SHAKOPEE

Safety Program/ Policies

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Section 1

A Workplace Accident and Injury Reduction (AWAIR) Program Administration, Program, and Policy Implementation

THE CITY OF SHAKOPEE SAFETY PROGRAM
POLICY STATEMENT

The City of Shakopee Management realizes it has the responsibility to provide safe workplaces for its employees and safe environments for its citizens. All employees must pursue the highest standards in their assigned activities and all City employees must recognize the wellbeing of persons and the protection of our physical resources are as important as the activity and work being performed.

The City of Shakopee has established a Loss Control Management Program meeting the requirements of the AWAIR Program (MN Statute 182.653). The City expects its Management, Supervisors, Department Heads and employees to meet their assigned safest responsibilities, respond to all planned safety efforts, and perform their assigned jobs in the safest possible manner.

The Safety Coordinator will be assigned the responsibility of implementing, organizing and maintaining the overall Loss Control Management Program.

The Safety Coordinator will be our personal representative and will be responsible for the staff direction and administration of our Safety Program. The Safety Coordinator will periodically report to the City Administrator on the status of the Safety Program.

In addition, a Safety Committee has been created to investigate major losses, loss trends, assign Task Force Committees and to conduct other assigned activities. This Committee is made up of a combination of Management and employees (a representative from each major area in the City).

All Supervisors will be responsible for the safety and wellbeing of their workers as well as the repair and maintenance of facilities and equipment in their area of responsibility. Supervisors and Department Heads will investigate all accidents/injuries and loss trends. All reports related to this program will be directed to the Safety Coordinator.

All City employees will complete their assigned tasks in a safe fashion based on the training they received, the City safety rules, OSHA standards, good safety practices, and any other appropriate guidelines.

The City of Shakopee is committed to doing all in its power to make its Safety Program and Safety Committee a success and expects all City employees to assist in this effort by contributing their expertise and following all established rules and procedures.

The City of Shakopee recognizes its obligation to provide the safest possible working conditions for its employees, a safe environment for its citizens, and to provide prompt first aid and medical care to minimize personal injuries in the event of an accident. This requires a Safety Program whereby: (1) our employees will be provided proper Personal Protective Equipment and job instruction; (2) their work practices will be frequently reviewed; and (3) most importantly, their work performance will be evaluated.

The Safety Program will provide for the establishment of job safety training, minimum job safety requirements, and investigation and reporting of accidents. Each Supervisor must implement and aggressively support our Safety Program. All Supervisors and Department Heads will be responsible for the actions of their employees. All employees will be expected to help and support the efforts of the Safety Coordinator, to follow safe practices, and to obey all of the safety rules. We all must make every effort to reduce the burden of accidents and injuries.

Signed this _____ day of _____, _____

Signed: _____ Title: _____

NOTE: Signed copy available to employee upon request through the Safety Coordinator.

TACTICAL GOALS

- Create and maintain active interest in the health and safety of employees and reduce the number of accidents and injuries.
- Discuss and take effective action on the principal accident-causing conditions.
- Help stimulate an awareness of health and safety issues and an atmosphere of cooperation between Management and employees.
- Identify problems and formulate policies and procedures monitoring and improving workplace safety and health.

OPERATIONAL GOALS

- To develop a safety and security conscious attitude in all employees.
- To review and revise general City and department specific Safety Policies/Rules.
- To develop and facilitate a Safety Program needs assessment.
- To develop and provide for the implementation of an annual Safety Program training schedule.
- To assure appropriate recordkeeping, reporting, and retention.
- To coordinate for the investigation of all work place incidents/accidents and the implementation of a corrective action plan.
- To review overall compliance with the Safety Program.
- To provide for an overall program evaluation (see end of section for annual review form).

RESPONSIBILITIES AND AUTHORITIES

GENERAL
It is the policy of the City of Shakopee to assign safety responsibilities to individuals and the individuals having responsibilities defined herein may delegate performance of their duties to others (unless stated otherwise).

PURPOSE
The purpose of this procedure is to identify the duties and responsibilities of City employees as they pertain to the Safety Program. These duties and responsibilities should be viewed as acceptable minimums and in no way are employees limited only to these activities.

APPLICATION
This procedure is applicable to all departments and/or Management groups.

RESPONSIBILITIES AND AUTHORITIES
City Council
The council has overall responsibility for the direction of the City of Shakopee and for the establishment of the Safety Program.

City Administrator
The City Administrator has the responsibility to monitor the Safety Program implementation, to periodically report the status and adequacy of the Safety Program to the City council, to maintain policy manual, to maintain the Safety Program records, and for the establishment of the position of Safety Coordinator.

Safety Coordinator
The Safety Coordinator has the appropriate level of authority to implement the program, and reports directly to the City Administrator on safety matters. The Safety Coordinator's position includes, but is not limited to:

- Professional development including maintaining a reference library, receiving publications, and membership in professional organizations
- Development and administration of incident-prevention and loss control methods, procedures, and programs
- Coordination of training and communications for Supervisors, Department Heads, and employees
- An internal consultant to identify and appraise incident- and loss-producing conditions and practices as well as an evaluation of the severity of the incident/conditions
- Communication of incident and loss control information to those directly involved
- Providing information for Management to include accident recording-keeping, and program activities
- Measure and evaluate the effectiveness of the incident and loss control system and the modifications needed to achieve optimum results
- Maintaining and making widely available the Safety Program documentation
- Thoroughly familiar with the OSHA Safety Standards as well as the Safety Program so they understand their own responsibilities and the responsibilities of the employees reporting to them
- Review the City Safety Program, at a minimum, annually, and make amendments or additions as needed (see Annual Review Form at end of this section)

Department Heads/Supervisors

- Ensure employees are aware of their specific duties and responsibilities, have access to the complete Safety Program Policy and all of the department specific safety rules and training requirements
- Review accident summary reports in order to keep informed of the job accident record and insist on appropriate action when trends are unfavorable
- Investigate accidents personally to ensure causes have been identified and proper corrective action taken
- Ensure tools and equipment are in first class condition; any tool or equipment defective or unsafe shall be removed from the working area and tagged, disabled, or discarded
- When new operations or materials are introduced, Supervisors and Department Heads should be satisfied necessary safety precautions have been exercised
- Monitor the written Safety Program documentation to ensure they are being fully and correctly completed
- Instruct employees of the Safety Program administrative procedures and proper and safe practices to be followed so that safe conditions are maintained throughout
- Make available necessary Personal Protective Equipment, job safety materials, and first-aid materials

Employees

The City expects each individual employee to cooperate in every respect with the Safety Program so operations may be carried on in such manner as to ensure the safety of all employees. The employee's responsibility is to be consistent with OSHA regulations, City-wide safety rules, department safety rules and specific job training. This includes, but is not limited to:

- Working according to good safety practices as posted, instructed and discussed
- Refraining from unsafe acts that may endanger themselves or fellow workers
- Using all safety devices provided and required for their protection and the protection of others
- Reporting any unsafe condition or act to their Direct Supervisor or Department Head immediately
- Assuming their share of responsibility for thoughtless or deliberate acts that may cause injury to themselves or fellow workers
- Reporting all injuries to their Direct Supervisor or Department Head
- Maintaining a clean and safe work area

HAZARD ANALYSIS AND CONTROL

Hazard Classification and Prioritization

GENERAL

Hazard classification and prioritization helps the Safety Committee, Supervisors and Department Heads address the workplace hazards posing the greatest risk to employees and the public. There are four key steps to hazard correction. (1) Identification and evaluation, (2) Ranking hazards by risk, (3) Initiating corrective measures, (4) Following up to determine effectiveness of corrective measures.

PURPOSE

This program establishes procedures for identifying, classifying, and prioritizing unsafe or unhealthful working conditions for corrective actions.

APPLICATION

This policy is applicable to all City employees. This includes but is not limited to Supervisors, Department Heads, hourly and includes part-time, seasonal, and volunteers.

DEFINITION

A Hazard is any existing or potential condition in the workplace that, by itself or by interacting with other variables, can result in death, injury, property damage, and other losses.

RESPONSIBILITIES

- All employees, including the Supervisor and Department Head, are responsible for identifying and correcting unsafe and unhealthful conditions in their work area or reporting such conditions to their Direct Supervisor.
- The Safety Coordinator, Safety Committee, Supervisors and Department Heads should prioritize addressing unsafe or unhealthful conditions. She/he will track identified hazards to ensure they are promptly corrected, or where long term solutions are necessary, ensure they are tracked until they have been properly corrected.

REPORTING PROCEDURES

- Employees are encouraged to correct unsafe or unhealthful working conditions immediately if possible. If employees cannot correct these conditions, they should immediately notify their Direct Supervisor or Department Head. Any employee can report the conditions verbally or in writing in any format. Employees may also use the Accident/Incident Investigation Form located at the end of this section.
- Unsafe or unhealthful working conditions may be identified in several different ways: e.g., formal inspections, daily workplace inspections/walkthroughs, surveys, accident investigations, employee notifications, or procedures learned from other locations.
- Upon report of an unsafe or unhealthful working condition, the Supervisor or Department Head will immediately inspect the site to determine the extent of the condition and the degree of the hazard.
- Supervisors and Department Heads will correct all hazards that are within their means. Hazards that are long term (more than 30 days) to correct or outside the resources of the Supervisor or Department Head will be reported to Safety Coordinator and Safety Committee. Each level of Management will use its resources to correct the hazard when possible.
- The Safety Coordinator will maintain all unresolved hazards as “active” until they have been satisfactorily corrected. When they are corrected, the Safety Coordinator will record the date completed on the report.

- The Safety Coordinator will not allow unresolved issues to be forgotten until issue is resolved.
- To effectively manage complex or long-term corrective actions, a formal action plan may be developed. When the Safety Committee, Supervisor, Department Head or Safety Coordinator determines it is necessary or desirable, he/she/they may direct that a formal action plan be completed.
- Approximately six months after the completion date for the hazard correction, the Department Head, Supervisor or Safety Coordinator, who corrected the hazard, will assess the effectiveness of the corrective action. The Safety Committee will also monitor progress.
- Hazards reported to the Safety Committee will be entered on the Safety Committee Minutes to comply with recording requirements.
- The Safety Committee will maintain all unresolved hazards as “active status” until they have been satisfactorily corrected. When they are corrected, the Safety Committee will enter the date completed in the minutes.
- The Safety Committee will not remove unresolved items from the agenda until the issue is resolved.
- All Safety Committee Minutes will be forwarded to all managers after each meeting. Managers must then post these minutes in their work areas.

CORRECTION OF DEFICIENCIES

- Deficiencies will be corrected on a worst first basis.
- Corrective measures should be implemented in the order shown below:

Elimination of the Hazard	Elimination is a permanent solution and should be attempted in the first instance. The hazard or environmental aspect is eliminated altogether.
Engineering Controls	Engineering controls involve some structural change to the work environment or process to place a barrier to, or interrupt the transmission path between, the worker or environment and the hazard. This may include isolation or enclosure of hazards, machine guards, fume hoods or manual handling devices.
Isolation or Procedural Controls	Administrative (procedural) controls reduce or eliminate exposure by adherence to procedures or instructions. Documentation should emphasize all the steps to be taken and the controls to be used in carrying out the task both safely and with minimum impact to the environment (Job Hazard Analysis).
The use of Personal Protective Equipment	Personal Protective Equipment relates only to hazards and their impact on personal safety worn by people as a barrier between themselves and the hazard. The success of this control is dependent on the protective equipment being chosen correctly, as well as fitted correctly and worn at all times when required (and correctly maintained).

- Deficiencies with a high risk of injury are to be corrected immediately. Others should be corrected as soon as possible to prevent degeneration into a higher risk category.
- No employee will be required to work under conditions in which he/she is exposed to hazards with a high risk category and does not have interim or alternative measures implemented to protect employees.
- Management should advise employees who report hazards of what actions are planned or the reasons why actions will not be taken.

SELF-INSPECTIONS

GENERAL

Surveys and inspections are an important part of an effective loss control program. They are done to verify that conditions are the way you want them to be; a smooth operation has few unexpected events that disrupt the work process and safety hazards are a risk to the operation of our organization.

PURPOSE

Inspections provide an early warning system allowing a Supervisor or Department Head to make the changes needed to keep things running smoothly. They allow unsafe conditions to be detected in time to provide countermeasures before someone is injured.

APPLICATION

This policy is applicable to all City employees who perform inspections. This includes, but is not limited to: Supervisors and Department Heads, hourly employees, and part-time, seasonal, and volunteer workers. However, the primary responsibility remains with Supervisors and Department Heads.

PROCEDURE

- In a low risk department, a self-inspection system should normally be achievable without a great investment of time and resources. Should a department be physically large or geographically widespread, dividing it into manageable sections to receive separate inspections is a sensible approach.
- Persons appointed to carry out the self-inspection should normally be chosen from members of the departmental staff. This person(s) does not require specialist knowledge or training to carry out the self-inspection task but should have a general knowledge of hazard recognition. Training should cover topics such as how to inspect for hazards, how to record what is discovered, who to report the results to, and how to prepare inspection reports.
- The annual planned inspection involves the Safety Committee and/or an outside entity/consultant. This type of inspection will cover all areas, including those areas where "no one ever goes." It is advisable to schedule the inspections when maximum observations can be made with the least amount of work interruption.
- All reports must be sent to the Safety Coordinator, applicable Supervisor or Department Head, and the Safety Committee.
- Additional inspections of equipment/etc. are required and part of this program (see forms at the end of each section).

INSPECTION FREQUENCY

As a general rule, documented inspections should be done focusing on areas where a high degree of hands-on work is done.

Employees will follow the inspection schedule below:

- Daily (informal)
- Periodically
  Employees should inspect their work area, tools and equipment at the beginning of each workday. Maintenance personnel, Supervisors and Department Heads and others whose duties take them into operational areas should be constantly checking for unsafe actions and conditions. In all cases where remedial action is needed, it should be reported and corrected as soon as possible.
- Annually
  The managers as a group, the Safety Committee, or an outside entity will inspect all areas, including those areas where "no one ever goes."
- As Necessary
  Upon report of an unsafe or unhealthful working condition, the Supervisor, Department Head or designated safety person will inspect the site to determine the extent of the condition and the degree of the hazard. If necessary, the Supervisor or Department Head will schedule follow-up evaluations, which could include conducting air-quality testing, noise surveys, ventilation evaluations, ergonomic analyses, etc.

