisors and employees alike are trained and are aware of their safety responsibilities. Other safety responsibilities for managers include:

- Ensuring that a department specific risk management plan is completed.
- Provide sufficient time and resources for required safety training.
- Provide leadership and direction concerning safety activities.
- Participate actively in the continuous evaluation of the safety program.
- Set goals concerning safety performance within the department.
- Review losses for potential trends on a regular basis.
- Enforce all safety rules.
- Participate in facility and work site audits.
- Participate and support all accident investigation activities.
- Require that all personal protective equipment used in the department is reviewed annually to determine if there is a newer, safer alternative.
- Review accident reports and recommend corrective actions.

B. Supervisor Safety Responsibilities:

Safety is as much a part of the supervisor's responsibility as is getting the job done efficiently. In addition to the aforementioned responsibilities of managers, the important safety responsibilities of each and every supervisor ~~also~~ include:

- Familiarize yourself with and enforce the safety rules and regulations established by applicable local, state, and federal organizations. These regulations set minimum standards for safety. The contents of the regulations should be enforced as minimum safety requirements for all activities on our work sites and in our facilities.
- Correct, or have corrected, all reported hazards. Operating under known hazardous conditions will not be tolerated.
- Do not permit new or inexperienced employees to operate vehicles for which they are not licensed or trained, work with power tools, machinery or complex equipment without proper instruction and training.
- Conduct required safety training.
- Give adequate instructions. Do not assume that an employee knows how to do a job unless you have personal knowledge ~~that~~ the person can perform the task correctly.
- Ensure tools, equipment, and machinery being used in the workplace is in proper working condition.
- Ensure proper personal protective equipment is available and utilized by employees when required.

- Review all personal protective equipment used on an annual basis to determine if there is a safer alternative.
- Always set a good example in safety, such as wearing the proper personal protective equipment and following policies and procedures.
- Consistently enforce the requirements of the organization's safety program and any associated rules or policies.
- Ensure that all employees have access to a copy of the organization's safety program.
- Encourage safety suggestions from employees under your supervision.
- Obtain prompt first aid for injured employees.
- Conduct accident or incident investigations involving your employees.
- Conduct inspections of all work areas and facilities on a regular basis in an effort to improve housekeeping, eliminate unsafe conditions and encourage safe work practices.

C. Employee Safety Responsibilities:

Employees are a crucial part of any safety program. Your actions, knowledge, mental state, physical condition, and attitude directly affect the safety of yourself and your fellow employees. Safety responsibilities for all employees include but are not limited to:

- Know your job, follow instructions, and think before you act
- Use appropriate personal protective equipment as dictated by the job and by policy.
- Work according to written safety practices as trained, posted, instructed, or discussed.
- Refrain from any unsafe act that might endanger yourself or your fellow workers.
- Never take short-cuts. Use all safety devices provided for your protection.
- Report any unsafe situation or act to your supervisor immediately.
- Assume responsibility for thoughtless or deliberate acts that may cause injury to yourself or your fellow workers.
- Never operate equipment that you are not licensed or trained to use.
- Never operate equipment that is defective or needs repair. Defective equipment must be reported to your supervisor.
- Do not operate equipment requiring licensing or certification until you have obtained the appropriate license or certification.
- Report all accidents/incidents to your supervisor as soon as they occur.

II. ACCIDENT/INCIDENT INVESTIGATION POLICY:

All work-related accidents, incidents, or 'near misses' that result in or could have resulted in injury or property damage will be investigated. As nearly all accidents and incidents have their own unique characteristics, only general rules and procedures can be outlined within this policy. An **accident** is defined as "an undesirable or unfortunate happening that occurs unintentionally and usually results in harm, injury, damage or loss".

Examples of accidents include on-the-job injuries (regardless of severity) and vehicle collisions. An **incident** is defined as "an occurrence of seemingly minor importance". Examples of incidents include 'near misses' or events where injuries or other accidents 'almost' occurred. The *Incident Report* will be used for the initial investigation.

A. Roles and Responsibilities:

- Employees must immediately report to their supervisor any on-the-job injury or illness they sustain, or suspect they have sustained, no matter how minor. They must also report any incidents with the potential to injure employees or third parties and any instances where property damage has occurred.
- Supervisors shall first respond to the immediate medical needs of any injured persons. Following any necessary medical attention, they should begin reporting and investigative activities as described in this policy.
- Witnesses will provide statements about what they observed. Witnesses may also be asked to participate in the initial and/or final investigations.
- The designated Risk Management representative is responsible for receiving the initial reports of injury or property damage and forwarding them to Texas Municipal League, (TML), representatives in a timely manner.
- The Safety Coordinator is responsible for reviewing the initial accident/incident report and coordinating a final investigation, if necessary.

B. Investigation Procedures:

The following procedures will be followed for any accident or incident as defined above.

1. Initial Notification:

- a. Employees are responsible for reporting all injuries, illnesses, or incidents as described earlier in this policy. Failure to report any injury or incident may be cause for disciplinary action. In the event of a serious or disabling injury, fellow employees must assume this reporting responsibility. The Risk Management Division must be notified ASAP of any injuries requiring hospitalization.

2. Initial Investigation:

- a. The supervisor shall immediately protect all other persons from the hazards that caused the initial incident and preserve the area where the incident occurred for investigation. After the injured person(s) have been attended to and the site is secure, the supervisor should begin the initial investigation. The initial investigation should include:
 - Injured employee completing the employee's portion of the incident report
 - Collect statements from witnesses
 - Photographs or sketches of area (cell phone photos are acceptable)
 - Completing the Incident Report in its entirety
 - Determination whether the employee violated any safety policy or work rule.
 - Immediate corrective actions, including but not limited to, removing or repairing defective equipment and/or issue disciplinary action.

3. **Initial Report:**

- a. An initial report will be completed for all accidents and incidents before the end of the next business day. The supervisor of the employee will complete the initial investigation and report as soon as possible after the occurrence. The initial incident report will be submitted to the Risk Management Division no later than the end of the next business day.

4. **Final Investigation:**

Within seven days of the original accident or incident, a final investigation will be completed, as necessary. Attendance at the investigation meeting will be: the injured worker, the crew or the staff, all supervisors/managers. The Department Director, Risk Manager and Safety Coordinator will attend as needed. The supervisor will go over the findings and recommendations with managers and staff. The final investigation report may be done in a memorandum format. ***Note: this is not always necessary for minor accidents/incident unless a trend is detected. At the least, conduct your investigation and share your findings with the involved parties.***

- The final investigation report should include:
- Description of the event by the involved persons
- Accounts of witnesses
- Input from supervision
- Listing of causes
- Development of corrective actions

Basically, the investigation must answer the following questions:

- Who was injured or what was damaged?
- When did the accident/incident occur?
- Where did the accident/incident occur?
- Why did the accident/incident occur?
- What caused the accident/incident to occur?
- How can it be prevented from occurring again?

The final investigation report will reflect all changes from the initial report and also must include:

- Finalized corrective actions
- Assigned completion dates for all corrective actions
- Assigned person(s) to complete the corrective actions. The persons assigned the corrective actions shall also be required to sign the final report when the corrective actions have been completed.

Copies of the final investigation report should be supplied to:

- Department Director
- Safety Coordinator

The Risk Manager or Safety Coordinator may conduct their own inquiry or investigation into the accident or incident. *Also see the Accident Investigation Procedure located on the Human Resources page on Employeeenet .*

III. SAFETY COMMITTEE:

A safety committee has been established for the City of Round Rock. The purpose of the committee is to recommend improvements to our workplace safety and accident prevention program and to help in the identification of necessary corrective measures to eliminate or control recognized safety and health hazards and exposures. The safety committee will consist of the Risk Manager, Safety Coordinator and Department's Health and Safety Coordinators. Departments may be required to designate a Health and Safety Coordinator. Health and Safety Coordinators will attend all safety meetings and training events and be prepared to make presentations at Health and Safety week.

A. Roles and Responsibilities of the Safety Committee:

The safety committee will continuously assist in evaluating the effectiveness of control measures used to protect employees from safety and health hazards in the workplace. The committee will also make recommendations as to any adjustments necessary to improve any components of the safety program.

The safety committee will be responsible for assisting management in reviewing and updating workplace safety rules based on accident investigation findings, inspection findings, employee reports of unsafe acts or conditions, and employee suggestions/complaints. These reviews will be conducted regularly during committee meetings and will focus on hazard/injury analysis and possible developing trends. Resources used during these analyses will include:

- Incident Reports
- Accident Investigation Reports
- Injury Log
- TML-IRP Loss History Reports
- Other Workers' Compensation Loss Reports
- Observations and Inspections Forms

The Risk Management division will maintain a copy of these records for reference as needed and will provide a written notification of any identified trends to supervisors, managers, and directors. The safety committee will assist management in continually evaluating employee accident prevention programs in an effort to promote safety awareness and employee participation in the safety program. This evaluation will involve conducting periodic safety inspections, observing work practices, reviewing accident causes, and suggesting recommendations for corrective measures. Responsibilities may also include updating or rewriting of policies or procedures as evaluations identify possible deficiencies.

Safety committee members will regularly participate in safety training activities, provide programs for HSSE week, and will also be responsible for assisting management in monitoring the effectiveness of workplace safety education and training sessions. Members of the

committee will participate in the development of improvements for identified deficiencies in the education and training programs.

B. Meetings:

Safety committee meetings will be held at least once a quarter or more often as necessary. A secretary will be selected and will be responsible for recording the minutes and proceedings of each meeting. A copy of the finalized minutes will be forwarded to each member of the committee and may also be posted in the workplace for other employees to review. Minutes from the most recent meeting should be reviewed at the beginning of each subsequent meeting for any necessary updates or changes.

IV. SAFETY EDUCATION & TRAINING POLICY:

A. Safety Meetings & Training:

Safety meetings are an effective way to encourage, educate and train employees on safe work practices. Safety meetings for field departments will be held monthly or more frequent based upon the specific department or operation. Other departments will have meetings on a quarterly basis or more often when so directed by the Risk Management division. Safety meetings will normally be conducted by the HSSE Coordinator or supervisor. Discussions of safety rules, possible hazards to be encountered in future job duties, or changes in procedures or equipment are some topics that should be covered on a regular basis. Topics discussed during safety meetings should pertain to the specific hazards associated with the employee's assigned job or task as well as general hazards associated with the workplace. All employee safety meetings and training will be documented according to the *Recordkeeping Policy in this manual*. Employees who do not attend regularly scheduled safety meetings or training will be identified and scheduled to attend makeup training at the supervisor's discretion. Documentation of makeup training will be made as well.

B. Special Training:

Additional or specialized safety training will be conducted for the following areas as the need arises:

- New equipment purchases
- New/changes in operations
- Identified areas of increased accidents
- Newly identified areas of exposure
- After the purchase of any new chemical or compound

C. New Employee Safety Orientation:

The Supervisor will provide an orientation to all new employees to address the hazards associated with their position and will include a review of all safety rules, policies/procedures, and equipment that are applicable to the employee's area of assignment within the first 14 days of employment. New employees will be given an opportunity to ask relevant questions that may pertain to their assigned duties and safety. Documentation of the new employee safety orientation will be complete using the appropriate form and maintained in accordance with the *Recordkeeping Policy*. New employee work activities will be limited until the safety orientation is completed.

D. Documentation of Safety Meetings & Training:

Documentation from any formal meeting, ‘tailgate’ meeting or training courses attended by employees, supervisors or managers will also be maintained for recordkeeping purposes using the appropriate form. Documentation should include the topic(s) covered, presenter information, and copies of any materials or handouts used during the training. The documentation associated with safety meetings and training will be kept in accordance with the *Recordkeeping Policy*.

V. SAFETY OBSERVATION & INSPECTION POLICY:

In an effort to detect unsafe acts or unsafe conditions and initiate necessary corrective actions as soon as possible, regularly scheduled, documented inspections will be conducted for all City of Round Rock facilities, vehicles, equipment, and worksites. The Risk Management division, Supervisors, managers and the Safety Coordinator will conduct these inspections. In addition, daily observations will be conducted on field operations. Employees may be requested or required to assist in conducting the inspections or observations. ***Once a month the following departments will provide the Safety Coordinator with dates, times, and locations of their crew’s worksites in the field:***

- PARC
- Utilities Environmental Services
- Transportation

This is for required monthly safety field inspections.

Employees are responsible to continually inspect their work areas, vehicles and equipment for possible hazards. Potential hazards should be immediately reported to supervisory personnel. Required corrective actions should be documented for any identified deficiencies. Follow-up corrective actions have been taken should also be documented on the inspection forms. The appropriate inspection forms will be completed for each facility, vehicle or piece of equipment. Employees assigned to drive vehicles and/or machinery and equipment will conduct inspections and complete the applicable forms each day, prior to using the vehicle or equipment. All completed inspection reports will be maintained according to the *Recordkeeping Policy*.

A. Departmental inspections should occur at the following intervals:

Weekly – Managers and supervisors shall conduct documented inspections of work areas, vehicles, tools and equipment for safe operations.

Monthly – Planned, scheduled and documented inspections by managers and supervisors on all equipment, vehicles and facilities.

B. As a result of any inspection, Department personnel should:

- Correct any safety issues immediately whenever possible.
- Notify any responsible Department/Division of safety issues that fall within their purview (i.e. vehicle maintenance, facilities maintenance, etc).
- Conditions that cannot be corrected immediately should be conveyed to Management in a written report. The conditions should be listed in the order of

- priority, including suggested solutions and compliance dates, if possible.
- Any unsafe tools, equipment, and vehicles shall be taken out of service until corrective action is taken.

VI. RECORDKEEPING POLICY:

It is the policy of the City of Round Rock to maintain records of all safety and accident documents for a minimum number of years as specified below. Documents may be kept in paper or electronic format. The Departments will appoint a person who will perform annual checks of the records for inclusion of all required safety documentation as described in this policy and will ensure that records are maintained and will include, but not limited to:

A. Injury Loss Records: These forms will be kept at the HR office.

- A copy of each Texas Department of Insurance (TDI) Division of Workers' Compensation Form DWC-1 (Employer's First Report of Injury). Shall be kept on file for five years.
- A copy of each TDI Division of Workers' Compensation Form DWC-6 (Supplemental Report of Occupational Injury or Illness). Shall be kept on file for five years.
- All TDI Division of Workers Compensation form DWC-73 forms shall be kept for five years.
- An injury log will be maintained to track all work-related injuries and illness reported by employees. The log will be updated and kept current by the Risk Management division and will be kept on file for three years.
- Claim and loss information from TML-IRP for all lines of coverage shall be maintained as well. This information will be used for various means of trend analysis and is kept in accordance with TML's recording keeping capabilities.