PROGRAM RECORDS

Accurate inspection records serve as evidence of program implementation, provide documentation of necessary corrective actions, and assure the completion of initial as well as follow-up inspections through the Accident Investigation form and Safety Committee Minutes. Previous inspections can be used but should be used as an aid to the inspection process, not as an end in itself.

INSTITUTING CORRECTIVE ACTION

- When the authority is able to correct or minimize a problem or hazard, the inspection team or the Supervisor or Department Head should do so immediately. At the completion of the inspection, discuss the results with the applicable Supervisor or Department Head and determine a target date for completion or corrections within their authority.
- Inform employees of unsafe acts and conditions observed during inspections. The items should be discussed with the applicable employees and their suggestions to prevent reoccurrence solicited.
- The Supervisor or Department Head will send a copy of the inspection to the Safety Coordinator and Safety Committee. The Safety Coordinator and Safety Committee will review the inspection and correction of hazards and promote/record these reviews through the Safety Committee Minutes.

PERSONAL PROTECTIVE EQUIPMENT PROGRAM

GENERAL

Personal protective equipment (PPE) includes all clothing and other work accessories designed to create a barrier against workplace hazards. PPE should not be used as a substitute for engineering, work practice, and/or administrative controls. Personal protective equipment should be used in conjunction with these controls to provide for employee safety and health in the work place.

PURPOSE

The purpose of this program is to establish the procedures under which the organization will evaluate the need for Personal Protective Equipment to protect employees from workplace hazards that could cause serious injury or death.

APPLICATION

Each department with a potential need for Personal Protective Equipment will conduct a hazard assessment. Where the need for PPE is identified, Supervisors and Department Heads will implement the entire PPE checklist located at the end of this section.

RESPONSIBILITIES

Safety Coordinator

The Safety Coordinator is responsible for:

- Assisting Supervisors and Department Heads in conducting hazard assessments
- Maintaining records and certifications of hazard assessments
- Assisting Supervisors and Department Heads in the selection and purchase of approved PPE
- Provide training and technical assistance to Supervisors and Department Heads on the proper use, care, and cleaning of approved PPE
- Maintaining records on PPE training
- Reviewing and updating the organization's PPE Program

Supervisors and Department Heads

Supervisors and Department Heads have the primary responsibility for implementing the PPE program within their areas. Each Supervisor or Department Head is responsible for:

- Conducting Hazard assessments, in the work areas for which they are responsible, to determine whether there are any hazards that require the use of PPE
- Updating hazard assessments when new hazards are encountered or when processes are added or changed
- Conducting periodic re-assessments of workplace hazards
- Selecting appropriate PPE to protect employees against hazards in their work areas
- Ensuring that PPE fits employees properly
- Training employees on the proper use, care, and cleaning of PPE
- Supervising employees to ensure that PPE program elements are followed and that employees properly use and care for PPE
- Periodically reevaluating the suitability of previously selected PPE

Employees

Employees are responsible for:

- Wearing PPE as required
- Attending required PPE training sessions
- Caring for, cleaning, and maintaining PPE as required
- Informing their Direct Supervisor or Department Head when PPE needs to be repaired or replaced

HAZARD ASSESSMENT GUIDELINES

Supervisors, Department Heads, Safety Committee, and the Safety Coordinator conduct hazard assessments jointly. The assessments will include the following steps:

- Review injury and illness logs, accident reports, and workers' compensation records to identify problem areas and to determine whether any injuries could have been prevented by the use of PPE
- Conduct a walk-through survey of each work area to identify hazards (see list of possible hazards in the "Job Hazard Analysis" packet in section 20)
- Analyze each job or task to identify potential hazards and to assess the need for PPE
- Organize and analyze hazard assessment data from the walk-through survey to estimate the potential for injuries, including injuries from potential exposure to multiple hazards
- Categorize risks by type of hazard, level of risk, and seriousness of potential injuries caused by the hazard. Refer to "Hazard Classification and Prioritization"
- Document the survey and task analyses using the "Job Hazard Analysis", which identifies the workplace surveyed, the person carrying out the survey, the survey findings, and the date the survey was conducted

  Hazard assessments should consider employees who occasionally enter hazardous areas, such as administrative staff who must walk through an operation area or work zone. PPE—including safety glasses or a hard hat—must be available for such personnel during the brief time they are exposed to hazards. Hazard reassessments will be performed when new hazards are identified, new equipment or processes are introduced, or when the Safety Committee deems a reassessment necessary.

PERSONAL PROTECTIVE EQUIPMENT SELECTION GUIDELINES

Supervisors and Department Heads, in consultation with the Safety Coordinator and Safety Committee are responsible for selecting and purchasing PPE. Supervisors and Department Heads must be familiar with the potential hazards in the workplace, as well as the types of PPE that are effective in protecting against such hazards. The procedure for selecting PPE is as follows:

- Compare the hazards found in the Job Hazard Analysis with the capabilities of the available PPE
- Review whether PPE provides a level of protection equal to or greater than the minimum required protecting employees from the hazards

PERSONAL PROTECTIVE EQUIPMENT FITTING

- An employee, Supervisor, Department Head, or any person skilled in the procedure should do fitting of PPE. In cases such as prescription safety spectacles, the employee should see qualified optical personnel so glasses can be fitted properly.
- A worker sometimes must wear one piece of PPE in combination with another piece. In such cases, both pieces of PPE should fit well and one piece of PPE should not interfere with the effectiveness of the other. For instance, if a worker must wear a hard hat while wearing a dust mask, both should fit well and remain effective.

PERSONAL PROTECTIVE EQUIPMENT USE

All designated employees must wear required PPE any time they are in an area, or doing work requiring such PPE. Employees must be aware that equipment does not eliminate the hazard. If the equipment fails, exposure will occur.

PERSONAL PROTECTIVE EQUIPMENT TRAINING

- Before allowing an employee to perform work requiring the use of PPE, Supervisors and Department Heads should ensure that employees receive training regarding:
  - when use of PPE is necessary
  - what type of PPE is necessary
  - how to properly put on, take off, adjust, and wear PPE
  - the limitations of the PPE
  - the proper care, maintenance, useful life, and disposal of the PPE
- After training, employees must demonstrate—on an ongoing basis—an understanding of the components of the PPE Program and how to use PPE properly.
- The Supervisor or Department Head will provide periodic retraining. They must ensure that employees receive retraining as necessary. Retraining may be required when:
  - changes in the workplace, work processes, or equipment require changes in the way PPE is used or in the type of PPE used
  - an employee fails to demonstrate competency in the use of PPE

CLEANING PERSONAL PROTECTIVE EQUIPMENT

- PPE must be kept sanitary and in good condition. Personal protective equipment that has been previously used should be disinfected before being issued to another employee.
- Employees are responsible for cleaning PPE as necessary and for inspecting PPE before each use. When an employee is assigned protective equipment for extended periods, it must be cleaned and disinfected regularly.
- PPE shared between employees must be properly cleaned and sanitized before and after use.
- When contaminated PPE cannot be decontaminated, it must be discarded in a manner that protects employees from harmful exposure and that complies with environmental regulations.

MAINTENANCE OF PERSONAL PROTECTIVE EQUIPMENT

Manufacturers should be consulted with in regards to inspection and maintenance requirements of PPE. PPE should be repaired with quality parts. Manufacturers' recommendations and published standards should be strictly implemented.

REPLACEMENT OF PERSONAL PROTECTIVE EQUIPMENT

Users are cautioned that if unusual conditions occur (such as higher or lower extreme temperatures than described in the standards), or if there are signs of abuse or mutilation of the equipment or any component, the margin of safety may be reduced. If damage is observed or suspected, equipment should be replaced.

RECORDKEEPING

The Safety Coordinator is responsible for maintaining written records of hazard assessments and PPE training. Supervisors and Department Heads should forward copies of these records to the Safety Coordinator. Training records must include the names of the trainer and the persons trained, the type of training provided, and the dates when the training occurred. Employee training and hazard assessment records must be kept for at least three years.

FIRST AID

GENERAL

An effective first aid program helps protect the health of employees by providing early care for injuries. It also provides valuable information for the analysis of losses, so Safety Programs can be continually improved.

PURPOSE

This program outlines procedures for providing first aid to injured employees.

APPLICATION

This policy is applicable to all employees. This includes, but is not limited to, Supervisors and Department Heads, hourly employees, and part-time, seasonal, and volunteer workers.

RESPONSIBILITIES

Safety Coordinator

- Monitor the first aid program, and recommend corrections and/or improvements as necessary.

Supervisors and Department Heads

- Ensure employees are trained on the location of first aid kits and are able to identify qualified first aid personnel.
- Ensure employees are trained on the location and use of eyewashes and emergency showers.

First Aid

- Provide first aid and CPR, within the scope of their training, to employees.
- Consider the most appropriate location of first aid kits and ensure they are clearly identified and accessible to employees. Also ensure first aid kits are regularly maintained and replenished.
- Ensure there are no scheduled drugs or needles (sharps) in first aid kits.
- Following an incident where first aid treatment has been provided, complete the Accident report.
- AEDs (Automated External Defibrillators) are available to law enforcement (in vehicles) and located within City buildings for use by employees and the public. The AEDs within buildings are covered under the “good Samaritan” laws (meaning: they can be used voluntarily and are not required). Calling 911 should be the first priority. AEDs must be inspected for readiness monthly (see form at the end of this section).

Employees

- Report all accidents/incidents requiring first aid to your Direct Supervisor or Department Head.

FIRST AID QUALIFIED EMPLOYEES

- All employees will dial 911 in the event of a serious injury to another employee.
- Persons should not attempt to give first aid for which they have not been trained.
- The Bloodborne Pathogens Standard covers employees who are designated or choose to provide first aid.
- Designated first aid personnel are eligible to receive appropriate vaccinations, i.e. Hepatitis A and B.

Although many employees are trained in first aid and/or CPR, only employees in the Law Enforcement department are considered "designated" first aid employees. All other employees should seriously consider all medical risks before providing first aid. An immediate 911 call should be your priority.

EMPLOYEE TRAINING

- Employees will be instructed on arrangements regarding first aid facilities:
  - Location of first aid kits
  - Name, Location and Contact number of first aid personnel (911)
  - Ambulance and other emergency numbers
  - This instruction must be updated whenever there are changes to the first aid provisions

- The following subjects must be addressed in employee training on eyewashes and emergency showers:
  - Employees will be instructed on the location and use of eyewash stations and emergency showers
  - If squeeze bottles are also provided, training must address proper use in conjunction with eyewashes
  - Training will address holding eyelids open and rolling eyeballs to flush the entire eye

FIRST AID KITS

- Supervisors and Department Heads must ensure that adequate first aid supplies are readily available. Supervisors and Department Heads should assess the specific needs of their work sites periodically and augment the first aid kit appropriately.
- If Supervisors and Department Heads purchase first aid kits, they should select the proper types.
- An appointed person in each department, or the Safety Coordinator, should inspect first aid kits monthly. The appointed person should inspect:
  - The kit is present and in good condition
  - The kit is located in a clean, visible and accessible area
  - All items required in the kit are present in the proper quantities
  - The containers or wrappers of all contents are unbroken and in good condition
  - The expiration dates on all contents that have them (remove expired items and reorder as necessary)
  - There are no needles (sharps) or scheduled drugs in the first aid kit

EYEWASH STATIONS AND EMERGENCY SHOWERS

- Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided in the work area for immediate emergency use.
- Supervisors and Department Heads must perform a hazard assessment to determine the requirements for an eyewash or safety shower.

Testing:

- All eyewash and shower facilities must be adequately maintained and should be activated for at least 3 minutes **weekly** to flush the supply line and verify proper operation (see plumbed eyewash inspection form at the end of section 2).
- Self-contained units should be maintained in accordance with the manufacturer's instructions. Particular attention must be given to changing the flushing fluid so that a safe flushing fluid is available when needed (see self-contained eyewash inspection form located at the end of section 2).
- Solutions & Squeeze Bottles: chemical formulations or isotonic solutions used as substitutes for water must be an appropriate application for the hazard, properly tested and maintained, and replaced prior to their expiration date.

JOB HAZARD ANALYSIS

GENERAL

- Establishing proper job procedures is one of the benefits of conducting a Job Hazard Analysis (JHA). By carefully studying and recording each step of a job and identifying existing or potential job hazards (both safety and health), one can discover the best way to reduce or eliminate these hazards. A JHA is used to review job methods and uncover hazards that:
  - may have been overlooked in the layout of the job or building and in the design of the machinery, equipment, tools, workstations, and processes
  - result from changes in work procedures or personnel
  - may have developed after operation has started
- The benefits of performing a JHA are many, including:
  - giving individual training in safe and efficient work procedures
  - reviewing job procedures after accidents occur
  - identifying what safeguards need to be in place
  - Supervisors and Department Heads learn about the jobs they supervise
  - employee participation in workplace safety
  - positive attitudes about safety
- For more information about conducting the Job Hazard Analysis, see the JHA packet located in section 20.

Note: Specific Job Hazard Analysis (JHA) are completed at the department level and located in those areas for employee review.

PURPOSE

Job Hazard Analysis is a technique for reviewing needs for machine guarding, energy lockout, ergonomics, material handling, Bloodborne Pathogens, Confined Space Entry, Right-to-Know, and other generally applicable standards.

APPLICATION

This policy is applicable to all City employees. Additional policies/procedures/SOPs/directives may be substituted for JHAs at the department level. This includes but is not limited to Supervisors and Department Heads, hourly employees, and part-time, seasonal, and volunteer workers.

PROCEDURE

- **Frequency of Accidents:** any job that repeatedly causes accidents is a candidate for JHA. The greater the number of accidents associated with the job, the greater its JHA priority.
- **Rate of Disabling Injuries:** every job that has disabling injuries should be given priority for JHAs.
- **Severity Potential:** some jobs may not have a history of accidents but may have the potential for a severe injury.
- **New Jobs:** a JHA of new jobs should be made as soon as possible. Analysis should not be delayed until accidents or near misses occur.
- **Near Misses:** jobs where near misses or close calls have occurred also should be given priority.

HAZARD CONTROL DEVELOPMENT PROCEDURE

- The development of the hazard control should be a consultative process involving those using the equipment / doing the task, and should take into account the experience and training of those involved. Advice should be sought from the Safety Coordinator, Safety Committee, and experienced workers, consultants or other suitable experts. In many cases, a mixture of the above control measures will be applicable.
- Correct implementation of the procedure must reduce the Risk Assessment.
- If using procedural controls, any training requirements should be assessed and included in the procedure. Procedures should be written as chronological sequences in wording familiar to those involved.
- Try the procedure with suitable workers and incorporate feedback.
- Ensure all work area personnel are made aware of the new procedure. Add the procedure to your safety-training schedule, and the Safety Program, if appropriate.
- Ensure those using the new equipment or process are trained and formally “authorized” for the new procedure. Posting instructions on the equipment is not sufficient for equipment or processes with a medium or greater risk level.
- Review the procedure as part of your annual review of the Safety Program.

COMMUNICATIONS AND SAFETY TRAINING

GENERAL

It is the policy of the City of Shakopee to train all employees in their individual safety responsibilities and to give employees an avenue to express concerns they may encounter in the workplace. Training and Instruction of employees is a form of hazard control. The AWAIR Act specifically requires that accident reduction plan will be communicated to all affected employees so they are informed of work-related hazards and controls. The program can only be truly effective if employees are trained in its requirements and procedures. An initial presentation of the program can inform employees, while follow-up training will usually be required to actually alter their behavior. All current employees should be trained in order to ensure a common baseline level of training.

Updated training also should be offered before or at the time of the introduction of new substances, processes, procedures, or equipment. As newly reported hazards are identified by inspections, employee reports, or other means, additional training should be provided to affected employees.

New employees are very vulnerable to accident or illness due to lack of knowledge and experience on process or equipment hazards. Transferred employees are "new" employees to the equipment, processes, and procedures in their new department. They need the same intensity of training as provided to “new” employees. “Temporarily" transferred employees are not exempted from the AWAIR training requirements.

PURPOSE

The purpose of this procedure is to ensure that employees are trained in dealing with hazards that have been identified in the work place and hazardous work activities.

APPLICATION

This procedure is applicable to all departments, all levels of Management, and all employees.

PROCEDURE

- New employees are to be informed of their Safety Program responsibilities. This training is to take place during orientation to the City and is to be documented. Additional employee orientation and specific job training shall take place at the department level prior to the employee starting work or on-line as required.
- The Supervisor or Department Head is to provide training in the use of Personal Protective Equipment and safe practices at the department level on an "as-needed basis." This training is to include, but is not limited to, training on general department safety rules, training on the appropriate equipment the employee may be using, and training on the work activities the employee may be involved in.
- Periodic safety training is to be provided in the safety meetings and other formal meetings, or correspondence as deemed appropriate by the department. The Department Head or Supervisor is to ensure that each individual employee is suitably instructed and knowledgeable in the use of equipment and Personal Protective Equipment. Training will be according to general and specific department policies/procedures.
- As determined by the Department Head, special safety training seminars presented by safety professionals will be presented to selected/affected employees.
- Copies of suitable safety information including the specific department Safety Policies/procedures should be easily available to employees.

- Employees are encouraged to submit pertinent safety recommendations through their department Safety Committee representative and/or Direct Supervisor/Department Head.
- Department Safety Meetings:
  - The appropriate Supervisor or Department Head will conduct safety meetings with the department employees at the time and place as determined by the department.
  - The purpose of these meetings is to include the following:
    - General promotion of accident prevention efforts on a continuing basis
    - Review of past accidents and any outstanding safety recommendations
    - Discussion of safety inspections performed since the previous meeting
    - Evaluation of Supervisor or Department Head's weekly safety meeting including suggestions and requests
    - Reading of City Safety Committee minutes
  - A selected safety subject may be presented in an effort to broaden the group's knowledge and stimulate continued, active regard for accident prevention.
  - Upon request, the City Safety Coordinator will provide the materials on selected topics for the meeting.
  - Meeting documentation is to be kept within each department, and a copy forwarded to the Safety Coordinator and Safety Committee.

Small Group and Individual Safety Meetings

- The Supervisor or Department Head may conduct safety meetings with the employees (during department meetings) at a time and place determined by the Department Head. The purpose of these meetings should include the following:
  - Review current job conditions as they relate to accident prevention
  - Identify conditions which are adverse to safety
  - Review use of safety practices and/or protective equipment
  - Review specific chemicals in use
- Identified conditions adverse to safety are to be acted upon by the lowest level of supervision practicable.

Additional forms of training may include:

- Written handouts
- One-on-one
- OTJT(On the Job Training)/hands-on
- Group (see safety training schedule)
- School or outside Training
- Area Seminars/Outside Contractors

Employee Communications

- Communication with employees is imperative. Top-down communication channels include:
  - Safety and Health Booklets
  - Presentations
  - Postings
  - Signs
  - Safety Committee Minutes

- Effective methods for "receiving" bottom-up communications are
  - Through the Safety Committee
  - By encouraging safety-suggestions
  - Having an Open-door Policy

Input from employees involved in the actual process is extremely valuable since it is based upon close and repetitive observation. Employee suggestions are considered very thoroughly when evaluating the safety issues involved in a process, piece of equipment, or new department policy/procedure.

Employee Training

- Training includes OSHA rights and access to information. Training required by applicable standards, including AWAIR and Employee Right to Know is provided to all employees.
- Specific departmental training is provided by managers and outside sources (see safety training schedule).
- Knowledgeable persons conduct safety and health training that is scheduled, assessed, and documented, and that addresses all necessary technical topics. Employees are trained to recognize hazards, violations of OSHA standards, and facility practices and report violations to Management. All employees, including Supervisors and Department Heads, can generally demonstrate preparedness for participation in the overall Safety Program policy.
- Records are kept for at least five years and the training is evaluated by the Safety Committee to ensure that it is effective.

Supervisor and Department Head training

- Supervisors and Department Heads should attend training as part of their safety duties. This training should include all subjects provided to employees under their direction. Supervisors and Department Heads can generally demonstrate preparedness for participation in the overall Safety Program policy.
- Safety and Health Training for Managers is necessary to ensure their continued support and understanding and facilitate their responsibility to communicate the program's goals and objectives to their employees, as well as to assign safety and health responsibilities and hold subordinates accountable.
- Supervisors and Department Heads may need additional training in hazard detection, accident reporting and record-keeping, accident investigation, their role in ensuring maintenance of controls, emergency handling, and use of Personal Protective Equipment.

Specialized Training and Retraining

- The format and extent of Job Orientation training will depend on the complexity of hazards and the work practices needed to control them. An orientation may consist of a quick review of location safety and health rules, hazard communication training, or specific on-site or online training. Other times the employee may have On-The-Job Training for a period of time.
- Retraining as a result of corrective action from an accident investigation may be needed.
- No matter what the reason for training and retraining, the employee should be trained before starting a new job or returning to work from an extended absence.

SAFETY COMMITTEE

GENERAL

- This organization is committed to preventing workplace injuries and illnesses among all employees. To help prevent these losses, a joint Management-labor Safety Committee has been established.
- Only the planning and effective leadership of Management and the Safety Committee can build a lasting Safety Program policy. The Safety Committee will be a constructive entity, providing guidance and leadership in matters pertaining to the overall health and safety of the organization.
- Employee and Management involvement in accident prevention and support of Safety Committee members and activities is necessary to ensure a safe and healthful workplace.

PURPOSE

The purpose of our Safety Committee is to involve labor and Management in a non-adversarial, cooperative effort to promote safety and health in the workplace. The Safety Committee will assist Management and make recommendations for change.

APPLICATION

This policy specifically applies to members of the Safety Committee, but is generally applicable to all employees. This includes but is not limited to Supervisors, Department Heads, and hourly (including part-time and seasonal) employees.

AUTHORITY

- The Safety Committee advises Management about safety and health issues in the workplace.
- All written recommendations from the Safety Committee will be submitted to Management through Committee minutes or direct contact. Management will consider the recommendations and respond to the Safety Committee within a reasonable time.
- Additionally, the Committee will have the authority to hold meetings and conduct required business during regular work hours. Members may conduct inspections or accompany inspectors, as necessary. They also have the authority to monitor compliance with safety and health regulations throughout the organization.

RESPONSIBILITIES

- Duties of the Chairperson:
    - ensure the Committee carries out its function
    - schedule meetings, and notify members
    - prepare meeting agenda
    - invite specialists or resource persons, as required
    - preside over meetings
    - guide the meeting per the agenda
    - ensure discussion items end with positive decision
    - assign projects to members
    - review and approve minutes

- Duties of the Secretary:
  - keep pertinent records
  - disseminate safety information to members
  - report status of recommendations
  - prepare minutes
  - distribute minutes, after approval
  - assist chairperson as required

- Duties of each Safety Committee member must include:
  - act as a safety and health resource for Supervisors or Department Heads
  - reporting unsafe conditions and practices
  - attending all safety meetings
  - reviewing all accidents and near-misses
  - recommending ideas for improving safety and health
  - working in a safe and healthful manner
  - observing how safety and health is enforced in the workplace
  - completing assignments given to them by the chairperson
  - act as a work-area representative in matters pertaining to health and safety

ORGANIZATION

- The number of employee representatives on a Safety Committee will equal or exceed the number of Management representatives on the Committee.
- Employee representatives will be volunteers or elected by their peers.
  - Employee representatives on Safety Committees will be selected by the employee's collective bargaining agent if one exists. It is not necessary that the Committee contain enough employee representatives to enable each union to be represented on the Committee. If more than one union has the right to select a single employee representative for a Safety Committee, they will collectively select the employee representative.
  - If there is no collective bargaining agent, the employee representatives will be selected by their peers.
  - If no employees volunteer or are elected, they may be appointed by Management.
  - Unless a collective bargaining agreement provides to the contrary, being a member of a Safety Committee is considered part of an employee's job, and time spent performing the duties of a Safety Committee member will be considered as time worked.
- Safety Committee members service terms will be reviewed annually. Reappointment of a member is acceptable.
- Co-chairpersons (one representative of Management and one from labor) will be elected by the members present at the last meeting of each year, for the following year. Reelection of a member is acceptable. By agreement, they will cooperate in accomplishing the duties outlined below.
- The Committee Chairperson will ensure that names of all Committee members are posted in areas where employees will see them.

ACTIVITIES

- The Safety Committee will meet quarterly (more often when necessary and approved by the Safety Chairperson). With the approval of his/her Direct Supervisor or Department Head, any employee may attend and observe any meeting.
- The Committee will conduct or ensure department inspections are done (at a minimum) annually.
- The agenda for each meeting will reflect the required activities as listed below, and any other activities requested by a Committee member.
    - The Committee will review the organization's occupational Safety Program policy and records, and make recommendations to improve it as necessary.
    - The Committee will complete a formal review of the Safety Program policy annually. This may be completed at a specific meeting, or as an on-going project, at the discretion of the Chairperson.
    - The Committee will review and monitor the performance of all safety training in the organization. Committee members will be prepared to support Supervisors and Department Heads in their training, as requested.
    - The Committee will review incidents resulting in work-related deaths, injuries, and illnesses, prioritize them, and make recommendations to prevent further occurrences. The Committee's review of these incidents may be limited to a review of a report made by others who have investigated the incident.
    - The Committee will monitor accident and illness records, and will formally review them at least annually. At a minimum, this will include the OSHA 300 Log, as well as records involving losses to the organization's property, or accidents/incidents in which the organization was liable for damages.
    - The Chairperson will forward any hazard reports or suggestions, received from employees or Department Heads, to the Committee for appropriate action.
    - The Safety Committee will conduct workplace safety and health inspections, to supplement those performed by Department Heads, as frequently as the Committee considers necessary. The Committee will keep a record of all hazards identified by and recommendations made.
    - During the third or fourth quarter each year, the Committee will establish its goals for the following year.
- All written recommendations submitted to Management will:
    - Be clear and concise
    - Provide reasons for implementation
    - Include implementation costs and recommended completion dates
    - List benefits

RECORDS

- The Committee Chairperson will publish an agenda at least 5 days before the meeting. She/he will distribute the agenda to all Committee members.
- The Committee Secretary will record the minutes of each Committee meeting. She/he will transcribe the information onto the Minutes. After receiving approval from the Chairperson, he/she will distribute the minutes as follows:
    - one to each Committee member
    - one to each manager
    - copies posted in areas where employees will see them
    - original to Committee files
- All Safety Committee recommendations or reports made to Management, including agendas and minutes, will be kept by the Committee in accordance with record retention policies, but in no case for less than three years.

ENFORCEMENT

It is expected that employees will comply with all safety standards, statutes, and policies on which they have received training. However, if an employee willfully or negligently violates any portion of the Safety Program, he/she/they will be subject to progressive discipline as required under organizational policy. Management reserves the right to deviate from the disciplinary policy if the seriousness of the offense warrants a higher degree of discipline.