B. Incident Reports:

Supervisors will ensure that an incident report is completed for each reported accident or incident. A copy of all completed incident reports will be maintained at the Risk Management office. Incident reports involving injuries, not requiring medical attention, shall be kept on file for three years. Those involving medical attention will be kept on file for five years. An incident report involving a claim for property damaged will be kept on file for two years. Personal injury claims will be maintained on file for four years. Incident reports may be kept in either electronic or paper format at the discretion of the Risk Management division. All periods identified above are minimum requirements. Reports may be kept longer.

C. Inspection Reports:

All vehicle, equipment, worksite and facility inspection/observation reports will be maintained at the Departments for a period of one year. The supervisor will ensure that all required inspection reports are completed in a timely manner. Follow-up to necessary corrective actions, including date, tasks, or jobs completed, should be documented as well. All vehicle/equipment reports will be made available upon request of Vehicle Maintenance when vehicles or equipment are turned in for repair.

D. Safety Meetings, Training Records and Sign in Sheets:

Documentation of safety meetings and other training records will be maintained at the Department level. When safety meetings are used as training activities or there is a training event then sign-in sheets will be used. All training event records will be maintained by the Department and kept on file for 1 year.

E. Accident/Incident Analysis:

A file containing Accident/Incident Analysis reports, using a memorandum form, will be maintained at the Department level. These forms will be on file for three years.

F. Reviews and Revisions of the Safety Program & Risk Management Plans:

A file containing reviews and revisions of the program, using a memorandum form will be maintained at the Department level. These revisions will be kept on file for one year.

VII. ACCIDENT/INCIDENT ANALYSIS POLICY:

Every quarter, the Safety Coordinator and Department's HSSE Coordinators will review all reported injuries, incidents, near misses, property damage, accident investigations, unsafe condition reports, and inspection reports that have been completed over the past three months to determine if injury or hazard trends are developing. Where potential trends are identified, the cause(s) will be determined to assist in the implementation of corrective actions, as needed, to eliminate or reduce hazardous exposures to employees.

The Safety Coordinator will follow up on the effectiveness of the corrective actions to ensure the situations have been mitigated, abated, or are in the process of being corrected. Items to be addressed during the analysis include progress on previous corrective actions, trends, recently identified exposures, and safety meeting and inspection reports.

VIII. SAFETY PROGRAM REVIEW & REVISION POLICY:

The Risk Management Division will, at least annually, review the entire Safety Program for revisions to help address any potential new exposures within current operations. Areas that should be evaluated include, but are not limited to: operations/equipment added/changed, changes in environmental conditions, adequacy of personal protective equipment, and employee training. In addition, procedures should be reviewed to make sure they are still applicable. Additional review(s) will be conducted whenever changes are needed to the Safety Program prior to the annual review of the program. Upon changes in the Safety Program, all employees will be informed of these changes and provided proper training as needed. This review will be documented using the Safety Program Review form and maintained according to the *Recordkeeping Policy*.

IX. DISCIPLINARY POLICY FOR VIOLATIONS OF SAFETY RULES/PROCEDURES:

Supervisors should make every effort to ensure all employees are following safe work practices, policies, and procedures. The disciplinary policy is a tool to ensure enforcement of the rules and

procedures for a safe and healthful working environment. Supervisors must focus on the work practice and not the results. Unsafe work practices that do not cause an injury are subject to disciplinary just like those practices that do cause an injury or loss. Some example of safety violations are:

- Unsafe acts
 - Riding in a trailer being towed by a moving vehicle.
 - Operating equipment without being certified on it.
 - Operating a vehicle/equipment without the appropriate license or training.
 - Horse playing while working.
 - Not wearing PPE.
- Repeated minor violations of safety rules or procedures.
- Single serious violations of a rule or procedure that could have potentially resulted in injury to themselves or another employee or could have caused property damage.
- Activities that could potentially result in injury or property damage.

A. Documentation:

Violations of safety rules, regulations, or procedures will be documented. Follow the guidelines for discipline set forth in the *City's Disciplinary Procedures located on the HR portal.*

SECTION 2 - GENERAL ADMINISTRATIVE POLICIES/PROCEDURES:

I. RETURN-TO-WORK PROGRAM:

A. Overview:

The City of Round Rock has a Return to Work Program for employees who are injured on the job. This program will provide the injured employee with immediate and appropriate medical attention and will attempt to provide opportunities to return the employee to safe, productive work as soon as medically reasonable. The ultimate goal is to return qualified employees to their original jobs. The *Return-to-Work Program* will attempt to provide alternative productive work assignments that meet the injured employee's capabilities and restrictions. Employees may be assigned to different job categories and departments while on limited duty. Departments that are unable or unwilling to accommodate a light duty restriction must contact the Risk Management division immediately. Employees will be paid their normal wage while working on limited duty.

B. Employee Responsibilities:

All employees are responsible for working safely and following all safety rules. If you are injured on the job, you must report the injury to your supervisor the same business day. Incident reports must be completed and forwarded to the Risk Management division as soon as possible, and in no circumstances, more than the end of the next business day. Employees should go to the Rockcare Clinic for initial treatment during normal business hours. If the clinic is closed, then employees should go to an urgent care clinic such as or Medspring or Nextcare. Hospital emergency rooms should not be used for anything other than life/limb threatening conditions. Employees seen at any location other than Rockcare should go to Rockcare as soon as possible thereafter for a follow up visit. After the examination by Rockcare, employees may treat with any approved provider. Approved providers are found on the risk management website. It is essential that you contact the Risk Management division in order to promote your return to work.

C. Supervisor/Management Responsibilities:

Management is responsible for providing a smooth transition back to work for any employee who has experienced a work-related injury or illness. Employees who are off work due to a work-related injury or illness are required to return to work as soon as medically reasonable. Management will provide modified work tasks as necessary and available. The Risk Management division will be notified of any modified work assignments. Employees and supervisors will work together with the Risk Management division to set guidelines for restricted duty in accordance with the treating physician's diagnosis. Supervisors will ensure employees are following restrictions. If an employee is not following restrictions, then notify the Risk Management division immediately. It is important to *keep in contact with any employee that is off work because of injury or illness. The employee needs to know that they are cared about and we want them come back to work.*

D. Procedures:

The City's Return-to-Work Program is applicable to all regular employees. An employee who is injured must immediately report the injury or incident to a supervisor or an appropriate person in management. If medical attention is required, the injured employee will be accompanied by his/her supervisor or designee to receive medical services.

E. Following an injury, employees should:

- Report all injuries immediately to their supervisor, no matter how minor
- Complete the employee portion of the incident report
- Report to Rockcare for initial examination
- Provide correct information immediately so that the DWC-1 form may be completed and filed within 24 hours
- Confirm with the Risk Management division that your phone number and address are current
- If continued medical treatment is needed, you may select an approved provider or continue your care at Rockcare
- Contact your supervisor/manager at least weekly and immediately after any medical visit to discuss your restrictions and other return-to-work opportunities
- Provide any restrictions and release to full duty notices to your supervisor and the Risk Management division the day it is received
- Report to work on the next scheduled shift after you have been released by the doctor (either regular duties, modified duties, or reduced time)
- Perform assigned work within the restrictions provided by the doctor
- Immediately contact the Risk Management division if asked to perform job tasks outside of your restrictions
- Return all Temporary Income Benefits (TIB) checks to the Risk Management division immediately upon receipt.

The employee and supervisor will complete an incident report for every reported incident whether or not medical attention is needed.

After medical treatment, the employee should request a written statement of any restrictions he/she may have in performing their tasks and, if taken off-work, an expected return-to-work date from the physician. This information is usually contained on the DWC 73 work status form. The employee is required to provide this information to his or her supervisor and the Risk Management division the day it is received. ***Note: the supervisor will not maintain copies of any medical information.***

If the physician indicates that the employee is not able to return to their regular duties, even with minor modifications, but is physically able to perform alternative assignments in their own department, the employee will be required to report to that position. The Risk Management division will be notified of the assignment to ensure it meets the restrictions. If there is no alternative assignment in the employee's department, then the Risk Manager should be notified and asked to look for alternative assignments in another department. The priority will be to return employees to their own departments if there is approved alternative work available. Employees participating in return-to-work through a light or modified duty assignment or an alternative assignment may not work overtime hours. If an employee has another job outside of the City, they should get approval from their physician to continue working. The employee will provide copies of the duties performed and a doctor's release clearing them to continue work while injured to the Risk Management division.

F. The injured employee will be in communication with the physician and Risk Management division until:

- The alternative assignment ends;
- The physician temporarily prohibits the employee from performing the alternative assignment;
- There is no longer any useful task available within the City that the employee can perform;
- The employee is able to return to his/her regular, pre-injury duties;
- The employee is terminated.

Only the treating provider may take an employee off work. Off work slips from an unauthorized medical provider will not be accepted. No sick time will be used while an employee is off work because of a work related injury/illness. An employee on light or restricted duty must use vacation or sick leave for any absences unrelated to the employee's injury.

G. Return to Duty:

Before returning to full duty, employees shall obtain a medical release from a physician. The medical release shall include the date the employee is cleared for full duty without restrictions. This notice should be provided to the Risk Management division prior to the return date.

H. Temporary Limited/Light Duty for Non Work Related Injuries or Illnesses:

Non-work related injury or illness' refers to an injury or illness (including physical and psychological conditions) which does not arise out of and in the course of employment, or that has been deemed not to be compensable under Workers' Compensation. Employees may be placed on limited/light duty for non-work related injuries if they are unable to fulfill their essential job functions. The employee's progress shall be reviewed when necessary, and at a

minimum every 90 days from the date they were incapable of performing their essential job functions, for significant progress by the HR Director or designee. Whether to assign temporary light duty assignments is at the sole discretion of the employer. If no reasonable accommodations can be found, the employee will remain off work until they are released to full duty. ***Note: all employees' doctor notes will be turned into the Safety Coordinator for review. The supervisor will not maintain copies of any medical information.***

II. HAZARD COMMUNICATION PROGRAM;

A. General Information:

The Texas Hazard Communication Act (THCA), codified as Chapter 502 of the Texas Health and Safety Code (HSC), requires all public employers in Texas to provide their employees with information regarding hazardous chemicals to which employees may be exposed in their workplace. In order to comply with Section 502.009(b) of the THCA and Section 295.7(a) of the THCA Rules (Title 25 of the Texas Administrative Code (TAC), Section 295.1-295.12), the following written Hazard Communication Program has been established for the City of Round Rock.

The master copy of the written hazard communication program will be maintained in each Department/Division. Copies of the written program will be modified as needed for each separate workplace where hazardous chemicals are used or stored and a copy maintained at each workplace. The written program will be available to all employees and their representatives upon request. To facilitate administration of and compliance with this Program, the following levels of responsibility have been established:

- Supervisors and managers will have overall responsibility for administering and maintaining this program and ensuring that it meets all requirements of the THCA.

B. Exemptions:

The following chemicals are exempt from the requirements of the THCA and are outside the scope of this written program:

- Hazardous waste that is subject to regulation by the Texas Commission on Environmental Quality and/or the U.S. Environmental Protection Agency.
- A chemical in a laboratory under the direct supervision or guidance of a “technically qualified individual” if:
 - Labels on incoming containers of chemicals are not removed or defaced,
 - This employer complies with Sections 502.006 and 502.009 of the THCA with respect to laboratory employees; and
 - The laboratory is not used primarily to produce hazardous chemicals in bulk for commercial purposes.
- Tobacco or tobacco products.
- Wood or wood products.
- Articles formed to a specific shape or design during manufacture and that does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use.
- Food, drugs, cosmetics or alcoholic beverages.

- Consumer products or hazardous substances used in the workplace in the same manner as normal consumer use and if the use results in a duration and frequency of exposure that is not greater than exposures experienced by a consumer.
- Radioactive waste.

C. Workplace Chemical List:

- Each Department will develop and maintain a list of hazardous chemicals normally present in the workplace in excess of 55 gallons or 500 pounds. This Workplace Chemical List will be developed for each workplace where such quantities of hazardous chemicals are used or stored and will be available for review by employees and their designated representatives.
- Each Department will be responsible for reviewing and updating the Workplace Chemical List as necessary, but at least by December 31 of each year.
- The Workplace Chemical List will be maintained for at least 30 years.
- Further information on each noted chemical can be obtained by reviewing Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS) located in each workplace where these hazardous chemicals are used or stored.

D. Safety Data Sheets or Material Safety Data Sheets:

- Every facility will maintain a current and appropriate Safety Data Sheets (SDS) or Material Safety Data Sheet (MSDS) for each hazardous chemical purchased.
- Every department will request new MSDS and SDS from all manufacturers and/or vendors that meet the requirements of the Globally Harmonized System.
- Every Department will designate a person who will be responsible for the SDS/MSDS system for their Department and will ensure that:
 - Incoming SDS/MSDS are reviewed for new and significant health/safety information and that any new information is passed on to the affected employees.
 - Hazardous chemicals received without an SDS/MSDS are withheld from use until a current one is obtained.
 - Missing SDS/MSDS are requested from an appropriate source (e.g., chemical manufacturer, distributor, or electronic database) within 30 days from receipt of the hazardous chemical.
 - Affected employees are provided a description of any alternative system (such as electronic databases) being used in lieu of actual SDS/MSDS.
 - Emergency responders are provided MSDSs as soon as practical upon request.
- SDS/MSDS files will be kept in a central location at each facility.
- SDS/MSDS will be readily available for review upon request.
- SDS/MSDS sheets will be kept on file for thirty (30) years from the chemicals last use.
- SDS/MSDS sheets for chemicals no longer in use may be kept in electronic format.