TRAINING REQUIREMENTS

	When Plan Developed	New Employee	New Operation	Change in Plan	Change in Duties	Change in Operation	Change in Equipment	Annual	Other
A Workplace Accident & Injury Reduction Program (AWAIR)		X				X	X	X	
Employee Emergency & Fire Prevention Plans	X	X		X	X				Annual Review Recommended
Powered Platforms for Building Maintenance		X					X		
Care and use of Personal Fall Arrest System		X					X		
Dip Tanks: Personal Protection		X	X		X	X	X		
Inspection, Maintenance. & Installation		X	X		X	X	X		
Hearing Protection		X						X	
Flammable & Combustible Liquids		X							
Explosives & Blasting Agents		X	X			X	X		
Bulk Delivery Vehicles		X	X			X	X		
Storage & Handling LP Gas		X	X			X	X		
Process Safety Management		X	X						
Hazardous. Chemicals: Contract Employer Responsibilities			X						
Mechanical Integrity (Maintenance)		X							
Hazardous Response Operations & Emergency Response: Cleanup Workers		X						X	Includes Supervisor Training
Temporary Skilled Employees		X							
Emergency Responders		X							
TSD Employees		X						X	
New Technology Programs		X					X		
Personal Protective Equipment (PPE)		X	X				X		Employee Performance
Respiratory Protection		X						X	Annual Fit Test
Respiratory Protection for M Tuberculosis									Employee Performance
Signs & Tags		X							

	When Plan Developed	New Employee	New Operation	Change in Plan	Change in Duties	Change in Operation	Change in Equipment	Annual	Other
Permit Required- Confined Spaces		X	X		X	X			Annual Review Recommended
Rescue & Emergency Services		X						X	
Control of Hazardous Energy		X		X	X	X	X	X	Annual Periodic Insp.
Lockout or Tagout Devices Removed		X							Annual Recommended
Outside Personnel			X						
Medical Services & First Aid		X							
Fire Protection		X							
Fire Brigades		X	X			X		X	Employee Performance Quarterly – Structural Fires
Portable Fire Extinguishers		X						X	
Standpipe Inspections		X							
Fixed Extinguishing Systems		X						X	
Fire Detection Systems		X							
Employee Alarm Systems		X							
Servicing Multi-Piece and Single-Piece Rim Wheels		X							Employee Performance
Powered Industrial Trucks		X				X	X		Employee Performance, Post-Accident, Every 3 years
Cranes: Moving the Load		X							
Crawler Locomotives & Truck Cranes (Fire Extinguishers)		X							
Mechanical Power Presses: Operators		X						X	Employee Performance
Maintenance Personnel		X							Employee Performance
Forging Machines		X							
Welding, Cutting, Brazing		X							
Oxygen-Fuel Gas Welding & Cutting		X							
Arc Welding & Cutting		X							
Resistance Welding		X							
Laundry Machinery & Operating Rules		X							
Logging		X			X	X	X		Annual Recommended

	When Plan Developed	New Employee	New Operation	Change in Plan	Change in Duties	Change in Operation	Change in Equipment	Annual	Other
Telecommunications		X							
Derrick Trucks		X							
Cable Fault Locating	See Medical & First Aid								
Guarding Manholes	See Medical & First Aid								
Joint Power Generation, Telecommunication Manholes	See Medical & First Aid								
Tree Trimming – Line Clearing		X							Annual Recommended
Electric Power Generation, Transmission & Distribution	See Medical & First Aid. See Lockout/Tagout.								
Grain Handling Facilities		X			X			X	
Contractors			X						
Electrical Safety-Related Work Practices		X							
Commercial Dive Team Qualifications		X							
Toxic & Hazardous Substances									
Asbestos		X						X	
4-Nitrobiphynyl		X						X	
Alpha-Napthylamine		X						X	
Methyl Chloromethyl Ether		X						X	
3,3-Dichlorbenzidine (and its salts)		X						X	
Bis-Chloromethyl Ether		X						X	
Beta-Napthylamine		X						X	
Benzidine		X						X	
4-Aminodiphenyl		X						X	
Ethyleneimine		X						X	
Beta-Propiolactone		X						X	
2-Acetylaminoflourine		X						X	
4-Diomenthyaminoazobenzene		X						X	
N-Bnitrosodimehylamine		X						X	
Vinyl Chloride		X						X	
Inorganic Arsenic		X						X	Respirators Quarterly
Lead		X						X	
Cadmium		X						X	
Benzene		X						X	
Coke Oven Emissions		X						X	Respirators Quarterly
Bloodborne Pathogens		X			X	X		X	

	When Plan Developed	New Employee	New Operation	Change in Plan	Change in Duties	Change in Operation	Change in Equipment	Annual	Other
Cotton Dust		X			X	X		X	Employee Performance
1,2-Dibromo-3-Chloropropane		X							
Acrylonitrile (Vinyl Cyanide)	X	X						X	
Ethylene Oxide		X						X	
Formaldehyde		X				X		X	
4,4 Methyleneidaniline		X						X	
Ionizing Radiation Testing		X							
Posting		X							
Employee Right to Know		X				X		X	
Occupational Exposure to Hazardous Chemicals in Laboratories		X				X			Employee Performance

- Some regulations require refresher training when employers observe that employee performance indicates the need.
- Some regulations require the employer to periodically evaluate that employee performance conforms to regulations and internal policies. This, in turn, may then require annual refresher training.
- Although most of the above is not applicable and therefore not currently trained on within our program, the Safety Coordinator, Supervisor or Department Head must periodically review the list to ensure OSHA compliance.

ACCIDENT/INCIDENT INVESTIGATION

GENERAL

- The AWAIR law requires that Safety and Health program describe how workplace Accident/Incidents will be investigated and corrective action implemented. Investigating Accident/Incidents is a responsibility of all levels of Management and a concern of every employee. The principal investigator should be the employee's Direct Supervisor, Department Head, or other designated person who best knows the process, equipment, and department. The Supervisor or designated person should be familiar with Minnesota OSHA rules on Accident Reporting and conducting a thorough Accident/Incident Investigation. All loss-producing incidents such as (OSHA 300 recordable) repetitive motion injuries, back injuries, property, liability and automobile (unclear what the link has to do with this list) should be investigated.
- It is the policy of the City of Shakopee to investigate all Accident/Incidents or process interruptions that are the result of actions involving employees requiring no treatment, first aid only, doctor's care, or restricted work activity as well as incidents involving property, liability, lost time, or a near miss. This also would include injury or potential injury to persons not employed by the City but injured on City property.
- At a minimum, all accidents and injuries that qualify as being reportable to Minnesota OSHA should be investigated. It is best to also investigate "near misses" and repetitive first aid cases, since these are often predecessors to a reportable accident. A timely investigation of a near miss, followed up by good corrective action, can prevent a serious Accident/Incident.
- Effective corrective action should be implemented based on the information collected during the Accident/Incident investigation process including Safety Coordinator review.

PURPOSE

- The Accident/Incident Investigation process is not to "fix blame" but to assure minimal injuries, collect recent data, and determine what corrective action must be taken to prevent similar Accident/Incidents. The purposes of investigation are:
  - Determining the causes of the Accident/Incident
  - Identifying and eliminating hazards
  - Discovering deviations from standard procedure
  - Making recommendations to Management to correct hazards and causes
  - Providing technical assistance where it is needed
- The purpose of this procedure is to determine the cause(s) and identify the actions to be taken to control losses.

APPLICATION

- This procedure is applicable to all departments and public, especially to those Accident/Incidents that result in injury, loss of life, loss of property, or claims of General Liability.
- The basic steps of this procedure that pertain to the investigation of the cause of the Accident/Incident should also be practiced for those Accident/Incidents which result in less serious injuries and/or damage to property.

RESPONSIBILITIES (For every accident to be investigated, every accident must be reported.)

- Safety Coordinator:
  - Ensure that Accident/Incident Investigation training is complete for Supervisor, new employees, and reviewed regularly by all employees in the area
  - Conduct refresher training for all Supervisors and Department Heads on Accident/Incident Investigation annually
  - Review the accident investigation form of Accident/Incidents
  - Ensure that corrective action is completed in a timely fashion
  - Follow-up corrective action
  - Take part in the review of all major injuries, incidences and losses through the Safety Committee
  - Ensure Safety Committee receives a copy of the Accident Report
  - Promote success through Safety Committee
- Supervisors and Department Heads:

The Supervisor and/or Department Heads are ultimately responsible for Accident/Incidents in or around their respective work areas. Supervisors and Department Heads are involved because they know the people and equipment better than anyone other than the employee.

  - Ensure that new employees are trained on their Accident/Incident Investigation responsibilities. This should include responsibilities involving all Accident/Incidents no matter how small, and should include "near miss incidents"
  - Conduct refresher training for all department employees on Accident/Incident investigation annually
  - Investigate Accident/Incidents of employees reporting to them
  - Ensure that corrective action is completed in a timely fashion and follow up when necessary
- Employees:
  - Report Accident/Incidents to Direct Supervisor and Department Head as soon as possible
  - Participate in the Accident/Incident Investigation process
  - Adhere to changes that may be the outcome of the Accident/Incident Investigation process in the form of corrective action

DEFINITIONS

- Accident/Incident:
  An Accident/Incident is an unplanned, undesired event, not necessarily resulting in an injury, but resulting in damage to property and /or interruption of the activity in progress.
- Accident/Incident Investigation:
  An Accident/Incident investigation is the Supervisor's analysis and account of an Accident/Incident based on factual information gathered by a thorough and conscientious examination of all factors involved. It is not a mere repetition of the employee's explanation of the Accident/Incident. True Accident/Incident Investigation includes the objective evaluation of all facts, opinions, statements, and related information, including definite action steps to be taken to prevent a recurrence.

Classifications of Accident/Incidents:

- **Lost Time Cases:** include any incident that result in lost workdays. That is, the employee could not perform all or any part of his normal assignment during all or any part of the workday or shift, because of the occupational injury or illness. Cases without lost workdays that result in transfer to another job or termination of employment, or involve loss of consciousness or restriction of work or motion are included in this classification.
- **Doctor's Care:** includes treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include First Aid treatment even though provided by a physician or registered professional personnel.
- **First Aid Only:** is any one-time treatment, and any follow-up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care. Such one-time treatments, and follow-up visits for the purpose of observation, are considered first aid only, even though provided by a physician or registered professional personnel.
- **The Near Miss:** is a category of accident or incident that did not result in bodily injury to an employee or non-employee or property loss to the employer but had a potential of severe injury, fatality, major property loss, or major liability claim.

Accident/Incident Investigators:

- **Lost Time:** the Supervisor or Department Head to whom that employee reports, and the specific Supervisor of the department that employee works in should investigate this classification of Accident/Incident. Corrective action should be identified and implemented as soon as possible. The Coordinator, Department Head, and Supervisor immediately review the report.
- **Doctor's Care:** This type of injury should be investigated by the individual supervising that employee, and upon completion of the Accident/Incident investigation, the Direct Supervisor should immediately review the report.
- **First Aid Only:** First Aid incidences must be recorded using the Accident/Incident Investigation Form and sent to the Safety Coordinator.
- **Near Miss:** Near Miss incidences must be recorded using the Accident/Incident Investigation Form and sent to the Safety Committee.

Note: The Safety Committee will review all Accident/Incident investigations to ensure proper course of action and promote resolution/success.

CONDUCTING THE INVESTIGATION

- The nature and severity of the injury or Accident/Incident will determine what information is to be gathered and the routing of the completed investigation report. In the case of injury to employees, the individual that affected employee reports to should complete the Accident/Incident Investigation Form. In the case of liability and property losses, the appropriate Department Supervisor should complete the Accident/Incident Investigation Report.
- All appropriate forms, such as the First Report of Injury and the internal Accident/Incident investigation form, should be completed as soon as possible as the reliability of information declines quickly after the initial Accident/Incident. The only situations that should be permitted to delay the investigation are when medical treatment is needed or when the worker is emotionally upset. As soon as the physical situation has been stabilized and any injured persons have been cared for, you should begin the investigation at the Accident/Incident scene. The First Report of Injury Report and the Accident/Incident Report should be completed within 48 hours.
- Using the First Report of Injury Report and the Accident/Incident Report, conduct a thorough investigation by completing these five steps:
    - Gather all related information
    - Analyze the information
    - Determine what corrective action must be taken to prevent a future Accident/Incident
    - Take corrective action
    - Send report to Safety Committee for review and recording

Following the implementation of the corrective action process, at some time in the future, i.e. 6 or 12 months, the corrective action should be reviewed again to ensure that it is accomplishing the desired result. Ensure the Safety Committee is involved in this process.

AED Inspection Record: Monthly Inspections

Department: _____ AED Location Building: _____ AED Serial Number: _____

Fiscal Year: _____ AED Location Detail: _____ AED Model Number: _____

		January	February	March	April	May	June	July	August	September	October	November	December
AED	AED - Condition	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR	NN RP MR
	Primary Pad Cartridge (Exp Date)	/	/	/	/	/	/	/	/	/	/	/	/
	Extra Pad Cartridge (Exp Date)	/	/	/	/	/	/	/	/	/	/	/	/
	Primary Battery (Exp Date)	/	/	/	/	/	/	/	/	/	/	/	/
	Extra Battery (Exp Date)	/	/	/	/	/	/	/	/	/	/	/	/
CASE	Case - Wall Mount	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Case-Alarm Function	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Case -Soft Sided	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
Supplies	Scissors	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Gloves	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Mask	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Razor	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Towel	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*
	Supply Case	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D	S M D
	Action	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*	*NN RP MR*

Last Name of Inspector and Date			
January _____	April _____	July _____	October _____
February _____	May _____	August _____	November _____
March _____	June _____	September _____	December _____

S= Satisfactory Condition	M= Missing	D= Damaged
NN= None Needed	RP= Replaced	MR= Maintenance Requested

Accident/Incident Investigation Report
Public/Employee (*Circle One)*

(TO BE COMPLETED **IMMEDIATELY** AFTER ACCIDENT/INCIDENT, EVEN WHERE THERE IS NO INJURY-RETURN COPY TO SAFETY COMMITTEE).

Date/Time Report_____ **Date of Injury** _____
Time of Injury_____
Name _____
Department/Address_____ **Job Title**_____

Supervisor Name_____
Location of Accident/Incident_____

Description of Injury_____
Severity of Injury: (check appropriate box and give brief explanation)
___ **No Treatment Needed** _____
___ **First Aid Only** _____
___ **Doctor's Care** _____
___ **Restricted Work Activity** _____
___ **Incident** _____
___ **Lost time** _____
___ **Near Miss** _____
Date of Medical Treatment _____

EMPLOYEE/PATRON DESCRIPTION OF ACCIDENT
_____
_____
_____

Witness Name_____ **Statement Taken: __Yes __No**
Witness Name_____ **Statement Taken: __Yes __No**
Photos Taken ___Yes ___No Date/Time_____ **By Whom**_____
Personal Protection Equipment Used ___ Yes ___ No Type Used _____
Other equipment involved, if applicable, type of equipment _____
Did employee return to work same day ___ Yes ___ No Date Returned _____
Any restricted work activities:
_____
What steps have been taken to prevent reoccurrence of this incident?
_____
_____
_____
_____
_____
Additional Comments _____
_____

Signature of Supervisor _____**Date** _____
Signature of Employee _____**Date** _____
Facility Name: _____

Safety Committee Comments:
_____
_____
_____

_____**Issue Resolved: Yes____ No_____**
Revisit issue
_____

Personal Protective Equipment
Checklist

JOB/OPERATION	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
Vehicular Traffic Exposure	
Working Where Employee May Bump or Be Struck by Falling Object	
Use of Power Washes (Water)	
Work with High Exposure to Hand Cuts, Bruises or Abrasions	
Where Decibels Exceed 85	
When Chemicals are Used/Mixed (Check Label & MSDS)	
Use of Herbicides/ Pesticides	
Operation of Vactor	
Operation of City Equipment/Vehicles	
Hand Tools (Impact, Air Wrench, etc.) Used With Air Compressor	
Use of Power Saws/ Tools	
Operation of Chipper	
Excavation/Trenching	
Operation of Jack Hammers	
Asphalt/Black Top-Street Repair	
Operate Walk-Behind Snow Blower	
Arial Truck Use	
Utility Knife Use	
Operation of Grinder	
Use of Chisel	
General Street Maintenance	

Legend

- GLOVES
- NEOPRENE GLOVES
- SEAT BELTS
- HARD HAT
- SAFETY GLASSES
- EAR PROTECTION
- PARTICLE MASKS
- O2 TESTER
- TRI-POD
- RUBBER BOOTS
- NEOPRENE BOOTS
- FACE SHIELDS/ SCREENS
- SAFETY VESTS
- SAFETY BELT/ HARNESS
- JACK STANDS
- TINTED GOGGLES/ HELMET
- LEATHER GLOVES
- PROTECTIVE FOOTWEAR
- CHAPS
- PROTECTIVE SUIT
- Protective goggles
- WELDING APRON

JOB/OPERATION	PERSONAL PROTECTIVE EQUIPMENT REQUIRED
Operation of Welder & Gas Torches	
Earthmoving Equip. Exposure	
Use of Spray Chemicals (Penetrating Oil, Carb Cleaner) - See MSDS	
Use of Jacks & Hoist/ Chain	
Use of Parts Washer	
Jobs Where Dirt, Grease, or Metal May be Propelled Towards Eyes	
Flag Person	
Use of Chain Saws	
Inspection of Building Sites	
Working in a Confined Space Area, i.e. Manholes, Tanks, etc.	
Post-Pounder Use	
Operate Walk Behind Mower	
Crack Repair	
Operate Riding Mower	Where Applicable
Operating Weed Whip	
Trimming Trees & Bushes	
Handling Chemicals Added to Water	
Milling Machine	
Tack Machine	
Working with Asphalt	
Off-Road Equipment Operation	

Section 2

Employee Right to Know

The City Of Shakopee
EMPLOYEE RIGHT TO KNOW POLICY

The City of Shakopee has committed to comply with the intent and spirit of the Hazard Communication Standard outlined in 29 CFR 1910.1200, Employee Right to Know (5206.0100 thru 5206.1200), and the Globally Harmonized System (GHS) of classification and labeling chemicals. Although applicable to all City employees, additional department policies/procedures may be available through individual department managers.