E. Chemical Container Labels:

- All containers of hazardous chemicals used or stored at the workplace will be appropriately labeled.
- A designated employee will be responsible for the hazardous chemical labeling system and will verify that:
 - All **primary** containers of hazardous chemicals are clearly labeled to include:

- The identity of the chemical as it appears on the SDS/MSDS;
- The appropriate hazard warnings; and
- The name and address of the manufacturer.
- All **secondary** containers of hazardous chemicals are clearly labeled to include:
 - The identity of the chemical as it appears on the SDS/MSDS; and
 - The appropriate hazard warnings.
 - Secondary containers will be removed from service and disposed of when the chemical is no longer being used.
- A description of alternative labeling systems, if used, is provided to employees. Examples of alternative labeling systems are the National Fire Protection Association (NFPA) 704m Standard and the Hazardous Materials Information Systems (HMIS) Standard.
- Every effort will be made to label pipes that carry materials that could be hazardous. Labeling can be specific markings identifying the contents of the pipes. If hazardous chemicals run through the pipes, the potential hazards and necessary safety precautions relative to the chemicals must be obtained and given to the employees in the area.
- Any empty container being considered for re-use must be fully cleaned and all labels removed prior to its use.
- The City will rely on the chemical manufacturers or distributors to provide labels which meet the above requirements for primary containers of all hazardous chemicals purchased, and will re-label containers only when the label is illegible or otherwise does not meet the above requirements.

F. General Handling and Storage Guidelines:

The risks associated with handling and storage of chemicals can be considerably reduced by following the actions listed below.

- A comprehensive chemical list should be maintained at each worksite or facility and include all chemicals or products at that site.
- A Safety Data Sheet (SDS) or Material Safety Data Sheet (MSDS) should be maintained for each chemical or product on-hand at a particular worksite.
- Chemical storage should be minimized to only those chemicals which will be actively used.
- Supervisors must train employees on any new chemical introduced into the work place before the chemical may be used.
- Employees shall not use chemicals that they are unfamiliar with or have not been trained to use.
- Chemicals should be stored in proper containers designed for such use.
- Chemicals should be stored such that they will not react with other chemicals, substances, or materials.
- All chemical containers, including temporary and secondary containers, must be labelled in accordance with the Globally Harmonized System.

G. Chemical Safety Guidelines:

- **Acids**
 - Store large bottles of acids on lower shelves or on trays in acid cabinets or a cabinet marked “Corrosive”.
 - Segregate oxidizing acids from organic acids, flammables, and combustible materials.
 - Segregate acids from bases, active metals (sodium, potassium, and magnesium) and other incompatible materials.
 - Use bottle carriers or a cart to transport acid bottles.
 - Have spill control materials or acid neutralizers available in the event of a spill. Do not use bases to neutralize an acid spill.
 - All liquid acids stored in excess of 50 gallons shall be protected with a secondary containment system unless an exception is specifically approved by the Risk Management division.
- **Bases**
 - Store large bottles of liquid bases on trays in cabinets marked as “Bases” or “Corrosives”.
 - Segregate bases from acids and other incompatible materials.
 - Store solutions of inorganic hydroxides in polyethylene containers.
 - Have spill control materials or caustic neutralizers for caustic spills. Do not use acids to neutralize base (caustic) spills
 - All liquid bases stored in excess of 50 gallons shall be protected with a secondary containment system unless an exception is specifically approved by the Risk Management division.
- **Flammables**
 - Only store flammable liquids in specially designed ‘flammable-safe’ cabinets.
 - Keep flammables away from sources of heat or ignition.
 - Keep fire extinguishing and spill control equipment readily available.
- **Oxidizers**
 - Store oxidizers in cool, dry, brick, steel or stone locations and away from flammable or combustible materials, such as paper or wood products.
 - Oxidizers should not be kept in wood frame buildings whenever other alternatives exists
 - Common oxidizers include chlorine bleach, hydrogen peroxide, bleach based cleaning products, swimming pool chemicals, fertilizers that contain nitrates, battery acid...See below for a more substantial list of oxidizers.
<http://www.ci.redding.ca.us/solwaste/documents/HHW/COMMONHOUSEHOLDH AZARDOUSWASTES.pdf>
 - Store oxidizers away from petroleum-based products.
- **Compressed Gases**
 - Compressed gas cylinders should be stored in an upright position and secured to prevent accidental tipping or falling.
 - Cylinders should be stored with the protective cap in place.
 - All cylinders should be labeled as “Full”, “In-Use”, or “Empty”.
 - Cylinder should not be carried or rolled but should be transported using a cylinder cart.

H. Employee Training Program:

- Every Department will provide an education and training program to all employees who routinely use or handle hazardous chemicals in their workplace.
- Supervisors will be responsible for the employee training program and will ensure that:
 - Appropriate training is provided to all covered employees and includes:
 - The use of information provided on SDS/MSDS and chemical container labels;
 - The location of hazardous chemicals present in the employees' work areas;
 - The physical and health effects of exposure;
 - Proper use of personal protective equipment;
 - Safe handling of hazardous chemicals;
 - First aid treatment for exposure to hazardous chemicals; and
 - Safety instructions on clean up and disposal of hazardous chemicals.
 - Required training records are maintained and include:
 - The date of the training session;
 - A legible list of all employees attending the training session;
 - The subjects covered; and
 - The name of the instructors.
 - All covered employees are identified and incorporated into the training program.
 - Employees are provided information concerning the hazardous chemicals to which they may be exposed during the performance of non-routine tasks.
 - New employees are trained prior to their being required to use or handle a hazardous chemical.
 - The need and frequency for periodic/refreshers training is assessed. Employees subject to these training requirements will sign an attendance roster for each training session attended, verifying that they received and understood the information.
 - Supervisors will hold refresher training on the department's hazard chemical policy on an annual basis.

I. Notification Due To Exposures:

- The City will notify the Texas Department of State Health Services, Hazard Communication branch, of any employee accident that involves a hazardous chemical exposure or asphyxiation, and that is fatal to one or more employees or results in the hospitalization of five or more employees.
- The Risk Manager will be responsible for reporting all such accidents to the Texas Department of State Health Services, Hazard Communication Branch, within 48 hours after their occurrence. Notifications will be made either orally or in writing.
- Employees will be responsible for reporting all accidents involving a hazardous chemical to their supervisor immediately.
- Supervisors will be responsible for reporting all accidents involving a hazardous chemical to the Risk Management Division immediately.

J. HAZCOM Requirements:

- The City will post and maintain in all workplaces where hazardous chemicals are used or stored the most current version of the TDSHS Notice to Employees that informs employees of their rights under the THCA.
- The Notice shall be clearly posted and unobstructed at all locations in the workplace.
- Where necessary, a copy of the Notice, printed in Spanish, will be posted together with the English version of the Notice.

K. HAZCOM Personal Protective Equipment:

- Every Department will provide appropriate personal protective equipment (PPE) to all employees who use or handle hazardous chemicals.
- Supervisors will assume overall responsibility for issuing PPE and will ensure that appropriate equipment and training are provided, to include:
 - Proper selection of PPE based on:
 - Routes of entry;
 - Permeability of PPE material;
 - Duties being performed by the employee; and
 - Hazardous chemicals present.
 - Proper fit and functionality of PPE as described by the manufacturer's specifications.
 - Appropriate maintenance and storage of PPE.

L. Reporting HAZCOM Violations:

- The City of Round Rock shall not discipline, harass, or discriminate against any employee for filing complaints, assisting inspectors of the Texas Department of State Health Services, participating in proceedings related to the Texas Hazard Communication Act, or exercising any rights under the Act.
- Employees cannot waive their rights under the Texas Hazard Communication Act. A request or requirement for such a waiver by an employer violates the Act.

M. Contractors Compliance with HAZCOM Act:

Before a contractor commences work in a City workplace, the supervisor or manager who controls the work area will be responsible for:

- Informing the contractor of its rights under the Act;
- Providing a copy of the Workplace Chemical List;
- Providing copies of all SDS/MSDS for the hazardous chemicals that they may be exposed to in the workplace; and
- Having the contractor provide SDSs/MSDSs for any hazardous chemicals they will be bringing into the workplace to which the employees will have an exposure.

SECTION 3 - GENERAL SAFETY RULES AND SAFE WORK PRACTICES:

Safe work practices are procedures adopted for carrying out specific tasks that ensures workers' exposure to hazardous situations, substances, and physical agents is controlled in a safe manner.

- Each employee shall be required to comprehend and abide by the contents of this safety program.
- All accidents, regardless of severity, shall be immediately reported to your supervisor.
- All hazardous conditions, actions, and/or practices shall be reported to your supervisor.
- Work areas, including the inside and outside of vehicles and buildings, shall be kept clean and orderly at all times.
- Employees shall only operate equipment/tools/chemicals that they are trained and authorized to operate.
- Smoking shall be prohibited in areas where there is a danger to equipment, materials, co-workers or buildings, or where ‘No Smoking’ signs are posted.
- Employees shall use all safety devices and personal protective equipment provided for their protection.
- Employees shall wear clothing and shoes suitable for the particular work they are doing.
- Employees shall use assisted lifting devices or obtain assistance from a coworker when lifting objects in excess of forty (40) lbs. or more when so required by the employee’s physical condition.
- Guards shall never be removed except when authorized to make repairs or adjustments and after the equipment has been de-energized. Replace guard immediately upon completion of work.
- Before starting work on any machine or equipment, except for routine maintenance, employees shall render the equipment or machine inoperative and attach a lockout device or tag to the equipment control.
- Employees shall not engage in practical jokes or horseplay while at work.

I. JOB, TASK, & PROJECT BRIEFINGS:

The person in charge of each individual work group is responsible for conducting a job/task/project briefing to all affected employees prior to work commencing. The briefing should address the following subjects, at a minimum:

- Brief overview of the job to be completed;
- Hazards associated with the job;
- Work procedures involved in completing the job;
- Special necessary precautions;
- Energy source controls; and
- Personal protective equipment requirements.

If the work or operations to be performed during the work day are repetitive and similar, at least one job briefing shall be conducted before the start of the first job each day. Additional job briefings are required if significant changes, which might affect the safety of employees, occur throughout the course of the work.

A brief discussion is satisfactory if the work involved is routine and if all employees, by virtue of training and experience, can reasonably be expected to recognize, avoid, and protect themselves against the hazards involved with the job. A more extensive discussion should be held if the work is complicated or extremely hazardous or if employees cannot be expected to recognize, avoid, and protect against the hazards. An employee working alone need not conduct a job

briefing. However, the supervisor should ensure that the tasks to be performed are planned as if a briefing were required.

II. FIRST AID:

- All injuries, regardless of severity, shall be reported to your supervisor.
- Preplanning for a potential emergency situation is most valuable. All employees shall be aware of the medical services available and how to obtain them.
- Where first aid kits are supplied, employees shall be familiar with the location, contents, and the instructions given with the first aid kit. Each employee shall learn how to use this equipment so they can render treatment when needed.
- The contents of the first aid kits shall be inspected each month and expended items replaced. Personal medication shall not be kept in first aid kits.
- Where the eyes or body may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided for emergency use.
- Emergency eye wash and/or shower stations should be tested at least once per month to ensure proper working condition.
- All first aid shall be given in accordance with the City's Bloodborne Pathogen (BBP) policy.

III. FALL PREVENTION:

Slips, trips and falls constitute a large percentage of accidents and injuries in public entities. These procedures are designed to prevent hazardous conditions that could result in slips, trips or falls.

A. Engineered and Administrative Hazard Controls:

Although every effort is made to prevent slips, trips, and fall accidents, additional precautions should be taken to ensure all possible measures have been taken. These include:

- Proper construction of elevated work surfaces;
- Proper use of fall arrest systems including safety harnesses;
- Proper use of hand, knee, and toe rails, where required;
- Proper design and use of fixed ladders and stairs;
- Adequate lighting in all areas;
- Training for all employees who work on elevated work surfaces;
- Routine inspections of ladders, stairs, walking, and working surfaces;
- Following housekeeping and cleaning requirements; and
- Immediate addressing potential problem areas.

B. General Requirements:

- **Housekeeping:**
 - All work areas, passageways, storerooms and shop areas should be kept clean and orderly at all times.

- The floor of every work area shall be maintained in a clean and dry condition as possible. Where wet operations are held, adequate drainage should be maintained, and non-slip mats or floor covering shall be provided.
- Every floor, work area and passageway shall be kept free of protruding nails, splinters, holes, debris and stored items.
- **Aisles and Passageways:**
 - Aisles and passageways shall be kept clear and in good repair with no obstructions across or in aisles that could cause a hazard.
 - Where mechanical equipment is used, aisles should be of adequate width as improper aisles coupled with poor housekeeping, vehicle and foot traffic can cause injury to employees, damage to equipment and materials and can limit egress in the event of an emergency.
 - Changes in elevation, such as steps, curbs and ramps, should be marked or highlighted with a stripe of highly-visible paint or other non-skid material to assist in the identification of the known trip and fall hazard.
- **Guarding Floor and Wall Openings:**

Floor openings and holes, wall openings and holes, and the open sides of elevated work surfaces may create hazards as people may fall through the openings or over the side to the level below. Objects such as tools or parts, may also fall through holes and strike employees or damage machinery on lower levels.

 - Standard railings shall be provided on all exposed sides of a stairway opening, except at the stairway entrance.
 - Floor openings may be covered rather than guarded with rails. However, temporary guard rails shall be placed when the opening is uncovered.
 - A ‘standard railing’ consists of a top rail, mid rail, and posts, and shall have a vertical height of 42 inches from the upper surface of the rail to the walking surface. Nominal height of the mid rail shall be 21 inches.
 - A ‘standard toe board’ is 4 inches in vertical height, with not more than ¼ inch clearance above floor level.
- **Guarding of Open-Sided Floors, Platforms, and Runways;**

Every open-sided floor or work surface located 4 feet or more above the adjacent floor or ground level shall be guarded by a standard railing (as specified above) on all open sides, except where there is an entrance to a ramp, stairway, or fixed ladder. A toe board shall be provided as well.

C. Fall Arrest Systems:

Different types of personal fall arrest systems are available depending upon the nature of work and the specific conditions in the area where the work will take place. A fall arrest system should be used whenever the employee is working at a height in excess of six (6) feet from the working service.

- **Types of Fall Arrest Systems:**
 - *Personal Fall Arrest* systems are used to stop a fall once it has begun and includes an anchorage and connector, full body harness, lanyard, locking snap hooks, lifeline, and may include a descent control device.
 - *Positioning Device* systems prevent falls by supporting the employee in a working position and eliminate the chance for a fall to begin. These systems include a body belt, harness, connector, locking snap hook, and proper anchorage.
 - *Personal Fall Protection for Climbing Activities* protects the employee while climbing and anchors at a point that usually adjusts and moves with the climber.

- **Body Belts and Harnesses:**

Only approved full-body harnesses shall be used. All recommendations of the equipment manufacturer shall be met, including care, storage, testing and replacement. A harness may be attached to either the center of the back at shoulder level, or above the head. Employees must follow the procedure described below to don their full-body harness:

 - Inspect the harness before putting it on;
 - Hold the harness by the D-ring and shake the straps into place;
 - Release buckled straps and slip them over the shoulders with the D-ring in back;
 - Pull the leg strap between the legs and connect to the opposing end;
 - Waist strap should be tight but not binding;
 - Connect chest straps and position in the middle of the chest; and
 - Ensure that the harness is snug but allows full movement.

- **Categories of Fall Protection Systems**
 - Class 1- Body belts (single or double D-ring) are designed to restrain a person in a hazardous work position and to reduce the possibility of falls. They should not be used when fall potential exists; Belts should only be used for positioning.
 - Class 2- Chest harnesses are used when there are only limited fall hazards (no vertical free fall hazard), or for retrieving persons, such as removal of persons from a tank or a bin.
 - Class 3- Full body harnesses are designed to arrest the most severe free falls and should be used whenever the employee will be working more than six (6) feet above a working service and not in an enclosed platform or lift.
 - Class 4- Suspension belts are independent work supports used to suspend a worker, such as boatswain's chairs or raising or lowering harnesses.

IV. PERSONAL PROTECTIVE EQUIPMENT (PPE) - GENERAL REQUIREMENTS:

- All employees shall wear clothing suitable for their particular type of work. Loose clothing shall not be worn while working around or near moving machinery or equipment.
- All department-approved special protective clothing or protective devices shall be used by employees when required by policy and/or department supervisors.

- Clothing that is soiled by oil or chemicals should be avoided to prevent skin irritations.
- When work is performed in the vicinity of exposed energized parts of equipment, employees shall remove all exposed conductive articles, such as key or watch chains, rings, wristwatches or bands, if such articles increase the hazards associated with inadvertent contact with the energized parts.
- Rings or jewelry shall not be worn while climbing on or off structures or vehicles while performing any task where the ring might get caught under or snagged by a projecting item.
- Department approved gloves shall be provided to and worn by all employees when work site operations could cause injury to the hands and shall be replaced immediately if they are unserviceable.
- Gloves and long sleeves shall be worn to protect hands and arms when handling cement, brush, sharp objects, hot materials, acids and other chemicals, or when there is a possible exposure to poison ivy.
- Department approved head protection shall be provided to and worn by employees when working in areas where possible danger or head injury exists from impact, falling or flying objects, or from electrical shock and burns.
- Employees shall wear department approved eye and face protection where injury exists from flying objects, glare, liquid splashes, use of line trimmers, edgers, chemicals, grinding, sandblasting, and welding. Eye protection shall be kept in a sanitary and usable condition and shall be replaced when it becomes warped, scratched, or pitted.
- Department approved hearing conservation devices shall be provided to and worn by all employees working in areas where a danger of noise exposure exceeds acceptable levels.
- Employees shall wear footwear suitable to the type of work being performed. Safety boots or shoes shall be worn when required. Wearing of sandals, tennis shoes, loafers or similar footwear shall not be acceptable during working hours for employees serving in labor, maintenance, construction, or inspection positions.
- Department approved life jackets or buoyant work vests shall be worn by all employees when working over or near water where the danger of drowning exists.
- Department approved respiratory protection shall be worn in areas where dangerous air contamination, chlorine, gasses, vapors, fumes, dust, or other hazardous contaminants exist.
- Employees required to work in or near the roadway shall wear high visibility clothing, garments and/or reflective vests and shall replace any unserviceable safety gear immediately.
- Department approved fall protection devices, such as harnesses, lanyards, et., shall be used by all employees when working in an overhead position which may require use of both hands and when there is a danger of falling.
- Protective clothing and equipment shall be used and maintained in accordance with manufacturer's recommendations.

V. GENERAL RULES FOR MOTOR VEHICLE AND EQUIPMENT OPERATION:

The following items are in addition to the City's "Driving Privileges and Use of City Vehicles" Policy located on the HR portal.

- Employees, who are authorized to operate City of Round Rock vehicles or personally owned vehicles on City business, must have a valid Texas driver's license for the class vehicle they operate.
- Employees must notify their supervisor immediately should the license be suspended or revoked.
- Drivers should pull over and/or wait until the vehicle is safely and lawfully stopped before initiating or responding to any voice or electronic communication.
- Though highly discouraged, employees may use a hands free or blue tooth device while operating a vehicle. The use of all hand-held phones and portable communication devices are strictly prohibited during vehicle operation. Police and Fire are exempt from this provision to the extent allowed by their department policies.
- Motor vehicle record checks will be conducted annually or semi-annually on all employees who have driving or motorized equipment operation responsibilities.
- The certificate of insurance coverage and other required documents, along with incident forms should be carried in all City owned vehicles.
- All drivers of vehicles must be familiar with and abide by all applicable state, federal, and local traffic regulations.
- All drivers/operators shall be responsible for the proper care and use of vehicles and motorized equipment. This includes maintaining vehicle/motorized equipment interiors and exterior, regularly servicing these items and reporting maintenance needs to the supervisor.
- A driver/operator shall not permit any unauthorized persons to drive, operate or ride in or on a City vehicle. Riders shall not be allowed on running boards, tailgates, fenders, bumpers, a top cabs, on tow bars or towed equipment. (Exceptions may include operator trainees and mechanics sharing operator positions.)
- Every accident involving personal injury or property damage shall be reported to your supervisor immediately.
- Where seat belts are provided, they shall be worn by all occupants. The size or operation of the vehicle or equipment does not excuse the operator from the seat belt requirement.
- Equipment on all motor vehicles must conform to state, federal, and Department of Transportation (DOT) regulations.
- Unsafe and discourteous driving practices such as 'road-hogging', disregarding the rights of pedestrians, violating traffic regulations, and deliberate recklessness of any kind are prohibited.
- Getting in or out of a vehicle/mobile equipment while it is in motion is prohibited, as is riding anywhere on the vehicle/mobile equipment not designed for passengers. Do not get out of vehicle/mobile equipment and leave the motor running or operate with a door ajar.
- Employees should maintain three points of contact with mobile equipment when entering and exiting to help in maintaining balance if a slip occurs. Many injuries occur as a result of slips and using three points of contact will help control this exposure. In addition, the condition of the handrails, steps, etc. should be inspected regularly.
- Driver/Operators are prohibited from using tobacco products, including smokeless tobacco, vapors and electronic cigarettes, in City vehicles or while operating City equipment and during refueling.

- Except in emergencies, gasoline must not be carried inside passenger cars or the cabs of trucks. Gasoline shall be transported in approved safety containers and sealed tight to prevent the leakage of gasoline or gasoline vapors.
- Garage doors must be opened for ventilation whenever a motor vehicle engine is running to help prevent the accumulation of carbon monoxide gas.
- Keys shall be removed from unattended vehicles and equipment. Doors should be locked for security purposes.
- Picking up hitchhikers is prohibited.
- Before starting out in your vehicle in the morning, clear all windows of any frost, ice, or dew. Cleaning only a small place on the windshield does not allow for proper visibility.
- Driving at the maximum posted speed limit can be too fast for safety in some situations. The drivers of all vehicles must use good judgment and proceed at a pace suitable to conditions of the vehicle, road, traffic and weather.
- All vehicle cabs should be kept clean to reduce distractions to drivers and interference with the operation of the vehicle or equipment.

A. Backing:

- When possible, park so that backing is not required.
- Extreme caution shall be exercised when backing any vehicle. If another employee is present, he/she shall act as a spotter to assist the driver in backing safely. Drivers shall stop immediately if they lose sight of the spotter.
- Backup alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict your view to the rear of the vehicle. If an alarm is not present, the operator should honk his horn to warn others of the moving vehicle.

B. Stopping on Roadways:

- When it is necessary to stop on the roadway, extreme caution shall be used.
- A beacon light shall be used, if so equipped.
- Tail lights/emergency flashers shall be used.
- If work is in progress, traffic control devices shall be used in accordance with the *Texas Manual on Uniform Traffic Control Devices, Part VI*. Please see additional information in the *Work Zone Traffic Control Safety* section of this manual.
- If the vehicle becomes inoperable on a public roadway, including shoulders, then the employee shall activate all emergency flashers and exit the vehicle and roadway if the employee can safely do so. If the employee cannot safely exit the vehicle and roadway, then the employee shall remain in the vehicle with the seatbelt fastened.

C. Inspection of Vehicles and Equipment:

- Drivers/operator shall utilize equipment checklists to inspect vehicles and equipment to determine if they are in good operating condition *prior* to operating the vehicle.
- The driver/operator shall determine that brakes are in good operating condition before using the vehicle or equipment. If brakes are not working properly, they must be corrected before use.

- The driver/operator shall report all defects promptly. Items that affect safety shall be repaired prior to continued use.

D. Powered Carts & Low-Speed Vehicles:

Powered carts and other low-speed vehicles (LSV) such as golf carts, ‘Mules’, ‘Gators’, etc. should be driven with special care. This classification of vehicle includes those which are electric, gasoline, or diesel-powered and may or may not be licensed to operate on public roadways. Vehicles not licensed (registered) by the Texas Department of Public Safety as an on-road vehicle should not be driven on public roadways. The following operating rules apply to powered carts & LSV:

- Only drivers authorized by the City of Round Rock and trained in the safe operation of powered carts and LSV shall be permitted to operate such vehicles.
- All prospective cart or LSV operators must receive training before being allowed to operate a powered cart or LSV.
- Seatbelts must be worn by all vehicle occupants at all times. The maximum number of passengers is equal to the number of seatbelts in the vehicle. All passengers must be in a seat while the cart is moving - no exceptions. Drivers violating this safety rule may have their driving privileges suspended or revoked.
- All operators and riders must wear eye protection at all times.
- Operators and passengers shall keep arms and legs inside the cart or LSV at all times and shall not jump on or off of moving vehicles.
- Powered carts or LSV shall be driven on facility vehicle traffic areas whenever possible. If a sidewalk must be used, the cart speed should not exceed that of the pedestrian traffic.
- Carts or LSV which are capable of reaching 25 mph or higher must remain in facility vehicle traffic areas and should not be driven on the sidewalks or "pedestrian only" areas.
- Operators shall be familiar with, and observe all established traffic laws.
- Materials and equipment shall be properly secured so that they will not shift or fall off of moving carts or LSV.
- Powered carts & LSV shall not be operated at night without properly working head and taillights.
- Be extremely cautious while making turns and while driving on uneven surfaces to avoid tipping in carts.
- Parking a powered cart or LSV should follow the same rules as a motor vehicle and is prohibited in the following areas:
 - Fire Lanes;
 - Designated no parking areas; and
 - Adjacent to building entrances or exits.

E. Forklift Safety:

- Forklifts shall only be operated by authorized persons who have been properly trained in their use. This training should be documented and consistently used with all authorized operators and trainees.
- The operator is responsible for inspecting the equipment before it is used. The brakes and controls shall also be tested by the operator prior to use. Needed repairs shall be reported immediately.

- Equipment shall be operated at a safe speed for existing conditions, moving slowly around corners and avoiding holes and loose materials.
- Seat belts shall be worn when operating a forklift with rollover protection.
- Clearances shall be checked in all directions, particularly overhead clearances.
- Forklifts shall not be fueled while the engine is running.
- Forks shall be placed under the load as far as possible. Loads should not be raised or lowered while traveling. Loaded or empty, forks should be carried as low as possible, but high enough to clear uneven surfaces. (Usually about 6-12 inches on level surfaces.)
- Operators shall always face the direction of travel and also keep their arms and legs inside the equipment.
- Load limits as specified by the manufacturer shall not be exceeded.
- Do not travel with the load raised as this causes the center of gravity to rise, which may affect the tipping potential.
- Only the operator shall be allowed on the equipment during operation, unless a seat is provided for another occupant.
- A secured platform specifically designed for the purpose must be used when lifting personnel.
- Unattended forklifts (i.e., those in which the operator is more than 25 feet away or the forklift not in his/her view) shall have the load fully lowered, controls neutralized, power shut off and brakes set.
- Equipment with internal combustion engines shall not be operated in enclosed areas for long periods of time so as not to exceed the allowable levels of carbon monoxide.

F. Backhoe, Skid Steer, Loader, Heavy Equipment Safety

- Operators shall be adequately trained and qualified to operate the equipment. The operators shall become thoroughly familiar with the equipment before using it and ~~they~~ must understand the contents of the operator's manual.
- The operator is responsible for inspecting the equipment before it is used. The brakes and controls shall also be tested by the operator prior to use. (Needed repairs shall be reported immediately). Observe proper maintenance and repair of all pivot pins, hydraulic cylinders, hoses, snap rings and main attachment bolts daily.
- Seat belts shall be worn on all equipment with rollover protection.
- Operators should maintain three points of contact with the equipment when entering or exiting. This will allow the operator to regain their balance if a slip occurs.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict your view to the rear of the vehicle. If an alarm is not present, the operator should honk his horn to warn others of the moving vehicle. Back-up alarms should be operable at all times.
- Only the operator shall be allowed on the equipment during operation, unless a seat is provided for another occupant.
- Employees shall never be allowed to ride in the bucket or use the bucket for an elevated platform.
- Walk around the equipment to observe for children and others before starting up. Consider the use of a spotter when backing the equipment.