In order to be in compliance, the City of Shakopee will identify hazardous substances, harmful physical agents, and infectious agents present in our workplace. Workers routinely exposed to these items will be provided with information relating to these agents and training on proper methods of safely working with them ("routinely exposed" means that a reasonable potential exists for exposure to hazardous substances during the normal course of an employee's work assignments).

Furthermore, this section also contains the following resources and procedures:

- Definitions
- Safety Data Sheets
- Lists of Hazardous Chemicals and Substances Present
- Labels and Other Forms of Warning (Global Harmonized System-GHS/Internal Labeling)
- Training
- Contract Workers
- Harmful Physical Agents

The procedures for some components found in this section may be expanded in other sections of this manual.

The GHS poster (see end of this section) will be posted with all other OSHA required postings.

SAFETY DATA SHEETS

Safety Data Sheets (SDS) are documents that provide us with specific information on the hazardous substance for which they are written. These documents are typically shipped by the supplier, manufacturer, or importer with the initial order, or the first order after any change in the product, of any substance and/or chemical known to pose a health hazard to employees who are exposed or potentially exposed to them. An SDS may be requested through any of the below methods:

- Add within msdsonline database-check here before any of the below
- Supplier's web site (on container/or web search)
- Call the supplier directly (through the number on container)
- Write to the supplier's physical address (on container/or web search)

NOTE: Material Safety Data Sheets (MSDS) may be used as an informational substitute until an updated Safety Data Sheet (SDS) is sent by the manufacturer, located online, or gathered through the City online database.

APPENDIX D TO §1910.1200 – SAFETY DATA SHEETS (MANDATORY)

A safety data sheet (SDS) shall include the information specified in Table D.1 under the section number and heading indicated for sections 1-11 and 16. If no relevant information is found for any given subheading within a section, the SDS shall clearly indicate that no applicable information is available. Sections 12-15 may be included in the SDS, but are not mandatory.

Table D.1. Minimum Information for an SDS

	Heading	Subheading
1.	**Identification**	(a) Product identifier used on the label; (b) Other means of identification; (c) Recommended use of the chemical and restrictions on use; (d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party; (e) Emergency phone number.
2.	**Hazard(s) identification**	(a) Classification of the chemical in accordance with paragraph (d) of §1910.1200; (b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200. (Hazard symbols may be provided as graphical reproductions in black and white or the name of the symbol, e.g., flame, skull and crossbones); (c) Describe any hazards not otherwise classified that have been identified during the classification process; (d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration ≥ 1% and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity is required.

	Heading	Subheading
3.	**Composition/ information on ingredients**	Except as provided for in paragraph (i) of §1910.1200 on trade secrets: **For Substances** (a) Chemical name; (b) Common name and synonyms; (c) CAS number and other unique identifiers; (d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. **For Mixtures** In addition to the information required for substances: (a) The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200 and (1) Are present above their cut-off/concentration limits; or (2) Present a health risk below the cut-off/concentration limits. (b) The concentration (exact percentage) shall be specified unless a trade secret claim is made in accordance with paragraph (i) of §1910.1200, when there is batch-to-batch variability in the production of a mixture, or for a group of substantially similar mixtures (*See* A.0.5.1.2) with similar chemical composition. In these cases, concentration ranges may be used. **For All Chemicals Where a Trade Secret is Claimed** Where a trade secret is claimed in accordance with paragraph (i) of §1910.1200, a statement that the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.
4.	**First-aid measures**	(a) Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion; (b) Most important symptoms/effects, acute and delayed. (c) Indication of immediate medical attention and special treatment needed, if necessary.
5.	**Fire-fighting measures**	(a) Suitable (and unsuitable) extinguishing media. (b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products). (c) Special protective equipment and precautions for fire-fighters.
6.	**Accidental release measures**	(a) Personal precautions, protective equipment, and emergency procedures. (b) Methods and materials for containment and cleaning up.
7.	**Handling and storage**	(a) Precautions for safe handling. (b) Conditions for safe storage, including any incompatibilities.
8.	**Exposure controls/personal protection**	(a) OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available. (b) Appropriate engineering controls. (c) Individual protection measures, such as personal protective equipment.

	Heading	Subheading
9.	**Physical and chemical properties**	(a) Appearance (physical state, color, etc.); (b) Odor; (c) Odor threshold; (d) pH; (e) Melting point/freezing point; (f) Initial boiling point and boiling range; (g) Flash point; (h) Evaporation rate; (i) Flammability (solid, gas); (j) Upper/lower flammability or explosive limits; (k) Vapor pressure; (l) Vapor density; (m) Relative density; (n) Solubility(ies); (o) Partition coefficient: n-octanol/water; (p) Auto-ignition temperature; (q) Decomposition temperature; (r) Viscosity.
10.	**Stability and reactivity**	(a) Reactivity; (b) Chemical stability; (c) Possibility of hazardous reactions; (d) Conditions to avoid (e.g., static discharge, shock, or vibration); (e) Incompatible materials; (f) Hazardous decomposition products.
11.	**Toxicological information**	Description of the various toxicological (health) effects and the available data used to identify those effects, including: (a) Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact); (b) Symptoms related to the physical, chemical and toxicological characteristics; (c) Delayed and immediate effects and also chronic effects from short- and long-term exposure; (d) Numerical measures of toxicity (such as acute toxicity estimates). (e) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.
12.	**Ecological information (Non-mandatory)**	(a) Ecotoxicity (aquatic and terrestrial, where available); (b) Persistence and degradability; (c) Bioaccumulative potential; (d) Mobility in soil; (e) Other adverse effects (such as hazardous to the ozone layer).
13.	**Disposal considerations (Non-mandatory)**	Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

	Heading	Subheading
14.	**Transport information (Non-mandatory)**	(a) UN number; (b) UN proper shipping name; (c) Transport hazard class(es); (d) Packing group, if applicable; (e) Environmental hazards (e.g., Marine pollutant (Yes/No)); (f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code); (g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.
15.	**Regulatory information (Non-mandatory)**	Safety, health and environmental regulations specific for the product in question.
16.	**Other information, including date of preparation or last revision**	The date of preparation of the SDS or the last change to it.

SDS MANAGEMENT SYSTEM

The SafeAssure/SDS Solutions services to our employees include:

- National Poison Control Hotline: 1-800-222-1222 (24 hrs a day/365 days yr)
- Our complete SDS data base
- SDS available online at www.msdsonline.com (24 hrs a day/365 days yr)

USER NAME: shakopeeempl PASSWORD: shakopeesds

- Automatic updating of all SDS/MSDS
- Internal backup reminders/support
- Archive of old/unused SDSMSDS
- Handout instructions (see end of this section)
- Support/Link to helpful videos: http://help.msdsonline.com/video-library#VideoLibrary

CONTRACTOR EMPLOYEES

The Safety Coordinator or Supervisor will advise outside contractors of any hazardous substances that may be encountered in the normal course of their work on our premises or job site. The Safety Coordinator will cover the SDS list, the labeling system in use, the protective measures to be taken, and the safe handling procedures required. In addition, the Safety Coordinator or Supervisor will notify those individuals of the location and availability of our SDS's. Each contractor bringing in additional hazardous substances will provide SDS's for those substances when requested by the Safety Coordinator. This will include labels used and the precautionary measures to be taken in working with these substances.

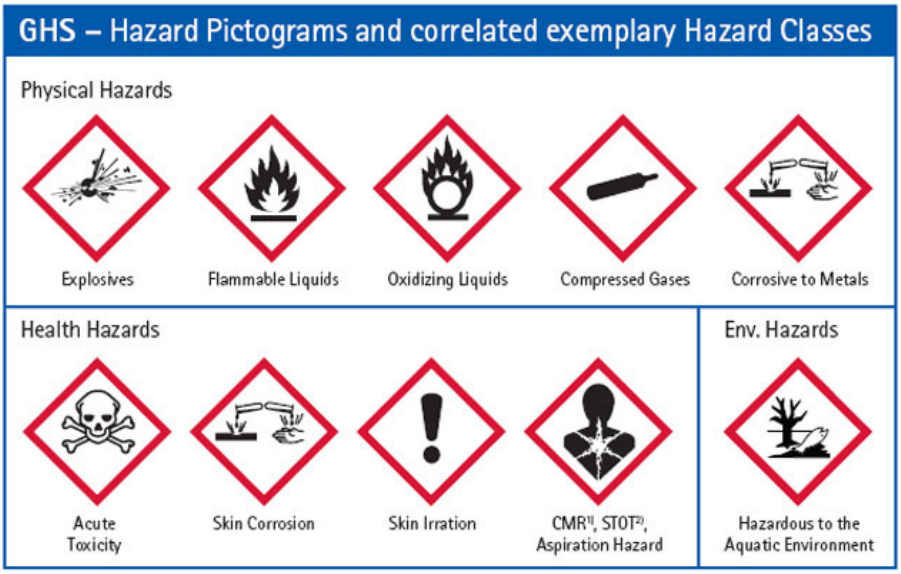
ADDITIONAL INFORMATION

All employees, or their designated representatives, can obtain this program, further information on this written program, the Employee Right to Know standard, applicable SDS's, and hazardous substance information lists by contacting the Safety Coordinator.

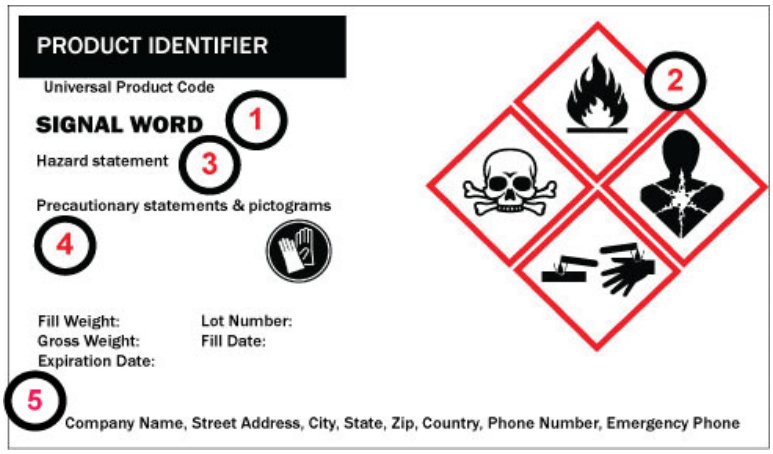
LABELS AND OTHER FORMS OF WARNING

Manufacturers/Venders Labels on containers shipped from the manufacturer must include the following elements:

- **Pictogram:** a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e. a red diamond). There are nine pictograms under the Global Harmonization System (GHS) of labelling chemicals. However, only eight pictograms are required under the Hazard Communication Standard (HCS).
- **Signal words:** signal words are used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are "Danger" and "Warning." "Danger" is used for the more severe hazards, while "Warning" is used for less severe hazards.
- **Hazard Statement:** a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
- **Precautionary Statement:** a phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling of a hazardous chemical.



SAMPLE GHS SHIPPING LABEL



INTERNAL LABELING REQUIREMENTS

A completed label must contain, at a minimum, the following information:

- Chemical/Product Name
- Hazard Warnings
- Chemical Manufacturer/Address (recommended)

All employees are responsible to ensure that hazardous materials in the work place have the proper and completed labels visibly attached. If non-English employees are hired, labels must also be completed in the language of that employee. All employees shall have these labels available to them when required.

Shipping & receiving personnel are responsible to ensure all incoming hazardous materials (bulk) have the proper labels affixed (see sample GHS label on previous page). Labels that are illegible, defaced, or in any other way unreadable will be replaced. Containers must be stored in such a manner that label is always visible.

Chemicals transferred from a labeled container to a portable container require that portable containers also be labeled unless the portable container is for ***immediate use***. Immediate use containers, described below, need not be labeled.

IMMEDIATE USE CONTAINERS: are containers into which substances are transferred from labeled containers, and which will be under the control of and used only by the person who transfers it from a labeled container, and only within the work shift in which it is transferred. This applies to containers such as plastic bottles, drums, vials, pitchers, pails, or similar containers which are routinely used and reused. Do not assume all containers not labeled are for “immediate use”.

TRAINING

Any employee who is routinely exposed to or has the potential of being exposed to any hazardous substance will receive on-site or on-line training in one or two phases. General training will consist of the following:

GENERAL TRAINING

- Methods and observations used to detect the presence or release of a hazardous substance in the work area
- Physical and health hazards of substances in the work area
- Measures employees can take to protect themselves from exposure to hazardous substances and specific procedures we have implemented to protect employees from exposure
- Details of our Hazard Communication/Employee Right to Know Program
- Description of the labeling systems
- Explanation of Safety Data Sheets
- Explanation of the Shakopee SDS data base system
- How employees can obtain and use the appropriate hazard information
- The location and availability of all exposure records (past and present), medical records, and SDS
- The hazards of non-routine tasks

This training will be repeated annually at minimum and more frequently as required.

SPECIFIC TRAINING

This training will target the specific hazardous substances associated with each job function and/or work group whereby employees are known to be exposed and/or what a customer requires. This training will consist of the following:

- the name or names of the substance including any generic or chemical name, trade name, and commonly used name
- the level at which exposure to the substance has been restricted
- the primary routes of entry and the known acute and chronic effects of exposure at hazardous levels
- the known symptoms of the effects
- any potential for flammability, explosion, or reactivity of the substance
- appropriate emergency treatment
- the known proper conditions for use of exposure to the substance
- procedures for cleanup of leaks and spills
- the name, phone number, and address of a manufacturer of the hazardous substance
- the location of the SDS

This training will be repeated as required by the applicable Standard.

NON-ROUTINE TASKS

The Safety Coordinator or the applicable Supervisor will inform all affected employees when they may be exposed to chemicals during their assigned task and conduct special training sessions any time:

- A new hazard is introduced into the work place
- The process changes
- Non-routine tasks are required
- An employee's job function or worksite location changes

This training will be accomplished and documented prior to any of the above conditions taking place.

HARMFUL PHYSICAL AGENTS

In addition to the procedures outlined for hazardous substances, all employees must be aware of, and trained on, our procedures regarding harmful physical and infectious agents.

Harmful Physical Agents

- Heat: Potential heat/sun exposure have been identified as hazards especially in the warmer summer months. When performing tasks during the summer months, consider the temperature of the work environment and higher work activity. Below are some tips to avoid heat casualties:
  - **Drink cool water**. Anyone working in a hot environment should drink cool water in small amounts frequently – a minimum of one cup every 20 minutes.
  - **Dress appropriately**. Wear lightweight, light-colored and loose-fitting clothing; change clothing if it gets completely saturated. Use sunscreen and wear a hat. Avoid getting sunburn.
  - **Work in ventilated areas**. All workplaces should have good general ventilation as well as spot cooling in work areas of high heat production.
  - **Work less & rest more**. Supervisors should assign a lighter workload and longer rest periods during days of intense heat. Short, frequent work-rest cycles are best. Alternate work and rest periods with longer rest periods in a cooler area and schedule heavy work for cooler parts of the day.
  - **Know the signs and take prompt action**. Employees and employers should learn to spot the signs of heat stroke, which can be fatal. Get emergency medical attention immediately if someone has one or more of the following symptoms: mental confusion or loss of consciousness, flushed face, hot/dry skin or an inability to produce perspiration.
  - **Reduce work for anyone at risk**. Employers should use common sense when determining fitness for work in hot environments. Lack of acclimatization, age, obesity, poor conditioning, pregnancy, inadequate rest, previous heat injuries, certain medical conditions, and medications are some factors that increase susceptibility to heat stress.
  - **Check with your doctor**. Certain medical conditions, such as heart conditions and diabetes, and some medications can increase the risk of injury from heat exposure. Employees with medical conditions or taking medications should ask their doctors before working in hot environments.
- Noise: Exposure to noise levels at or above 85 db on an eight-hour time weighted average will require adherence to OSHA Standards.
- Ionizing Radiation: All potential sources of X-rays and radioactive materials will be identified. The most common source of ionizing radiation occurs in hospitals and dental offices with X-ray equipment and radioactive sources for non-destructive testing of welded seams, such as in pipes. We currently do not have or expect exposures of this kind.
- Non-ionizing Radiation: All sources will be identified.

Any work areas in which it is expected that harmful physical agents will be generated at a level that may be expected to exceed the permissible exposure limits shall be appropriately identified and labeled.

Infectious Agents

- Bloodborne Pathogens in the form of:
  - HBV (Hepatitis B Virus)
  - HIV (Human Immunodeficiency Virus)

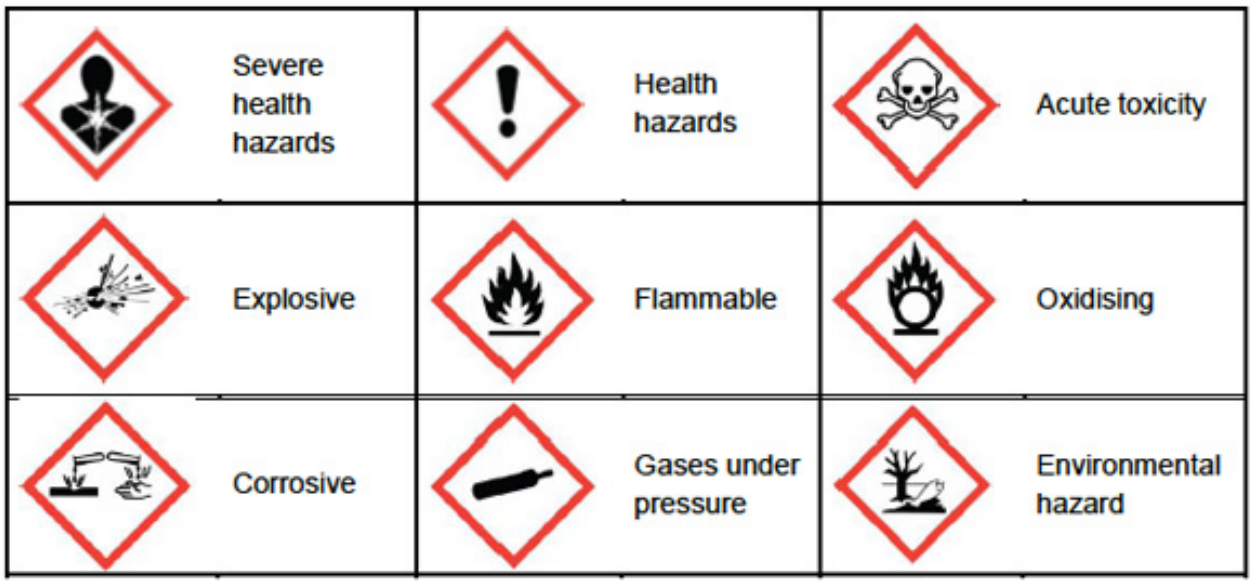
Each element on the harmful physical agent list that applies will be addressed with a policy and procedures under its own section in this manual. This also applies to infectious agents. (See sections titled "Hearing Conservation" “Bloodborne Pathogens”, and "Personal Protective Equipment".)

GHS

The Global Harmonization System of Classification and Labeling

post

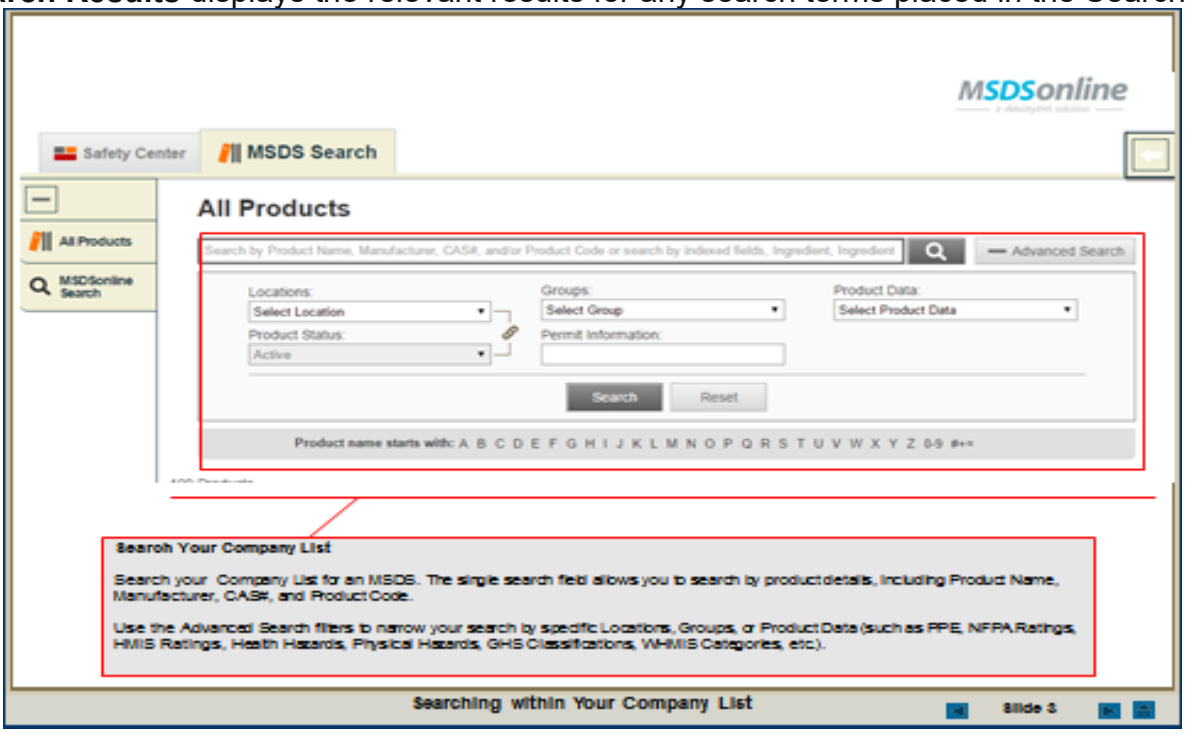
Section	NEW GHS SDS REQUIREMENTS
1	Identification of the substance or mixture and of the supplier
2	Hazards identification
3	Composition/information on ingredients
4	First aid measures
5	Firefighting measures
6	Accidental release measures
7	Handling and storage
8	Exposure controls/personal protection.
9	Physical and chemical properties
10	Stability and reactivity
11	Toxicological information
12	Ecological information
13	Disposal considerations
14	Transport information
15	Regulatory information
16	Other information including information on preparation and revision of the SDS



MSDSONLINE Employee Handout/Website Instructions

1. Go to www.msdsonline.com and type in your login and password.
   a. General (Employee) Login: **shakopeeempl**
   b. General (Employee) Password: **shakopeesds**

2. A single **Search** field is provided to help quickly locate an MSDS within the database. You can search by Product Name, Manufacturer Name or Alias, CAS#, Product Code, or Synonyms. Search suggestions will be generated based on popular successful searches. Every suggestion is accompanied by an estimate of the number of results that search will return. **MSDSonline Search Results** displays the relevant results for any search terms placed in the Search field.



Be sure to take advantage of all of the links and documents to help you maneuver through the site.
Link to helpful videos: http://help.msdsonline.com/video-library#VideoLibrary

NOTE: Employee login level (above) will allow you to view the inventory only. Admin login level username and password are available to the Safety Coordinator (or designee) who will add sheets and maintain your inventory.

PLUMBED EYEWASH WEEKLY INSPECTION

DATE	CAPS SECURE	DUST/DEBRIS	CLEAR PATH (36” CLEARANCE)	5-MINUTE FLUSH	INITIALS

SELF CONTAINED EYEWASH MONTHLY INSPECTION

DATE	CAPS SECURE	DUST/DEBRIS	CLEAR PATH (36" CLEARANCE)	INITIALS

Section 3

Emergency Action Plan

EMERGENCY ACTION PLAN GUIDELINES

INTRODUCTION and Accountability Location

GUIDE 1 Bomb Threat/Terrorist Threat

GUIDE 2 Fire Emergencies

GUIDE 3 Security Threat Within

GUIDE 4 Tornados/Severe Weather

GUIDE 5 Hazardous Material Incidents

GUIDE 6 Gas Leak (real or suspected)

GUIDE 7 Utility Emergency (other than gas)

GUIDE 8 Medical Emergencies

GUIDE 9 Suspicious Person/Activity

NOTES

The City of Shakopee
EMERGENCY ACTION PLAN

This Emergency Action Plan has been prepared to assist you with the preparation of a workable emergency plan. Guidance is provided by 29 CFR 1910 Subpart E and GENERAL DUTY CLAUSE. This plan is designed to serve as a guideline that can be printed and used as a "stand alone" document to be referred to in an emergency. All departments and facilities should also refer below for specific internal and external accountability locations. Changes/additions to this program must be approved by the Safety Coordinator before implementation.
It is imperative those employees and any visitors to your facility are protected in case of an emergency and that health and care of all individuals are prime considerations. Continuing and meaningful efforts to prevent incidents that lead to emergency situations should be the area of greatest concern.
All emergency situations cannot be neatly defined into a category for which hard and fast guidelines can be drawn. Individual judgment will need to be exercised in certain situations. Emergency guidelines are directed towards those who have responsibility for the safety of employees and visitors within their facility.
For the implementation of this program, the Facility Administrator will be a Receptionist, Senior Manager, or Supervisor within the facility. The Supervisors of each work area have the primary responsibility for the dissemination of emergency guidelines to those employees assigned to them. In addition, they must set up a designated chain of responsibility to ensure the safety guidelines are carried out in their absence.