- Keep bystanders in the clear while operating equipment? No one is allowed in a ditch while there is excavating.
- Locate underground utility lines and overhead power lines before starting to dig. (Always contact utility companies to physically locate any underground lines). Do not operate within 10 feet of an overhead electrical line. Hand-dig in the vicinity of all known underground utility lines and pipelines.
- Never attempt to lift loads in excess of the equipment capacity.
- Never allow anyone to get under the equipment or reach through the lift arms while the bucket is raised.
- Relieve the pressure in any hydraulic lines before disconnecting them to make repairs. Any hydraulic implements that are not relieved shall be physically blocked to protect against mashing injuries during maintenance or repair activities. Physical blocks may include safety stands, timbers, cinder blocks, etc. that can withstand the force.
- Use care at all times to maintain proper stability. Drive at safe speeds over rough ground, on slopes, when crossing ditches and when turning corners.
- To prevent upsets when operating on a slope, avoid using the full reach and swinging a loaded bucket to the downhill side.
- Always center and raise the boom before moving to a new location.
- Do not attempt to exit the equipment while it is still in motion. Apply the parking brake and shut down the engine before leaving equipment.
- Lubrication activities or mechanical adjustments shall not be attempted while the equipment is running if there is a possibility of contacting a pulley, belt, shaft, etc. that is in motion.
- Park the equipment on level ground when possible. As a minimum, the bucket should be lowered, the brakes set, the transmission engaged and engine killed when parking.
- Use care in attaching towing lines to the equipment. Pulling from the tractor rear axle or any point above the axle may cause an accident.
- Slow moving placards and other warning devices should be used to help other motorists in spotting the slow-moving vehicle from a safe distance.

G. Dump Truck Safety:

- Employees or other individuals shall not be carried in the bed for transportation purposes.
- Employees shall not remain in the cab when the bed is being loaded unless the cab is protected against impact.
- Check overhead clearances before raising the bed. Be aware of overhead electrical lines.
- Be sure hoist is not engaged before moving the truck.
- Loose material shall be covered to prevent blowing debris and spillage.
- Close windows during loading/unloading to control dust accumulation inside the cab.
- Operators of dump trucks must possess a valid Commercial Driver's License.
- Operators are responsible for cleaning debris, mud, rocks, etc. from the bed, fenders and other body parts that may become dislodged during travel.
- A spotter will always be used when backing up if one is available.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict your view to the rear of the

vehicle. If an alarm is not present, the operator should honk the horn to warn others of the moving vehicle. Back-up alarms should be operable at all times.

- All mirrors should be maintained in clean, good working condition and adjusted to assist the operator in viewing obstructions or other vehicles.
- Operators should maintain “three point of contact” with the equipment when entering or exiting the cab. This will allow the operators to regain their balance if a slip occurs.

H. Tractor Safety:

- The operator shall wear a securely fastened seat belt if the tractor is equipped with rollover protection.
- Guards around chains, shafts, pulleys, gears, etc. shall always remain in place while the equipment is in operation.
- Use caution when operating near slopes, cuts, depressions, drop-offs, soft shoulders, ditches, etc. Operators shall constantly watch for hidden objects and uneven ground. Hazardous areas shall be pre-cleaned and special hazards removed prior to mowing.
- Use care when entering traffic areas, crossing railroad tracks, etc.
- Operators should maintain three point of contact with the equipment when entering or exiting. This will allow the operator to regain his/her balance if a slip occurs.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict your view to the rear of the vehicle. If an alarm is not present, the operator should honk his horn to warn others of the moving vehicle. Back-up alarms should be operable at all times.
- Only the operator shall be allowed on the equipment during operation, unless a seat is provided for another occupant.
- Lubrication activities or mechanical adjustments shall not be attempted while the equipment is running if there is a possibility of contacting a pulley, belt, shaft, etc. that is in motion.
- Take sharp turns at low speed.
- Proper PPE shall be worn at all times. On a tractor with an uncovered cab, the operator should as a minimum wear safety glasses and hearing protection. Other PPE such as gloves, face shields, sleeves, boots, etc. should be evaluated for individual jobs. Sunscreen should also be used in areas where the operator may be exposed to sunlight for long periods of time.
- Slow-moving placards and other warning devices should be used to help other motorists in spotting the slow-moving vehicle from a safe distance.

VI. ELECTRICAL SAFETY:

- All departments that operate and repair direct wired equipment and/or with equipment that stores energy (whether pneumatically or hydraulically) shall have a hazardous energy policy that requires employees to be trained on all equipment and trained annually thereafter.
- All hazardous energy policies shall be sent to the Risk Management division for review before implementation.

- Keep electrical cables and cords clean and free from kinks. Never carry equipment by its cords.
- Keep cords out of walkways to prevent damage and trip and fall hazards.
- All electrical tools, equipment, extension cords, etc. shall be inspected on a regular basis. All faulty equipment shall be reported immediately to your supervisor. Lockout or tag the equipment so that others are aware the equipment is damaged. The tool, equipment, or cord shall not be used if it has any defects, such as bad insulation, missing grounds, loose prongs, etc.
- Only employees that are properly trained on repairing equipment that is direct wired or that stores energy may perform repairs on those pieces of equipment.
- All electrical equipment shall be properly grounded.
- Extension cords should not be used in wet or damp areas. For adequate protection, a Ground Fault Circuit Interrupter (GFCI) should be used to protect employees in wet or damp locations.
- Extension cords may not be used as a permanent wiring system except approved cords used to operate personal office equipment.
- All circuit breakers shall be identified as to use. Maintain clear access to electrical panels and main power sources at all times. Electrical panels and boxes should be securely fastened.
- All electrical panel boards, boxes, disconnects, switch gears, etc. shall be covered or isolated to prevent accidental contact with energized parts and to protect equipment and wiring from potential contamination.
- Before work begins at a jobsite, the location of electrical lines (underground and above) shall be determined and precautions taken to prevent accidental contact.
- Electrical cables passing through work areas shall be covered or elevated to protect them from damage, which could create a shock hazard.
- Metal ladders shall not be used when working near electrical circuits.
- Exposed light bulbs or fluorescent tubes shall be guarded or recessed in reflectors to prevent accidental breakage.
- Personal space heaters/coolers shall not be used unless plugged directly into a wall outlet and approved by the Risk Management division.
- Personal space heaters must be turned off when not in use and when unattended.
- To aid in the prevention of electrical shock, 120 volt, single phase, temporary receptacles used at work sites should be used with a GFCI. If a GFCI is not available, assured equipment grounding conductor program may be used for added protection. Another option in protection from electrical shock involves the use of double insulated equipment.
- A certified electrician shall perform hazardous energy training on a yearly basis for all employees that repair direct wired electrical equipment and/or equipment that stores energy.

VII. EXCAVATION AND TRENCHING SAFETY:

- Before opening an excavation, all interferences such as trees, sidewalks, and foundations shall be removed or supported as necessary to protect employees and the public.
- Ensure a utility line locate was done before any digging starts.
- Take pictures of the line locating markings before digging starts.

- The estimated location of utility and other underground installations that may be encountered during excavation work shall be determined before opening the excavation.
- When excavation operations approach the estimated location of underground installations, the exact location of the installation shall be determined by safe and acceptable means.
- While the excavation is open, underground installations shall be protected, supported, or removed to safeguard employees.
- Employees exposed to vehicular traffic shall wear high visibility vests or clothing.
- Refer to *Work Zone/Traffic Control Safety* procedures as described in this manual.
- A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees. Ladders must extend 3 feet above the surface and be tied off if necessary.
- No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.
- All mobile equipment (front end loaders, bulldozers and dump trucks) shall be equipped with a warning device such as a backup alarm. When mobile equipment is operated adjacent to an excavation, a warning system shall be utilized such as barricades, hand or mechanical signals or stop logs. If possible, the grade should be sloped away from the excavation.
- In excavations deeper than 4 feet with the potential for a hazardous atmosphere or oxygen deficiency, air testing shall be conducted before employees enter an excavation and as often as necessary to ensure the atmosphere remains safe. Ventilation or respiratory protection may be needed to protect employees from harmful atmospheres.
- Daily inspections of the excavations and adjacent areas and protective systems shall be conducted for evidence of situations that could result in a possible cave-in, failure of protective systems, hazardous atmospheres or other hazardous conditions. An inspection shall be conducted prior to the start of work, when there are changes in weather conditions, if the excavation has been left unattended for a period of time (such as lunch), and as needed.
- Employees shall not work in excavations in which there is accumulated water or in an excavation in which water is accumulating unless adequate precautions have been taken to protect employees. The precautions necessary to protect employees adequately can include special support or shield systems, water removal or the use of a body harness and lifeline.
- Surface water shall be prevented from entering an excavation by utilizing diversion ditches, dikes, or other suitable means.
- Excavated earth (spoil), materials, tools, and equipment shall be placed no closer than 2 feet from the edge of the excavation.
- Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard handrails and guardrails shall be provided.
- When excavations are left open, warning devices, barricades or guardrails shall be placed to adequately protect employees and the public.
- At the end of the workday, as much of the excavation as practical, shall be closed.

- Mechanical excavating equipment that is parked or operating on streets or highways shall be protected by proper warning devices.
- Each employee in an excavation shall be protected from cave-ins by an adequate protective system (sloping, benching, shoring or shielding), unless excavations are made entirely in stable rock or are less than five feet deep and examination of the ground provides no indication of a potential cave-in.
- When choosing protective system take into consideration soil type, vibration sources, previously disturbed soil, layered soil, presence of water, heavy equipment work adjacent to the excavation, limited work area, and other hazard increasing conditions.
- Sloping, benching, shoring or shielding for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

VIII. WORK ZONE/TRAFFIC CONTROL SAFETY:

- Work zone safety is the adequate safeguarding or protecting of pedestrians, motorists, utility workers and equipment by the use of adequate barriers, warning signs, lights, flags, traffic cones, high level standards, barricade rope, flaggers, etc. on approaches to work areas, excavations, open manholes, parked equipment, etc.
- Work zone traffic control is accomplished by the use of informative and protective devices, keeping in mind that a safe installation requires the use of these devices in relation to the location of the workers and equipment involved. The use of these devices must be coupled with proper planning, design, installation, inspection, maintenance and the use of good common sense. It is of utmost importance that the work area be properly identified and that warning devices clearly convey the message to the traveling public well in advance of arrival at the work area.
- The public must be warned in advance, then regulated and guided through or around the work area. Proper work area protection shall be planned to ensure the safety and protection of the public, the worker, and the equipment.
- If street construction or repair work is to be done, preparations will be made to ensure vehicle and pedestrian safety before work is allowed to begin by use of a traffic control plan.
- If traffic is affected by the operation, proper signs must be used in advance of the work area, and the traffic control signs in and around the affected area are to be correctly placed and maintained for the duration of the period when work is being performed and traffic obstructions exist.
- When barricades and signs are used overnight, supervisors will examine the work area for proper placement at the end of the workday.
- All employees working in or near the roadway will wear retro-reflective vests or suitable garments marked with or made of retro-reflective or high visibility material while at the work site. Garments worn at night must be made of retro-reflective material.
- Lighted barricades will be used whenever possible for overnight protection.
- Where traffic must be periodically stopped or obstructed by workers or equipment in a traveled portion of a roadway, a flagger wearing a reflective vest may be stationed. If lack of manpower exists, the roadway must be closed and the traffic detoured.

- Flaggers will be used to slow or direct traffic where the approach to the work area does not provide adequate visibility to drivers. The use of sign paddles (Stop/Slow) is preferred and should be used if available. During night operations, the flagger area should be illuminated and retro-reflective signs used.
- All plates used to cover holes in the street on a temporary basis are to be spiked in place.
- In any case where streets are significantly obstructed or closed for any period of time, the police, fire and other relevant Departments will be notified of the situation and told approximately how long the closure will be in effect.
- When pedestrian traffic is impeded, barricades, restrictive tape, rope or other restraint will be used to keep the public from the work site.
- Holes in the sidewalk or parkway that must be left open will have perimeter protection. Protection of these areas will be in the form of physical barriers and warning signs.
- For additional information, please refer to the most current publication of the *Texas Manual for Uniform Traffic Control Devices, Part VI*. A copy of this manual is available at www.dot.state.tx.us.

IX. BACK INJURY PREVENTION & MATERIAL HANDLING:

Back injuries are prevalent and continue to be one of the leading causes of on-the-job injuries in the workplace. The following procedures are designed to prevent injury and disability to employees; decrease lost productivity due to accidents and injuries and decrease costs associated with these types of injuries:

A. Common Causes of Back Injuries:

- Prolonged positions
- Poor posture
- Poor ergonomics
- Improper lifting/lifting too much
- Twisting while lifting
- Reaching while lifting
- Slips/trips and falls
- Vehicle and equipment entry and exit

B. Safe Lifting Principles:

The following steps should be taken prior to lifting, handling, or carrying materials:

- Prior to lifting or carrying, check to ensure that the walkway is clear of all obstacles.
- Carefully check the object's weight and center of gravity.
- Lifting any object over forty (40) lbs requires a minimum of two people.
- Face the object and get as close as you can with feet slightly apart and the head and neck facing forward. Grip the object firmly and hold it as close to your body as possible.
- Bend at your knees, not at your waist.
- Use your legs to bring you to a standing position, making the lift smoothly and under control.
- Do not twist your body when lifting or lowering.

- If necessary, obtain assistance in lifting heavy objects by utilizing additional personnel, power equipment, or other types of assistive lifting devices.
 - When two or more persons carry a heavy object that is to be lowered or dropped, there shall be a pre-arranged signal for releasing the load.
 - When two or more persons are carrying an object, each employee, if possible, should face the direction in which the object is being carried. Crouch or squat with the feet close to the object to be lifted; secure good footing; take a firm grip; bend the knees; keep the back vertical; and lift by bending at the knees and using the leg and thigh muscles. Employees shall not attempt to lift beyond their capacity. Caution shall be taken when lifting or pulling in an awkward position.
- Material shall not be thrown from place-to-place or person-to-person.
- A cart or dolly should be used whenever carrying a lifted item weighing 20 lbs or more a distance in excess of sixty (60) feet.

X. FIRE PREVENTION & SAFETY:

These procedures address specific exposures and prevention methods related to fire prevention and the safety of employees.