The following emergency situations require guidelines specifically designed to help employees, Department Heads, and Supervisors make good decisions and give viable options in cases of emergencies. Please use the below table for reference.
During all emergencies:

- Identify Emergency
- Execute Initial Priorities
- Notify Required Personnel
- Evaluate Options
- Execute Plan

EMERGENCY	INITIAL PRIORITIES	GUIDE #
Bomb/Terrorist Threat	Follow Threat Checklist, Notify Direct Supervisor, Refer to Guide	1
Fire Emergency	Initiate Alarm, Call 911, Notify Direct Supervisor, Refer to Guide	2
Security Threat Within	Push Panic Button (if available), Notify Direct Supervisor, Refer to Guide	3
Tornado/Severe Weather	Notify Direct Supervisor, Refer to Guide	4
Hazardous Material Incident	Notify Direct Supervisor, Refer to Guide	5
Gas Leak (real or suspected)	Notify Direct Supervisor, Refer to Guide	6
Utility Emergency (other than gas)	Notify Direct Supervisor, Refer to Guide	7
Medical Emergency	Call 911, Notify Direct Supervisor, Refer to Guide	8
Suspicious Person/Activity	Notify Direct Supervisor, Refer to Guide	9

Accountability Locations

Building	Evacuation Accountability Location/Bomb Threat	Storm Shelter
NEED		

EMERGENCY NUMBERS

Ambulance	911
Fire and Rescue	911
Law Enforcement	911

GUIDE 1
Bomb Threat/Terrorist Threat

THE PERSON RECEIVING THE CALL

- REMAIN CALM (the greatest danger in any emergency is PANIC; it is the duty of every employee to prevent visitors from being unnecessarily frightened in any emergency)
- Consult "Bomb Threat Worksheet" (**form located at end of this section**)
- Immediately notify their Direct Supervisor
- Notify Law Enforcement (911)
- Notify the Facility Administrator
- Notify the City Administrator

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Evacuation of Facility is determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building. If bomb location is known, evacuate that area first, including floors above and below Follow evacuation procedures and use an alternate exit if bomb location is in the pathway
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors
- The Department Head, or person in charge, shall make available to the Search Commander copies of the building floor plan in order that Search Commander can readily make search assignment
- BE ALERT! All personnel should conduct a QUICK 360 degree visual search of their work area which should be conducted in the following manner:
  - THIS IS A VISUAL SEARCH; DO NOT TOUCH OR MOVE ITEMS
  - Search work area from floor to ceiling by dividing the work area into thirds. Visually scan lower third first, the center, and then ceiling
  - Look for anything unusual or out of place
  - Report information to your Direct Supervisor once in the safe area

IF A BOMB OR SUSPICIOUS OBJECT IS LOCATED, SEE GUIDE 9

OTHER FACILITIES (those not directly involved in incident):

Notification by the City Administrator's Office may be received in order to bring employees to an awareness level.

Each facility will respond by:

- Conducting a quick search of public areas for unusual or suspicious objects
- Employees will be asked to be aware of suspicious actions or persons who enter facilities and report this to their Direct Supervisor
- Facilities should communicate information related to the emergency to the City Administrator's Office

EVACUATION (if necessary):

When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used. The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. Search the areas which people will use to evacuate the building. Once this is accomplished, the building can be evacuated. An option not to evacuate may be made when "sound judgment" and experience indicates there is no real threat.

If evacuation is necessary, view the following guidelines:

- REMAIN CALM.
- Evacuation of a Facility will be determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building at the closest exit. (Supervisors, remember to review exit locations and guideline with employees annually and during orientation). If you are not at your work area at the time of evacuation, leave the facility through the closest safe exit.
- Remember to close all internal and external doors after insuring that employees and customers have exited the area, in order to contain the problem.
- Employees will gather outside at their assigned accountability location (see beginning of this section for specific locations and/or locate maps within your work areas).
- Ensure all visitors accompany you. They are your responsibility.
- Knock on doors (bathrooms, meeting rooms, unoccupied rooms, etc.) in the immediate area.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-entry by anyone not connected with the search or removal of objects until the suspected item has been removed or otherwise declared safe by the search commander or the Bomb Disposal Unit.
- Do not permit re-entrance until given the “All Clear”.

PREVENTIVE CONSIDERATIONS

- Determine that unauthorized persons do not have access to the boiler rooms, maintenance areas, and other areas where an explosive might be deposited.
- All staff personnel should be alert for suspicious-looking and -acting people. Watch for foreign or suspicious objects, items, or parcels that do not appear to belong in the area where such items are observed. Ensure that doors and access ways to such areas as the boiler room or supply/janitor closets are securely locked when not in use.
- Notify your Department Head if you become aware of any suspicious situations.

EXITS/DOORS

- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency (see **beginning of this section** for specific locations and locate maps within your work areas).

GUIDE 2
Fire Emergency

THE PERSON DISCOVERING THE FIRE

- REMAIN CALM. The greatest danger in any fire is PANIC. It is the duty of every employee to prevent visitors from being unnecessarily frightened in any emergency.
- Pull fire alarm (if available).
- Call 911.
- If at all possible, isolate the source (example: trip circuit breaker/close doors, close windows, etc.).
- Notify your Direct Supervisor.

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Evacuation of Facility is determined by the Facility Administrator or next immediate Supervisor.
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Immediately notify their Direct Supervisor.
- Notify Law Enforcement at 911.
- Notify the Facility Administrator.
- Notify the City Administrator.

EVACUATION (if necessary)

When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used. The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. An option not to evacuate may be made when "sound judgment" and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
- Evacuation of a Facility will be determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building at the closest exit (supervisors: review exit locations and guideline with employees annually and during orientation). If you are not at your work area at the time of evacuation, leave the facility through the closest safe exit.
- Remember to close all internal and external doors after insuring that have exited the area, in order to contain the problem.
- Employees will gather outside at their assigned designated location (see **beginning of this section** for specific locations and locate maps within your work areas).
- Ensure all visitors accompany you. They are your responsibility.
- Knock on doors (bathrooms, meeting rooms, unoccupied rooms, etc.) in the immediate area
- Areas of the facility that could possibly be affected by the fire should be notified, through runners or paging network.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-entrance until given the "All Clear."

PREVENTION

- Keep all building areas neat.
- Know the location of fire extinguishers and how to use them. Know the type of extinguisher to be used in different types of fires. All authorized employees will be trained in the use of fire extinguishers and the use for each type of fire.
- Allow smoking only in designated areas.

RESCUE PROCEDURES

In all emergencies where an employee is trapped and conventional assistance cannot be provided, rescue will be performed by or under the leadership of law enforcement and the fire department. DO NOT ATTEMPT TO RESCUE! Leave it to the professionals.

EXITS/DOORS

- Make sure all exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency (see beginning of this section for specific locations and locate maps within your work areas).

GUIDE 3
Security Threat Within

EMPLOYEE INVOLVED IN THE THREAT

If confronted with violence (potential assault), here are some common-sense guidelines.

Confrontation

- Push PANIC BUTTON (if available). Panic buttons have been strategically located. Please talk to your Direct Supervisor about specific locations.
- REMAIN CALM. The greatest danger in any emergency is PANIC. It is the duty of every employee to prevent visitors from being unnecessarily frightened in any emergency.
- Move slowly and explain calmly any actions one takes.
- Cooperate and offer no resistance (unless asked to enter a vehicle).
- Use techniques to try and "talk down" the threatening individual, such as:
  - Listening to the grievance actively and empathetically.
  - Avoiding confrontation by staying calm.
  - Verify understanding.
  - Let them suggest a solution.
  - Attempt to remove yourself or others who are affected from direct contact by leaving the area or allowing the person making the threat to leave.
  - If a weapon is shown, leave the area quickly, locking any doors behind you.

Post-Confrontation

The strategies listed above may help to save a life, but what should be done after the perpetrator leaves or is isolated? Below are some recommended guidelines:

- Lock the door.
- Don't touch any evidence.
- Notify your Direct Supervisor.
- Write details and descriptions right away and give them to the Sheriff when they arrive.
- Complete Workplace Violence Report (**form located at the end of this section).**

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Evacuation of Facility is determined by Facility Administrator or next immediate Supervisor.
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Immediately notify their Direct Supervisor.
- Notify Law Enforcement at 911.
- Notify the Facility Administrator.
- Notify the City Administrator.

EVACUATION (if necessary)
When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used (see **beginning of this section** for specific locations and locate maps within your work areas). The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. Search the areas which people will use to evacuate the building. Once this is accomplished, the building can be evacuated. An option not to evacuate may be make when "sound judgment" and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
- Evacuation of a Facility will be determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building at the closest exit. (Supervisors review exit locations and guideline with employees annually and during orientation). IF you are not at your work area at the time of evacuation, leave the facility through the closest safe exit.
- Remember to close all internal and external doors after insuring that have exited the area, in order to contain the problem.
- Employees will gather outside at their assigned designated location (see **beginning of this section** for specific locations and locate maps within your work areas).
- Ensure all visitors accompany you. They are your responsibility.
- Knock on doors (bathrooms, meeting rooms, unoccupied rooms, etc.) in the immediate area.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-enter until given the "All Clear."

PREVENTIVE CONSIDERATIONS

- Determine that unauthorized persons do not have access to the maintenance areas and other areas where an explosive might be deposited.
- All staff personnel should be alert for suspicious looking and acting people. Watch for foreign or suspicious objects, items or parcels that do not appear to belong in the area which such items are observed.
- Ensure that doors and access ways to such areas as boiler rooms, and supply/janitor closets are securely locked when not in use.
- Notify your Department Head if you become aware of any suspicious situations.

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EXITS/DOORS

- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency (see **beginning of this section** for specific locations and locate maps within your work areas).

GUIDE 4
Tornado/Severe Weather

Tornado Watch:
If the conditions are favorable to the formation of tornadoes, such as during severe thunderstorms, a Tornado Watch will be called. During a Tornado Watch, keep an eye on the weather and be prepared to take shelter immediately if conditions worsen.

Tornado Warning:
A Tornado Warning indicates that a tornado has been sighted or indicated by radar. You should take shelter immediately. Because Tornadoes can form and move quickly, there may not be time for a warning to be announced. Tornado information is given by local radio and TV station. THE LOCAL EMERGENCY MANAGEMENT *SIREN* WILL SOUND A STEADY FIVE MINUTE TONE - IF A WARNING IS ISSUED IN THE AREA OF YOUR FACILITY, DO NOT WAIT FOR THE *SIREN* TO SOUND BEFORE SEEKING SHELTER.

EMPLOYEE GUIDELINES
Once a tornado announcement has been received:
- Secure your work area (close doors, windows, etc.).
- Report to the designated shelter area. If time permits, bring a portable radio, first aid kit, flashlight and fire extinguisher with you to your shelter area.
- Employees will gather inside at their assigned designated location. See the **beginning of this section** and locate maps within your work areas.

SUPERVISOR AND/OR EMERGENCY PERSONNEL
- Supervisors will conduct an employee count as soon as possible after employees have reached the shelter.
- Do not permit employees to return to their areas until given the “All Clear”.
- Notify the Facility Administrator.
- Notify the City Administrator.

Post Tornado
Whether our facility is struck by a tornado/severe weather or not, we should expect a loss of power at the very least. Expect downed power lines if the facility is directly hit. in either case, a flashlight is a must in the shelter areas.

PREPARATION
- Supervisors should stay aware of adverse weather conditions by radio or TV.
- Employees should be notified of all Tornado Watches and be allowed to review guidelines.

RESCUE PROCEDURES
In all emergencies where an employee is trapped and conventional assistance cannot be provided rescue will be performed by or under the leadership of law enforcement and the fire department:

GUIDE 5
Hazardous Materials Incident

EMPLOYEE NOTIFICATION

Warning of a hazardous material incident will be received from Fire or Law Enforcement when the incident occurs sufficiently near your facility to be a threat to safety.

When such an alert is received, the person responsible for warning all employees and visitors should do the following:

- Notify all employees of the emergency and instruct them not to leave the building until told to do so by emergency personnel.
- Instruct them to close all doors and windows and shut off all air conditioning or fresh air circulation systems.
- Contact the individual in charge of building maintenance and make him/her aware of the situation. Instruct him/her to shut off all central air conditioning or fresh air circulation systems for the building.

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Evacuation of Facility is determined by the Facility Administrator or next immediate Supervisor.
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Immediately notify his/her Direct Supervisor.
- Notify Law Enforcement at 911.
- Notify the Facility Administrator.
- Notify the City Administrator.

EVACUATION (if necessary)

When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used. The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of law enforcement authorities. An option not to evacuate may be make when “sound judgment” and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
- Evacuation of a Facility will be determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building at the closest exit. Supervisors should review exit locations and guideline with employees annually and during orientation. If you are not at your work area at the time of evacuation, leave the facility through the closest safe exit (see **beginning of this section** and locate maps within your work areas).
- Remember to close all internal and external doors after exiting the area in order to contain the problem.
- Move crosswind, never into the affected area or downwind. Follow Evacuation Instructions of Emergency Personnel! Supervisors are responsible for employee list and employee count.
- Ensure all visitors accompany you. They are your responsibility.
- Knock on doors (bathrooms, meeting rooms, unoccupied rooms, etc.) in the immediate area
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-enter until given the “All Clear”.

EXITS/DOORS

- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency (see **beginning of this section** and locate maps within your work areas).

GUIDE 6
Gas Leak (real or suspected)

EMPLOYEE DETECTION

If a strong or persistent odor of gas or sulfur (rotten egg smell) is present in your area, or if you hear a hissing sound of escaping natural gas, follow this procedure.

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- GAS EMERGENCY – CALL THE FIRE DEPARTMENT – 911
  - Gas odor outside of the building
    - Contact building maintenance
    - Call the gas company
    - Notify your Direct Supervisor
  - Gas odor in the area of appliances or pipelines
    - Open windows
    - Notify building maintenance and Direct Supervisor
    - Call the gas company
    - Evacuate area if necessary
  - Gas line break or odor throughout the building:
    - Clear area, open windows
    - Call maintenance
    - Call the gas company
    - Proceed with evacuation if necessary
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Notify the Facility Administrator.
- Notify the City Administrator.

EXPLOSION PREVENTION

- Open windows and doors wide if possible to ventilate the building. Start where odor is the strongest. **DO NOT** re-enter the building for this purpose.
- **DO NOT** use the telephone from inside the building. This includes cellular phones and all types of portable communication and electronic devices that have a battery. These can spark and create a source of ignition.
- **DO NOT** light matches or create any other source of ignition.
- **DO NOT** operate any electrical switches, appliance controls, or pull any plugs from outlets.
- **DO NOT ALLOW SMOKING.**

EVACUATION (if necessary)
When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used. The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. An option not to evacuate may be make when "sound judgment" and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
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- Evacuate the building at the closest exit. Supervisors, review exit locations and guideline with employees annually and during orientation. If you are not at your work area at the time of evacuation, leave the facility through the closest safe exit.
- Remember to close all internal and external doors after insuring that have exited the area in order to contain the problem.
- Employees will gather outside. See **beginning of this section** and locate maps within your work areas.
- Ensure all visitors accompany you. They are your responsibility.
- Knock on doors (bathrooms, meeting rooms, unoccupied rooms, etc.) in the immediate area.
- Areas of the facility that could possibly be affected should be notified through runners or the paging network.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-entry by anyone not connected with the search or removal of objects until the suspected item has been removed or otherwise declared safe by the search commander or the Bomb Disposal Unit.
- Do not permit re-enter until given the "All Clear."
- DO NOT ALLOW SMOKING.

EXITS/DOORS

- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency. See **beginning of this section** and locate maps within your work areas.