A. Management Responsibilities:

- Ensure all fire prevention methods are established and enforced.
- Ensure fire suppression systems such as sprinklers and extinguishers are inspected annually and maintained in working order.
- Ensure that sufficient employees are trained in the PASS method of fire suppression, Pull, Aim, Squeeze and Sweep to safely handle small fires.
- Train supervisors to use fire extinguishers for incipient (developing) fires.
- Train employees on evacuation routes and procedures.
- Provide sufficient non-flammable cabinets for the storage of flammable materials

B. Supervisor Responsibilities:

- Closely monitor the use of flammable materials and liquids.
- Train assigned employees in the safe use, storage and handling of flammable materials.
- Ensure flammable material storage areas are properly maintained.
- Ensure that sufficient employees are trained in the PASS method of fire suppression, Pull, Aim, Squeeze and Sweep to safely handle small fires.
 - Pull the pin (from the handle)
 - Aim the nozzle (at the base of the fire)
 - Squeeze the handle (to actuate the extinguisher)
 - Sweep the nozzle (from side-to-side)

C. Employee Responsibilities:

- Use, store and transfer flammable materials in accordance with provided training and policy.
- Do not mix flammable materials.
- Immediately report violations of this program to a supervisor.

D. Fire Extinguishers:

A portable fire extinguisher is the “first aid” device and is very effective when used while a fire is small. The use of an extinguisher that corresponds to the class of fire, by a trained person, can save both lives and property. Portable fire extinguishers must be installed in all workplaces, regardless of other firefighting measures. The successful performance of an extinguisher in a fire situation largely depends on the proper selection, inspection, maintenance, and distribution.

E. Classifications of Fire Extinguishers:

Fires are classified into five general categories, depending upon the type of material or fuel involved. The type of fire determines the type of extinguisher to be used to extinguish it.

- **Class A** fires involve combustible materials such as wood, paper and cloth, which produce glowing embers or char.
- **Class B** fires involve flammable gases, liquids and greases, including gasoline and most hydrocarbon liquids, which must be vaporized for combustion to occur.
- **Class C** fires involve live electrical equipment or materials near electrically energized equipment.
- **Class D** fires involve combustible metals such as magnesium, zirconium, potassium and sodium.
- **Class K** fires involve cooking fats and oils found in deep fat fryers or other cooking appliances such as solid fuel char-broilers. In many cases, areas will be equipped with an ‘ABC’-type extinguisher, which can be used for a wide variety of common fires.

F. Location and Identification of Extinguishers:

Extinguishers should be conspicuously located and readily accessible for immediate use in the event of a fire. Generally, extinguishers will be placed along normal paths of travel and egress. Wall recesses and/or flush-mounted cabinets should be used whenever possible. Extinguishers should be clearly visible. In locations where visual obstruction cannot be completely avoided, directional arrows will be provided to indicate the location of extinguishers and the arrow will be marked with the extinguisher classification. If extinguishers intended for different classes of fires are located together, they will be marked to ensure the proper class of extinguisher is selected. Classification markings will be located on the front of the shell above or below the extinguisher nameplate and should be legible from a distance of three feet.

- **Condition of Extinguishers:**

Portable extinguishers will be maintained in a fully charged and operable condition and kept in their designated locations at all times when not being used. When extinguishers are removed for maintenance, inspection, or testing, a fully charged and operable replacement should be provided.

- **Mounting and Distribution of Extinguishers:**

Extinguishers should be installed on hangers, brackets, in cabinets or on shelves, no more than 42-inches above the floor. Extinguishers should be distributed such that the amount of time required traveling to the extinguisher and back to the fire does not allow the fire to get out of control.

- **Inspection and Maintenance of Extinguishers:**

All extinguishers should be visually inspected on a monthly basis, tested and certified by a qualified service provider on an annual basis.

G. Potential Hazards:

Fire and explosion hazards can exist in almost any work area. Potential hazards include, but are not limited to:

- Improper operation or maintenance of gas-fired equipment
- Improper storage or use of flammable liquids and oxidizers
- Smoking in prohibited areas
- Accumulation of trash and debris
- Loose electrical wires
- Unauthorized 'hot work' operations
- Over loaded extension cords and surge protectors
- Extension cords used as a permanent supplier of electricity

H. Hazard Prevention and Control:

All nonessential ignition sources must be eliminated where flammable liquids are used or stored. The following is a list of some of the more common ignition sources:

- Open flames, such as cutting and welding torches, furnaces, matches and heaters, should be kept away from flammable liquids. Cutting or welding on flammable liquids equipment should not be performed unless the equipment has been properly emptied and purged with a neutral gas, such as nitrogen.
- Electrical sources of ignition, such as DC motors, switches and circuit breakers should be eliminated where flammable liquids are used, handled or stored. Only approved, explosion-proof devices should be used in these areas.
- Mechanical sparks produced as a result of friction should not be used near flammable liquids.
- Static sparks generated as a result of static electricity discharge. Every effort should be made to eliminate the possibility of static sparks including proper bonding and grounding of tools and equipment.

I. Removal of Incompatibles:

Materials that can contribute to a flammable liquid fire should not be stored with flammable liquids. Examples include oxidizers and fertilizers stored near petroleum-based products. Fertilizers and oxidizers may NOT be stored in wood frame buildings whenever possible.

J. Control of Flammable Gases:

Generally, flammable gases pose similar fire hazards as flammable liquids and their vapors and many of the same safeguards also apply. Other properties, such as toxicity, reactivity and corrosivity must also be taken into consideration as a flammable gas could produce toxic combustion products.

K. Fire Safety Inspection:

Supervisors, Fire Marshals, and Safety Coordinator are responsible for conducting workplace fire inspections as a part of the normal workplace safety inspection. These surveys should include observations of housekeeping issues and should specifically address proper storage of chemicals and supplies, unobstructed access to fire extinguishers and emergency exit or evacuation routes.

L. Emergency Exits:

Every exit designated as an emergency exit should be clearly visible or the route to it conspicuously identified in such a manner that every occupant of the building will readily know the direction of escape from any point. At no time should exits or paths of egress be blocked. Flammable materials such as file folders, file boxes and discarded furniture shall not be kept in staircases, stairwells, or other emergency exits routes. Any doorway or passageway, which is not an exit or access to an exit, but which may be mistaken for an exit, should be identified by a sign reading “Not an Exit” or otherwise labeled as to the purpose (i.e., “Closet”). Exits and accesses to exits will be marked by a readily visible sign. Each exit sign (other than internally illuminated signs) should be illuminated by a reliable light source or phosphorescence.

M. Emergency Lighting:

Emergency lighting in buildings, if equipped, should be tested at least monthly to ensure proper operational conditions in the event of an emergency. These tests should be completed in conjunction with the fire extinguisher visual inspections.

N. Evacuation Routes and Plans:

Each facility shall design and post an emergency evacuation plan to allow employees and other to safely evacuate the building or affected area in the case of an emergency. Should evacuation be necessary, proceed to the nearest exit or stairway and proceed to an area of refuge outside the building. Most stairways are fire resistant and are often equipped with barriers to smoke if doors remain closed. Do not use elevators. Should a fire involve the control panel of the elevator or the electrical system of the building, power in the building may be lost and you could become trapped in the elevator, potentially between floors. Also, the elevator shaft can become a flue, lending itself to the passage and accumulation of hot gases and smoke generated by the fire.

O. Fire Emergency Procedures:

The following procedures should be followed in the event of a fire within a building:

- Activate the nearest fire alarm, if equipped
- Notify your supervisor, co-workers, and other occupants
- Fight the fire only if:
 - The Fire Department has been notified of the fire, and
 - The fire is small and confined enough to its area of origin, and
 - You have a way out and can fight the fire with your back to the exit, and
 - You have the proper extinguisher, in good working condition, and know how to use it.

- If you are unsure of your ability or the fire extinguisher's capacity to contain the fire, leave the area.
- Leave the building and move away from exits, maintaining a clear path for emergency operations.
- Assemble in a designated area and in accordance with your department's emergency action plan.
- Report your safety to the appropriate supervisor or personnel.

XI. TOOL SAFETY:

- All tools shall be of an approved type and maintained in good condition.
- All tools shall be examined prior to use to ensure adequate working condition.
- Defective tools shall be tagged to prevent their use and removed from the jobsite.
- Employees shall be trained on the correct use, hazards, and limitations of tools used in the workplace.
- Gloves should be worn when they provide protection to the employee without increasing the chances of the employee becoming entangled at the point of operation.
- Tools shall not be left unsecured in elevated places. Tethering is recommended in areas where tools may fall to a lower level.
- Impact tools, such as chisels, hammers and punches that become mushroomed or cracked shall be replaced.
- Chisels and punches shall be held with a safe holding device, such as vice grips or pliers to avoid injury to employee's hand.
- Wrenches with sprung or damaged jaws shall not be used.
- Wooden handles that are loose, cracked or splintered shall be replaced, not taped or lashed.
- Power tools shall be disconnected from any power source while repairs or adjustments are being made.

A. Tool Carrying and Storage:

- Never carry sharp tools in your pockets unless the edges are protected.
- Do not carry tools in your hands while climbing a ladder. Hoist them with a rope or use an approved utility belt.
- Protect your tools from falling when working from a scaffold, ladder or other elevated work areas.
- Do not leave your tools lying around where they may cause a trip/fall hazard. Tools no longer needed for the job shall be returned to their proper location.

XII. LADDER SAFETY:

- Wooden ladders shall not be painted so as to obscure a defect in the wood; only a clear nonconductive finish shall be used.
- All ladders shall be inspected before use. All ladders shall have a non-skid surface. Ladders with weakened, broken or missing steps, broken side rails, or other defects shall be tagged and removed from service.

- All ladders shall have a maximum weight load identified affixed to the ladder. Ladders without a fixed limit shall be removed from use until an appropriate label is affixed.
- Ladders and scaffolds shall be sufficiently strong for their intended use. All ladders shall be capable of supporting at least 2.5 times the maximum intended load without failure.
- Ladders shall not be placed in front of doors opening toward the ladder unless the door is open, locked, or guarded.
- When ascending or descending ladders, employees shall have both hands free and shall face the ladder.
- Only Department supplied ladders shall be used by employees.
- Ladders shall not be used as scaffold platforms unless specifically designed for that purpose.
- Boxes, chairs, etc. shall not be used as ladders.
- Portable metal ladders and other portable conductive ladders may not be used near exposed energized lines or equipment except in very specialized situations.
- The use of stepladders above 20 feet is prohibited and the use of extension ladders above 24 feet is strongly discouraged.
- Supervisors and employees are strongly encouraged to use a fall arrest system in conjunction with a ladder whenever the employee will be elevated more than ten (10) feet above the working surface.
- A fall arrest system must be used whenever an employee is working on a ladder, including a fixed ladder, more than 24 feet above the working surface.
- All ladders used in fire service activities shall be NFPA approved.

A. Straight Ladders:

- Portable straight ladders shall be equipped with nonskid bases or shoes.
- The ladder shall be placed so that the distance between the bottom of the ladder and the supporting point is approximately one-fourth of the ladder length between the foot of the ladder and the upper support.
- Straight ladders shall not be climbed beyond the third step from the top.
- When working from a portable ladder, the ladder must be securely placed, held, tied or otherwise made secure to prevent slipping or falling.
- When dismounting from a ladder at an elevated position (such as a roof), the employee shall ensure that the ladder side rails extend at least 3 feet above the dismount position, or that grab bars are present.
- Employees shall belt off to a ladder whenever both hands must be used for the job or a possibility of the employee falling from an elevated position exists.
- Ladders shall not be spliced together to form a longer ladder, unless specifically designed to be used as a section ladder.
- A ladder shall not be placed against an unsafe support.
- The base of the ladder shall be placed at a 4:1 pitch ratio or 25% of the ladders height from the fixed object the employee is working on.

B. Step Ladders:

- The top two steps shall not be used, except for platform ladders.
- Stepladder legs shall be fully spread and the spreading bars locked in place.

- Stepladders shall not be used as straight ladders.
- When an employee is working on a stepladder more than 10 feet high (except a platform ladder), another person shall hold the ladder or it should be tied to a support to prevent it from falling.

XII. MATERIAL STORAGE SAFETY:

- Material shall be stored in such a manner that it will be safe from damage. Special care must be taken to assure that stored material poses no hazard to anyone working around it. Only lightweight material should be stored on top shelves.
- Bins or shelves shall never be used as ladders.
- Materials shall not be stored on the floor, in front of shelving.
- All storage shelves, equipment and facilities shall be marked with the maximum safe storage weight including ceilings and recessed areas. This provision shall not apply to office file cabinets and break room kitchen cabinets.

A. Housekeeping:

- Work locations including vehicles, buildings, shops, yards, offices, cabs, etc. shall be kept clean and orderly at all times.
- Combustible materials, such as oil-soaked rags, waste and shavings shall be kept in approved metal containers with metal lids. Containers shall be emptied as soon as practical.
- Both clean rags and used rags shall be kept in metal or metal lined bins having metal covers.
- Permanent floors and platforms shall be kept free of dangerous projections or obstructions and shall be maintained reasonably free from oil, grease or water. Where the type of operation produces slippery conditions, mats, grates, cleats or other methods shall be used to reduce the hazard from slipping.
- Stairways, aisles, permanent roadways, walkways and material storage areas in yards shall be kept reasonably clear and free from obstructions, depressions and debris.
- Materials and supplies shall be stored in an orderly manner so as to prevent their falling or spreading and to eliminate tripping and stumbling hazards.
- Paper and other combustible materials shall not be allowed to accumulate, and weeds or other range vegetation shall not be permitted to grow in or around storage areas, shops, substations, pole yards, buildings, fuel tanks or other structures.
- Batteries shall be stored in a well-ventilated area protected from sparks or open flames.
- All personnel will practice good housekeeping. Scrap material will be disposed of properly, and the work area should be free of any loose material.

B. Stacking Material:

- When material is stacked, all possible precautions must be taken to assure that it will remain stable. The lower level must be blocked or tied to prevent slipping. The height of a stack of material should remain within reasonable limits.
- When unloading and/or stacking poles or pipe, great care should be exercised to maintain a safe work environment. Do not stand on poles or pipe. Watch for pinch points, and stay

out of the path of equipment during unloading. Avoid any contact with creosote, while unloading poles.

C. Flammable Material:

- Under no circumstances shall flammable materials be stored in an area where heat or potential ignition sources may affect the stability of the material.
- All flammable materials shall be stored in a location that will not endanger life or property. Containers will be clearly and appropriately marked, in accordance with fire safety standards. In addition, storage facilities shall have a sign identifying the materials as “flammable”.
- Flammable liquids and gases must be stored in fire proof/fire resistant cabinets when not in use.
- Storage of open containers of flammable materials is prohibited. Container covers must be promptly replaced. Smoking will not be permitted inside any warehouse facility or outside near flammable or combustible materials in the equipment yard.
- Flammable liquids shall be used only for their designed purposes. Gasoline shall not be used for cleaning purposes or for starting or kindling fires.
- All solvents should be kept in approved, properly labeled containers. Gasoline and other solvents of this class shall be handled and dispensed only in approved, properly labeled (yellow letters) red safety cans.
- When pouring or pumping gasoline or other flammable liquids from one container to another, metallic contact shall be maintained between the pouring and receiving containers. Transferring of flammable liquids from one container to another shall be accomplished only in properly ventilated spaces free from ignition sources.
- Strict adherence shall be paid to “No Smoking” and “Stop your Motor” signs at fuel dispensing locations.

D. Smoking:

Open flames shall not be permitted in areas where flammables or combustibles are present. Smoking will only be allowed in designated smoking areas and never in the vicinity of flammable materials. The absence of “No Smoking” signs shall not be considered authorization for smoking in hazardous locations.

XIII. SHOP SAFETY:

Many safety-related hazards and exposures exist in workshops and maintenance garages. The following procedures were developed to serve as a reminder of some of the potential exposures that can be found in these areas. This is not an all-inclusive list and does not address all of the known or expected hazards. In many cases, references to alternative safety procedures contained within this manual are noted.

A. Air Compressors:

- Drain valves on air compressors should be opened frequently to prevent the accumulation of liquid.
- Safety-relief valves will be installed on all compression tanks. These valves will be tested periodically to ensure their proper operation.

- Never use compressed air to clean your hands or to blow dirt from clothing or your body.
- When using compressed air for cleaning purposes, it must be kept at a level below 30 pounds per square inch (PSI).

B. Compressed Gas Cylinders:

- If compressed gas cylinders are stored inside a building, the area will be kept dry and well ventilated. Oxygen and fuel gas cylinders must be stored separately.
- Cylinder carts, other than those designed to hold cylinders in an upright position, are prohibited. Upright cylinder carts must be equipped with a chain, bar or some other device that will act to stabilize the cylinder. If gauges are not attached to the cylinder, valve caps must be in place.
- Signage similar to the following must be posted in any cylinder storage area. “Danger – No Smoking, Matches or Open Flames”.

C. Grinders:

- A face shield and safety glasses shall be worn while grinding. Any grinding equipment without proper safety features is not allowed in the work place. Abrasive wheels shall only be used on machines that have guards that cover the spindle end, nut and flange projections.
- Grinder work rests must be designated to be adjustable to compensate for wheel wear. Work rest should be adjusted with a maximum clearance of 1/8-inch to help prevent work from jamming. Tongue guards must also be adjusted to within 1/8-inch.
- When replacing abrasive wheels, follow the manufacturer’s directions for proper installation and inspection. All grinding wheels must be inspected prior to installation to insure that the RPM rating of the wheel is correct for the grinder’s RPM.
- All grinders shall be permanently mounted and/or equipped with non-tip protections.

D. Electrical Safety:

- Identify and label all electrical control devices, such as circuit breaker, fuses, disconnects, etc.
- All electrical outlets, including wall receptacles, extension cords, etc. must have an independent, third-wire ground system.
- All electrical tools and equipment shall be effectively grounded unless the tool is an approved double-insulated type.
- All electrical junction boxes shall have protective covers. All such boxes must have sufficient access space.
- Extension cords and surge protectors may not be used to permanently power shop equipment.
- See *Electrical Safety* section for additional requirements.

E. Material Storage:

- Stored materials should be stacked in such a manner as not to create a hazard. Stack containers, boxes, parts, etc. in an orderly fashion to ensure stable stacking heights.

- Heavy bulky materials should be stored on lower shelves to minimize chances of injury due to falling objects.
- See *Material Storage Safety* section for additional requirements.

F. General Shop Safety:

- There shall be an eyewash station and safety shower within the immediate work area where employees are exposed to chemical/hazardous materials.
- Eyewash stations and safety showers shall be unobstructed, clean and in working order at all times.
- Elevated storage platforms over four feet in height from floor level shall have standard handrails (includes a mid-rail and a top handrail) and toe boards. The handrails will be constructed of metal or wood sufficient to withstand 200 pounds of top rail pressure.
- Elevated storage platforms must be labelled or have a readily observable sign showing the maximum weight allowed.
- Proper signage, such as “No Smoking” signs, will be installed in all areas where flammable or easily combustible materials are stored.
- Hooks used on hoisting equipment shall be equipped with a safety latch to help prevent dropping of any lifted load.
- The hoisting capacity of any hoisting equipment shall be printed clearly on the frame in lettering that is large enough to be read from ground level. All cranes shall be inspected on at least a monthly basis to assure their proper operation and condition.
- All shops shall have at least two accessible exits for emergency evacuations.
- Any doors not designated as exits, but may be mistaken for exits should be clearly marked “Not an Exit”.
- All exits shall be identified by a clearly visible, illuminated, “Exit” sign.
- Only approved containers are to be used for the storage of flammable and combustible materials. Approved containers can be identified by the presence of a label from a certifying organization, such as Underwriters Laboratories (UL).
- Safety cans shall be painted red and clearly marked to identify the contents. Only approved pumps or self-closing faucets are to be used for dispensing flammable or combustible liquids.
- No guard shall be removed from any machine or piece of equipment except to perform required maintenance. Guards removed to perform maintenance operations shall be replaced immediately after the completion of the work.

XIV. STORAGE & EQUIPMENT YARD SAFETY:

- All vehicles shall have the emergency brake set when parked on a slope or down grade. Consideration should also be given to the use of chocks in these situations.
- All vehicles and equipment shall be parked in a position that does not require backing whenever possible. When backing a truck or machinery in the yard, use a spotter to assist you into position.
- Proper personal protective equipment should be evaluated before performing any work in the yard. It is not possible to identify all personal protective equipment that may be required due to the various types of assignments in that area.

- Miscellaneous tools, equipment and material should be stored on pallets instead of being placed on the ground. Pallets should be stacked in a way that ensures their stability. Stability may be influenced by many items such as the stability of the ground, the height of the stacked material, the configuration of the stacking, etc.
- Always roll pipe from the ends or from behind to avoid placing your body in the pipe's path.
- All pipe racks will be fitted with pipe stops to prevent pipe roll-off. Stripping should also be used at the ends of the pipe to act as spacers.
- All above ground fuel storage tanks should be protected on all four sides with heavy-duty guard posts and crash rails. Emergency cut-off switches shall also be installed near the pumping equipment and a fire extinguisher should be readily accessible.
- A diking system capable of holding the volume of the above ground storage tank should be constructed to help control potential spills.

XV. WELDING & CUTTING SAFETY:

- Welding and cutting shall only be performed by experienced and properly trained personnel.
- The work area shall be inspected for potential fire hazards before any cutting or welding is performed.
- When welding or cutting in elevated positions, precautions shall be taken to prevent sparks and hot metal from falling onto people or material below.
- Suitable fire extinguishing equipment shall be immediately available at all locations where welding and cutting equipment is used.
- Proper strikers shall be used in lighting torches. Matches and cigarette lighters shall not be used.
- A fire watch shall be maintained whenever welding or cutting is performed in locations where combustible materials present a potential fire hazard. A fire check should be made of the entire area after completion of welding or cutting activities.
- Machinery, tanks, equipment, shafts or pipes that could contain explosive or flammable materials shall be thoroughly cleared and decontaminated prior to the application of heat.
- In dusty or gaseous spaces where there is a possibility of an explosion, welding or cutting equipment shall not be used until the space is adequately ventilated.
- Adequate ventilation or approved respiratory equipment shall be used while welding in confined spaces or while cutting, brazing or welding zinc, brass, bronze, stainless steel, galvanized or lead coated materials.
- Welders shall wear clothing made of fire resistant fabrics, gloves, appropriate footwear, sleeves and a buttoned collar. All protective clothes and equipment should be worn in a manner that provides the most efficient protection from slag or other hot material.
- When using an arc welder, use No. 10 or No. 12 shade lenses. When using acetylene torches for welding or cutting, use No. 5 or No. 6 shade lenses.
- Regular shaded safety glasses do not provide adequate protection for welding or cutting operations.

- Proper eye protection in the form of safety glasses and a face shield should be worn during any portable grinding activities. Safety glasses should also be worn during any slag chipping activities.

A. Gas Welding:

- Suitable eye protection, protective gloves and clothing shall be worn during welding or cutting operations or while cleaning scale from welds. Helpers or attendants shall wear proper eye protection. Other employees shall not observe welding operations unless they use approved eye protection.
- Matches shall not be used to light a torch. A torch shall not be lit on hot work.
- When gas-welding equipment is not in use, the cylinder valves shall be closed and the pressure in the hose released.
- Gas hoses shall not be positioned so they create tripping/slipping hazards.
- Always inspect oxygen or fuel gas hoses for leaks, burn spots, worn places, or other defects before pressurizing.

B. Electric Welding:

- No electric welding machine, either AC or DC, shall be operated until the frame or case of the machine is electrically grounded for protection from potential shock hazards.
- All ground and electrode lead cables will be inspected before use for bad or damaged connectors. Only connectors designed for joining or connecting will be used for that purpose.
- Welders shall wear an approved welding helmet, proper protective gloves and fire-resistant clothing during welding activities. Proper eye protection in the form of safety glasses and/or a face shield should be worn by the welder and any helpers in the area when chipping slag, grinding, etc. Other employees shall not observe electric welding operations unless they use approved eye protection.
- Welders shall wear proper eye protection to guard against flying particles when the helmet is raised.
- Welding screens shall be used whenever practical to help control potential ultraviolet light exposures to other personnel in the area.
- Welding machines will be placed at least 4 feet apart.
- Fire extinguishers should be placed in the immediate area and a fire watch used as necessary to control any fire potential.

XVI. WEATHER-RELATED ILLNESS PREVENTION:

Supervisors are responsible for encouraging employees to frequently consume acceptable beverages (Acceptable beverages include water and sports drinks that do not contain caffeine) to ensure hydration. Employees are responsible for monitoring their own personal factors for heat related illness including consumption of water or other acceptable beverages to ensure hydration.

A. Evaluating and Controlling Outdoor Heat Stress Factors:

In addition to outdoor temperature, supervisors should evaluate other potential heat stress factors. These factors include:

- Radiant Heat (Example: Reflection of heat from asphalt, rocks, or composite roofing)

material, or work in direct sunlight)

- Air Movement (Example: Wind blowing and temperature above 95° F)
- Conductive Heat (Example: Operating lawnmower)
- Workload Activity and Duration (Examples: Hand sawing, digging with a shovel)
- PPE (Examples: Wearing a respirator and gloves for pesticide application, or mask and gloves for welding)

B. Supervisors should attempt to control outdoor heat stress factors when feasible. Controls to consider include:

- Taking breaks in a shaded area (building, canopy and under trees)
- Starting the work shift early (when daylight begins) and not working outside during the hottest part of the day.
- Removing personal protective equipment such as respirators, and gloves and welding gear during breaks
- Using cooling vests or headbands
- Workers should not work alone in the heat for long periods of time.

C. Heat-Related Illnesses:

- Heat stroke, heat exhaustion, heat cramps and heat rash are health-related problems associated with working in hot environments. Heat-related illnesses can be caused by prolonged exposure to hot temperatures, limited fluid intake or failure of temperature regulation mechanisms in the brain.
- The most serious health disorder associated with working in a hot environment is heat stroke. Symptoms of heat stroke include hot dry skin, no sweating, high body temperature, rapid heartbeat, mental confusion or a loss of consciousness. While medical help is being called, the victim should be moved to a cool area and his/her clothing soaked with cool water. Vigorous fanning of the body will increase cooling. Death can occur if prompt first aid and medical help is not given.
- Heat exhaustion occurs as a result of excess fluid loss and failure to replace the minerals and fluid lost during sweating. Signs of heat exhaustion include extreme weakness or fatigue, giddiness, nausea, or headaches. The skin is clammy and moist and the body temperature is relatively normal. The best treatment for heat exhaustion involves resting in a cool place and drinking plenty of fluids.
- Heat cramps are painful muscle spasms, which are caused by excessive fluid and salt loss. Such cramps can be treated by consuming fluid replacement beverages.
- Heat rash is likely to occur in hot and humid environments where sweat cannot be easily evaporated from the skin surface. It can be prevented by resting in a cool place and allowing the skin to dry.
- By following a few basic precautions, health problems associated with working in hot environments can be prevented:
 - Those unaccustomed to working in the heat should be given time to adjust to work in a hot environment.
 - Wear light, loose fitting clothing and protect yourself by wearing a hat. Sunscreen should also be used when prolonged exposures to sunlight may be possible.

- Drink plenty of fluids to help prevent dehydration. Five to seven (5-7) ounces of fluid are recommended every fifteen to twenty (15-20) minutes when working in extremely hot or humid conditions. Beverages containing alcohol or caffeine should be avoided to prevent dehydration.
- Alternate work and rest periods. Heavy work should be scheduled for the cooler parts of the day if possible.
- Educate employees on the symptoms, treatments and preventive measures for heat-related problems.

Cold weather can also be dangerous. Slippery footing is a big safety concern so employees will pay extra attention to what when walking on wet surfaces.

D. Cold-Related Illnesses:

Hypothermia is when the body’s temperature drops below normal, causing uncontrollable shivering, weakness, drowsiness, disorientation, unconsciousness, and even death. Persons working outdoors during the winter months should follow the guidelines listed below:

- Dress in layers.
- Keep dry.
- Work with co-workers when possible.

XVII. CHAIN SAW SAFETY:

A. Personal Protective Equipment (PPE):

Employees operating a chain saw or related equipment shall, at a minimum, wear:

- Safety glasses and/or face shields.
- Head protection.
- Hearing protection.
- Gloves.
- Cut-resistant chaps.
- Work shoes or boots.
- Fall protection, if necessary.

B. Chain Saw Operation:

- When starting a chain saw, it shall be placed on the ground or against a solid support. Do not hold the chainsaw off the ground when starting.
- Ensure the chain brake, if equipped, is locked before starting.
- The operator shall grip the chain saw with both hands during the entire cutting operation.
- The saw bumper shall be against the tree or limb before starting a cut.
- Chain saw operators shall regularly clear the immediate area around their work to make certain that brush or limbs will not interfere with the chain saw or operator.
- Chainsaws shall not be modified in such a way to allow locking of controls in the “on” position.
- Safety guards and breaks shall remain in place and operational at all times
- The saw engine or motor shall be stopped when:
 - Working on any part of the chain or cutting bar;
 - Being moved from one location to another; and

- The unit is unattended.
- Gasoline driven chain saw engines shall be stopped when being refueled. If gasoline is spilled on the chain saw during refueling, it shall be wiped off before the engine is started.
- A gasoline driven chain saw shall not be used above shoulder level. Employees shall not approach the chain saw operator with the reach of the saw blade while it is in operation.
- Ropes, pulleys, etc. should be used as necessary to lower larger limbs that may endanger persons and property if allowed to “free-fall”.
- The proper use of fall protection and/or ladders should be reviewed with all employees prior to working from a position other than ground level.
- The transportation department should be contacted before cutting any tree that may require the closing or redirection of traffic.
- When traffic will be closed or redirected, the approved Manual on Uniform Traffic devices shall be used.

XVIII. TREE CUTTING & TRIMMING SAFETY:

Before attempting to trim, cut or remove any tree, carefully consider its characteristics. Items to be considered include:

- Tree lean.
- Tree size.
- Wind conditions.
- Nearby structures.
- Nearby utilities.
- Other trees or brush in the vicinity.

Before cutting, clear the ground around the tree where the work will be performed, carefully, removing any underbrush or other obstructions. This will provide clear vision, unrestricted movement, and an unhampered escape route when the tree or limb begins to fall.

In advance of the cutting, plan an escape route to the side or rear, depending upon the situation and likely direction of tree and limb fall. As the tree or large limb begins to fall, stop the saw and lay it in a safe place that will allow unrestricted escape.

A. Trimming & Cutting Procedures:

- Hold the saw firmly with both hands.
- If cutting entire tree, make a cut close to the base of the tree but high enough to conveniently avoid running the saw near the soil.
- Cut through trees up to 8-inches in diameter with one cut.
- On larger trees, notch (undercut) at least one-third of the trunk diameter on the fall side of the tree. Then, make a lower cut of the 45-degree notch first to prevent pinching or binding of the chain by wedge cut, if used.

- Make the cut to initiate the fall on the opposite side of the trunk about 2-inches above and parallel to the horizontal notch. Leave wood fibers intact to act as a hinge to keep the tree from twisting and falling in the wrong direction or kicking back on the stump.
- Guide the saw into the tree but do not force it.
- Remove the saw from the tree and shut it down before the tree falls.

B. Preventing Saw Kickback:

- Hold the saw firmly with both hands.
- Grip the top handle of the saw by wrapping hand and thumb firmly around handle.
- Use a saw equipped with chain brake or kickback guard.
- Watch for twigs or other impediments that could snag the chain.
- Don't pinch the chain bar while cutting.
- Saw with the lower part of the bar close to the bumper, but not on the top near the nose.
- Maintain high saw speed when entering or leaving a cut in the wood.
- Keep the chain sharp.

XIX. LANDSCAPING & GROUNDS MAINTENANCE SAFETY:

A. Power Lawn Mowers (Push, Riding, and Zero-Turn Radius):

Prior to use:

- Review the instruction/owner's manual, especially if you are unfamiliar with a particular piece of equipment.
- Ensure that all mowers are equipped with adequate and appropriate guards, which shall remain in place while the mower is in use, including rear shields, grass chute/deflector, and 'dead-man' controls.
- Any adjustments, inspections, or repairs, should be completed while the mower is at a complete stop. A spark plug wire shall be removed if necessary to prevent accidental starting.
- Fill the fuel tank outdoors. No smoking allowed while fueling.
- Walk the area to be mowed, carefully removing any debris including rocks, limbs, logs, or anything else the mower blades could throw while cutting.

Mower Operation:

- Proper PPE shall be worn for the task being performed. Necessary personal protective equipment includes protective eyewear, face shields, hearing protection, gloves, and work boots.
- Avoid directing the discharge opening toward other individuals or vehicles in the vicinity.
- When mowing on a slope or incline, it is safer to mow up and down the hill rather than across the face of the slope. Do not operate mowers on a slope greater than 15 degrees.
- Avoid wet slopes to prevent losing traction and tipping over.
- Keep the mower's movement steady and slow enough to adequately maintain control.
- Maintain a safe distance from drop-offs, water, and other hazards.

- Do not make rapid corrections or turns.

B. Line Trimmers, Leaf Blowers & Edgers:

- Proper protective eyewear and hearing protection shall be worn by all employees using trimmers, edgers or leaf blowers and other PPE may be necessary depending on the activity.
- Never install a blade on a trimmer or edger that was not specifically designed for that machine.
- Carefully trim around vehicles, doorways, parking lots, and other areas where others may be as flying debris may cause injury.
- Allow machines to properly cool down prior to re-fueling. Hot engine parts and mufflers may cause a fire should fuels be spilled on or in them.

XX. OFFICE/FACILITY SAFETY:

- Employees shall walk cautiously up and down stairs and use handrails whenever possible.
- Caution shall be exercised when walking around blind corners.
- Desk drawers and file cabinets shall be kept closed when not in use.
- Only one drawer of a file cabinet shall be pulled out at a time.
- Boxes, chairs, buckets, etc. shall not be used in place of ladders.
- The floor shall be kept clear of tripping hazards such as telephone cords, electrical extension cords, paper cartons, etc.
- Employees mopping or waxing floors shall place warning signs to alert co-workers of the potential for slippery floors before beginning operations. In addition, all liquid spills shall be cleaned up immediately and signs put in place until the hazard is alleviated.
- Material shall be stored on shelves in a manner to prevent falling; heavy objects shall be placed on lower shelves.
- Hallways and aisles shall be kept clear of obstructions.
- All emergency exits, electrical panels, fire extinguishers and emergency equipment shall be kept clear of all obstructions.
- Solvents or other toxic substances shall be used only with adequate personal protection or in well-ventilated areas. Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS) should be accessible to all employees who are using these substances.
- Employees shall not attempt to clean oil or adjust any machine that is running. If the machine is not equipped with a starting switch that can be locked in the “off” position, it shall be disconnected from the power source.
- Unsafe electrical cords, faulty equipment or any other hazardous condition shall be reported and taken out of service until the repairs are completed.
- Broken glass and other sharp objects shall not be placed in wastepaper containers.
- Every facility must provide adequate toilet facilities which are separate for each sex. These facilities must be: kept clean at all times, be protected from the elements, and have proper ventilation.

- The requirements above for toilets facilities do not apply to mobile crews or normally unattended locations, as long as employees working at these locations have transportation immediately available to nearby toilet facilities.
- Employees shall be working in a safe manner.
- Office furniture (chairs, desks, tables) in safe, usable condition.
- Required exits will be clearly evident and marked with illuminated signage.
- Evacuation routes will be clearly posted and up-to-date.
- Outside areas and parking lots shall be properly maintained, adequate lighting and free of slip/trip hazards.

A. Printing and Duplicating Equipment:

Printing and duplicating equipment can generate indoor air pollutants. Common types of equipment found in the workplace include photocopiers and computer laser printers. To reduce indoor air quality concerns with this type of equipment do the following:

- Make sure the equipment is located in a ventilated area and not located near someone's workstation.
- Provide routine maintenance for equipment to ensure that it operating correctly.
- Keep the document cover closed at all times during photocopying, as this prevents light leakage and avoids visual fatigue.
- Establish a clear work area around photocopiers, separate from any walkway or emergency exit route.

XXI. ERGONOMICS AWARENESS:

A. Work Stations, Desks, and Counter-Tops:

- Chairs should be easily adjustable and provide good lumbar support. If feet cannot rest firmly on the ground, a footrest may be provided. Chairs with a five-point base are recommended due to the stability that is provided.
- Sufficient leg room must be allowed for when seated.
- Position the monitor directly in front of the user. The user eyes should be level with the top of the screen. Viewing distance between the user's eyes and the screen should be approximately 16 to 22 inches.
- The equipment or sources of light should be positioned so that glare or bright reflections on the display screen are minimized.
- Adjust the height of the chair and/or keyboard so that the shoulder-elbow-arm angle is approximately 90 degrees.
- Keyboard heights and placement should be adjustable. Use a cushioned palm rest if needed to keep user's hands and fingers in the same plane as the forearm and avoid resting wrists and forearms on sharp table edges.
- Work surface heights should range from 23 to 28 inches for seated work stations. In addition, your work area should be well organized with routine operations within easy reach and easily accessible.
- Document holders should be placed adjacent to and at the same height as the display screen.
- Users should adjust positions frequently and get up and move around to help avoid fatigue.

B. Lighting, Noise and Heat:

- Adequate but not excessive heat should be provided during cooler weather.
- Windows should be equipped with adjustable blinds.
- Use task lighting where extra illumination is required.
- Noise above 85 to 90 decibels (DBA) may be harmful to workers. When exposed to high noise levels, employees shall utilize hearing protection equipment to ensure proper working conditions.
- Whenever possible, isolate noisy machines and equipment in a remote location.
- Tailor work practices to prevent heat/cold-related disorders. Employees exposed to hot environments must know the appropriate medical steps to counteract life threatening situations such as hypothermia, heat stroke, heat exhaustion and heat cramps.

XXII. WORKPLACE VIOLENCE AWARENESS:

The City of Round Rock has zero tolerance with respect to workplace violence or the threat of violence. The City does not tolerate any type of workplace violence committed by or against employees. Employees are prohibited from making threats or engaging in violent activities. Employees who violate this policy shall receive disciplinary action, up to and including termination. See the City of Round Rock Policies and Procedures Manual Section 8 for further clarification.

http://employees.roundrocktexas.gov/wp-content/uploads/2014/06/corr_policy_manual.pdf

A. Recognition:

Recognize signs that may precede violence in your co-workers or customers and report them to your supervisor and/or the Risk Management division. The supervisor shall immediately notify the Risk Management division of any reported threats or perceived threats. Be cautious when you deal with a person who:

- Makes verbal threats on the job about getting “even” with co-workers or with your employer for disciplinary action or dismissal.
- Regularly threatens or intimidates others.
- Claims people are out to get him or her.
- Talks a lot about weapons.
- Holds grudges.
- Blames others for problems or setbacks.
- Gets angry very easily and often.
- Is defensive when criticized.

B. Reporting:

Report the following situations, events or behaviors to your supervisor:

- A customer that becomes unusually angry with you because of perceived slow service, perceived poor conduct quality or lack of information
- A customer who talks abusively when making a telephone complaint

- A customer who threatens you or co-workers.

C. Respond:

Respond effectively to a threatening or violent situation:

- Take all threats seriously
- Keep furniture between you and disgruntled citizens/co-workers whenever possible.
- Stay calm and be polite, look the person in the eye and do not argue or threaten
- Address each customer with a friendly greeting when you are on the phone or meeting the customer in person
- Be courteous at all times
- Notify the police if you are frightened or use a warning signal to alert co-workers
- Ask your employer for training to help you deal with the public.
- Ask for a second person to be present whenever possible.

D. Protect:

Protect yourself and co-workers on the job:

- Know how to use an alarm or alert staff to possible danger.
- Develop a danger signal you can use to alert others to possible danger.
- Meet visitors in the lobby and escort them to your work area.
- Report any unusual packages to appropriate personnel. Do not open suspicious packages.
- Lock purses and personal belongings in a desk or locker.
- Report signs of a break-in and missing items immediately.

E. Security:

Follow security policies and procedures by doing the following:

- Keep locked door locked, do not prop them open.
- Wear name tags or badges when required.
- Do not share access cards or entry codes.
- Do not allow non-employees (including ex-employees) to avoid sign-in and other visitor entry procedures.
- Do not engage in fistfights or other aggressive behavior at work.
- Do not bring a weapon to work or leave one in your car.
- Do not drink or use drugs at work, or work under the influence.
- Report all threats and security violations.

F. After-Hours Work:

Take special precautions when working late or alone.

- Inform someone that you are working late.
- If possible, relocate your vehicle closer to the building.
- Lock the door to your work area if you are alone.
- Work near a phone.
- Work with lights on.
- Avoid using dark stairways or halls.
- If working with others, try to leave and walk to transportation together.

- Have your car keys ready as you leave the building.
- Check under and inside your car before unlocking it.
- Lock your car as soon as you are seated in it.
- Walk confidently and quickly to show that you know where you are going and what you are doing.
- Try to run away from an attacker if possible.
- Yell if you are being attacked to alert others.
- Give an attacker money or jewelry on demand.

XXIII. EMERGENCY ACTION PLANS:

To ensure employee safety in the event of fire and other emergencies, every facility will have a written emergency action plan which includes the following elements:

- Escape procedures and routes.
- Meeting place after leaving the immediate area
- Critical operations.
- Employee count following an emergency evacuation.
- Rescue and medical duties.
- Means of reporting emergencies.
- Persons to be contacted for information or clarification.
- Frequency of drills which will be held twice a year.

A. Type of Potential Emergencies:

- Medical Emergencies.
- Fire, Hazardous Materials and Toxic Substances Exposure.
- Building Air Contamination.
- Threats, Workplace Violence, and Civil Disturbances.
- Man-made Emergencies and Disturbance.
- Severe Weather, Tornados, and High Winds.
- Heavy Rain and Water Flooding.

XXIV. BLOODBORNE PATHOGENS

Bloodborne pathogens, though difficult to contract, can be extremely dangerous to employees. Employees shall refrain from coming into contact with blood or other potentially infectious materials, including but not limited to semen, vaginal secretions, cerebrospinal fluid, synovial fluid, large amounts of vomit and feces, other than through the means contained herein, and through the use of universal precautions. See the City’s approved “Bloodborne Pathogen Exposure Control Plan” for complete handling instructions.

APPENDIX A:
Safety Program Forms