GUIDE 7
Utility Emergency (other than gas)

ELECTRIC POWER
- Notify your Direct Supervisor for activation of any existing standby power.
- Employees should keep a supply of flashlights and extra batteries on hand.
- Contact emergency number to notify of a problem.

WATER OR SEWER PROBLEMS
- Contact building maintenance
- Contact your Direct Supervisor
- Contact Public Works if necessary
- Sewers can produce dangerous gas; avoid contact and evacuate the area if necessary. Do not enter without proper equipment or training.
- DO NOT ALLOW SMOKING.

EXITS/DOORS
- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency. See the **beginning of this section** and locate maps within your work areas.

SUPERVISOR AND/OR EMERGENCY PERSONNEL
- Evacuation of Facility is determined by Facility Administrator or next immediate Supervisor.
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Immediately notify his/her Direct Supervisor.
- Notify the Facility Administrator.
- Notify the City Administrator.

EVACUATION (if necessary)
When evacuation is ordered by the Department Head or person in charge, the Fire Evacuation routes will be used. The Department Head or person in charge will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. Search the areas which people will use to evacuate the building. Once this is accomplished, the building can be evacuated. An option not to evacuate may be make when “sound judgment” and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
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- Remember to close all internal and external doors after insuring that have exited the area, in order to contain the problem.
- Employees will gather outside. See the **beginning of this section** and locate maps within your work areas.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-entry by anyone not connected with the search or removal of objects until the suspected item has been removed or otherwise declared safe by the search commander or the Bomb Disposal Unit.
- Do not permit re-enter until given the “All Clear.”

GUIDE 8
Medical Emergency

Medical emergencies may occur from time to time which require immediate attention. All assistance possible will be provided to an injured employee.

RECOMMENDED GUIDELINES

- CALL 911.
- Keep the ill or injured person as comfortable as possible.
- Protect yourself from bodily fluids.
- Contact your Direct Supervisor.

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Notify the Facility Administrator.
- Notify the City Administrator.
- Notify Law Enforcement, Fire, Rescue, and/or Ambulance. (**Emergency Phone - Dial 911**)

All efforts that do not endanger you or other employees should be made in a rescue or medical emergency. However, our primary sources of help are the trained professionals.

GUIDE 9
Suspicious Object/Person/Activity

EMPLOYEE GUIDELINES

Suspicious Object

- DO NOT MOVE OR TOUCH THE OBJECT.
- Immediately evacuate the room or area where the object is located.
- Notify your Direct Supervisor.
- Evacuate if necessary.

Suspicious Person

- Notify your Direct Supervisor.
- Let him/her know you notice them by asking
  - Can I help you?
  - Are you looking for someone?

Suspicious Activity

- Notify your Direct Supervisor.

SUPERVISOR AND/OR EMERGENCY PERSONNEL

- Evacuation of Facility is determined by Facility Administrator or next immediate Supervisor.
- When evacuation is necessary, assist emergency personnel in evacuating all employees and visitors.
- Immediately notify your Direct Supervisor.
- Notify Law Enforcement at 911.
- Notify the Facility Administrator.
- Notify the City Administrator.

EVACUATION (if necessary)

When evacuation is ordered by the Department Head, or person in charge, the Fire Evacuation routes will be used. The Department Head, or person in charge, will make the decision whether to evacuate all or relevant parts of the office area based upon information available and the advice of the local law enforcement authorities. Search the areas which people will use to evacuate the building. Once this is accomplished, the building can be evacuated. An option not to evacuate may be make when “sound judgment” and experience indicates there is no real threat.

If evacuation is necessary, view the below guidelines

- REMAIN CALM.
- Evacuation of a Facility will be determined by Facility Administrator or next immediate Supervisor.
- Evacuate the building at the closest exit. If you are not at your work area at the time of evacuation, leave the facility through the closest safe exit.
- Remember to close all internal and external doors after insuring that have exited the area, in order to contain the problem.
- Employees will gather outside. See the **beginning of this section** and locate maps within your work areas.
- Supervisors will conduct an employee count as soon as possible after employees have reached the safe area.
- Do not permit re-entry by anyone not connected with the search or removal of objects until the suspected item has been removed or otherwise declared safe by the search commander or the Bomb Disposal Unit.
- Do not permit re-enter until given the “All Clear”.
- The Department Head (or person in charge) shall make available to the search commander copies of the building floor plan in order that search commander can readily make search assignments.

PREVENTIVE CONSIDERATIONS

- Determine that unauthorized persons do not have access to the boiler rooms, maintenance areas, and any other areas where an explosive might be deposited.
- All staff personnel should be alert for suspicious looking and acting people. Watch for foreign or suspicious objects, items, or parcels that do not appear to belong in the area which such items are observed. Ensure that doors and access ways to such areas as the boiler room or supply/janitor closets are securely locked when not in use.
- Notify your Department Head if you become aware of any suspicious situations.

EXITS/DOORS

- Make sure that exit doors are never blocked or locked from the inside during working hours.
- Exit doors must be open to the outside and have the type of hardware that makes them easy to open.
- The exterior path must be clear at all times. This means keeping it free of ice and snow during the winter months.
- All employees are required to know the exits they are to use in an emergency. See the **beginning of this section** and locate maps within your work areas.

NOTES

EVACUATION ROUTS/EXITS/ACCOUNTABILITY LOCATIONS

- Management is required to review exit locations and guidelines with employees annually and during orientation. See **beginning of this section** for accountability locations.
- Practice drills should be done periodically and documented and critiqued. See the **drill critique form at the end of this section**.
- Emergency Lighting: To help ensure their reliability, battery-operated emergency lights must undergo the following tests. See the **inspection form at the end of this section**.
  - A 30-second monthly functional test.
  - A 90-minute annual test.

INCIDENT MANAGEMENT

In the event of a major workplace incident that affects, or has the potential to affect, the mental health of our workforce, we will provide initial counseling and support services to you and your immediate family members. As the crisis passes and support systems are put into place for individuals affected by the incident, we must make every effort to return to normal operations. A reasonable effort will be made to notify employees, customers, and others who need to know of the status of operations directly whenever possible. In cases where direct contact is not possible or practical, an effort will be made to communicate through the news media and other available resources.

LAW ENFORCEMENT RESPONSIBILITY

The law enforcement agency having primary jurisdiction will have the responsibility of promptly notifying (1) the Fire Department (2) State Law Enforcement or (3) the FBI. They will also be responsible for the orderly search of the building and investigation of any sufficient threat. In the event a bomb or suspect object is located, the responsibility for removal will be that of the bomb detachment unit. The search commander will have the responsibility of giving the “All Clear” signal at the completion.

MEDICAL

All efforts that do not endanger you or other employees should be made in a rescue or medical emergency. However, our primary sources of help are the Sheriff’s Department & Fire Department. **In an emergency, DIAL 911.**

MEDIA

All contacts and statements given to the media related to facility emergencies will be coordinated through the City Administrator.

CONTROLLING A FIRE

Extinguishing a Minor Fire

Do not jeopardize your safety to fight a fire. Only do so if you are in a safe situation.

- Smother a minor fire by pouring water on it unless its origin is electrical or flammable liquid.
- In the case of a trash fire, do not pick up burning trash and run with it. This will only fan the fire and cause it to burn more rapidly.
- Stay calm. Do not panic. First, alert a Supervisor. If it is safe to do so, fight the fire with the closest accessible extinguisher.
- Be sure that fire is extinguished. Remove smoldering articles to an area where they cannot rekindle or cause any further damage.
- Assure visitors and personnel that everything is under control and that fire has been extinguished.
- Report the incident to the facility manager. Relate the details about the fire and that it has been extinguished.
- Recheck the fire area and see if it is safe to enter.
- Do not use the fire alarm if the fire is of a minor nature. Keep activities and information localized.
- Close all doors and windows in the fire area.
- Seal off the fire area by placing a wet blanket under the room entrance door to prevent smoke from entering the rest of the building.
- Move visitors to other available rooms or areas until the fire area can be declared safe.

Responding to a Major Fire

Should a major fire (one that is out of control) be discovered, or a minor fire gets out of control, immediately activate your Emergency Action Plan and call your fire department. Then:

- Remain calm. Do not panic.
- Follow all instructions issued by the Safety Coordinator. Time is of the essence.
- Evacuate all visitors and employees away from the danger area.
- Move visitors to pre-assigned areas.
- Be sure that all visitors are accounted for.
- Report missing persons immediately.
- Close all doors and windows to rooms as they are evacuated.
- Check exits to assure they are safe and usable. If not, clear them of obstacles.
- Turn all lights on.
- Turn off any equipment with blower fans (such as heating and cooling systems) and all unnecessary electrical equipment.
- Do not let anyone return to the area once they have been evacuated.

Fire Extinguishers

How to Use an ABC Fire Extinguisher

- Hold the extinguisher upright.
- Pull the ring pin to snap the safety seal.
- Start back ten feet from the fire.
- Aim at the base of the fire. Do not start at the top of the fire.
- Squeeze the lever and hold. The substance will last for 6-10 seconds.
- Sweep the hose from side to side.

Note: Do not attempt to put out a major fire or an overhead fire. Only fire department personnel shall fight with these fires.

Only fight the fire until the fire department arrives or the fire is no longer controllable. Do not endanger personal safety.

Fire Extinguisher Inspections

Annual inspections shall be done by a qualified external inspection organization. Internal inspections of fire extinguishers shall be done at least once a month and more often in severe environments. Inspection shall include the following:

- The extinguisher is not blocked by equipment, coats, or other objects that could interfere with access in an emergency.
- The pressure is at the recommended level. On extinguishers equipped with a gauge, the needle should be in the green or "Goldilocks" zone - not too high and not too low.
- Determine fullness by hefting (lifting) the extinguisher.
- Turn the extinguisher upright (valve down) and strike bottom with soft rubber mallet to loosen material.
- The nozzle or other parts are not hindered in any way.
- The pin and tamper seal (if it has one) are intact.

There are no dents, leaks, rust, chemical deposits and/or other signs of abuse/wear. Wipe off any corrosive chemicals, oil, gunk etc. that may be on extinguisher.

Initial the back of tag when inspection is completed!

EMERGENCY ACTION PLAN
DRILL CRITIQUE

On _____ a (Fire/Tornado) drill was done at _____ facility.

The alarm was received at _____. We had a complete accountability of all employees at _____.

The total time elapsed between alarm and complete accountability was _____.

Comments on complications/areas needing work_____

_____

_____

_____

_____

_____

_____

_____

Safety/Drill Coordinator

BOMB THREAT WORKSHEET

TIME OF CALL: ☐ AM ☐ PM	DATE:
TO: ☐ AM ☐ PM	
PHONE # USED:	CALLER: ☐MALE ☐FEMALE

Voice Characteristics:

☐ Young ☐ Old ☐ Average ☐ High ☐ Low

☐ Nasal ☐ Raspy ☐ Normal ☐ Lisp ☐ Stutter ☐ Slur ☐ Angry

SPEAKS: ☐Slow ☐ Fast ☐ Normal ☐Excited ☐ Angry

Does Caller:

- ○ Call anyone by name? _____
- ○ Seem to know our facility? _____
- ○ Sound familiar? _____

Ask the Caller:

- ○ Where exactly is this bomb located? _____
- ○ What does it look like? _____
- ○ When will it go off? _____
- ○ What kind of timer does it have? _____
- ○ Why did you do this? _____
- ○ How big is it? _____
- ○ How did you get the device here? _____
- ○ Where are you now? _____

Listen For Background Noises Such As:

☐ Static ☐ Voices ☐ TV/Radio ☐ Bells ☐Trucks/Traffic Noises

Think:

1. Are any problem employees absent today?
2. Any employee recently dismissed?
3. Any dissatisfied customers?

If voice of that was a youth:

1. Which employees have teenagers?
2. Which employees have troubled teens?

Keep the caller on the line as long as possible. Try to "**memorize**" the sound of the caller's voice, listen closely for unusual phrases or speech patterns. Listen for background sounds that might be useful in identifying the caller. If possible, have another reliable member of Management listen in on the conversation without being noticed. After caller hangs up, do not hang up the phone.

EMERGENCY LIGHTING TEST LOG

TEST DATE	ANNUAL OR MONTHLY (A OR M)	UNIT NUMBER	START TIME	STOP TIME	PASS ? (CHECK IF YES)	FAIL ? GIVE REASON FOR FAILURE & REFER FOR REPAIR/REPLACEMENT	TESTER'S INITIALS

Workplace Violence Reporting Form

Date of Incident: _____
Time of Incident: _____
Reported by: _____
Employee(s) Involved: _____
Supervisor's Name: _____

Description of Incident (include names, dates, time, etc.)

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

Action Taken:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Follow-up Action Needed or Taken:

_____
_____
_____
_____
_____
_____

Employee's Signature: _____ Date: _____

_____ _____ _____ _____
Supervisor Date Safety Coordinator Date

Section 4

Bloodborne Pathogens/ Exposure Control Plan

The City of Shakopee

BLOODBORNE PATHOGENS POLICY
EXPOSURE CONTROL PLAN

The City of Shakopee Bloodborne Pathogens Policy (Exposure Control Plan) was developed to ensure our staff is informed of the potential occupational exposure to Bloodborne Pathogens in and outside our facilities and to eliminate or minimize occupational exposure to Bloodborne Pathogens in accordance with the OSHA 29 CFR 1910.1030 regulations. This program covers all affected employees with the exception of the Police and Fire Departments who have separate programs to ensure their specific compliance requirements. Employees may obtain a copy of the above Standard upon request.
Although applicable to all City employees, additional department policies/procedures may be available through individual Department Managers.

The following Bloodborne Pathogens program will cover the following:

- Program Administration
- Definitions
- Epidemiology
- Exposure Control Plan
- Universal Precautions

PROGRAM ADMINISTRATION

Implementation and maintenance of the Exposure Control Plan will be the responsibility of the Safety Coordinator and includes the following:

- Ensure proper housekeeping procedures and disinfectants are utilized to reduce exposures
- Training of all personnel
- Ensure that proper medical attention is provided and all medical records are maintained, stored, and kept confidential
- Maintain exposure-controlling items. Ensure engineering controls, Personal Protective Equipment, and supplies are maintained and available.

EPIDEMIOLOGY

Hepatitis B Virus

Transmission: The most common method of transmission of HBV is through fluid-to-fluid contact with an infected person. This can include sexual contact, sharing of hypodermic needles, and perinatal contact from mother to baby. However, in the occupational setting for employees who may respond to accidents and injuries in our facilities or in the general public, there is an increased risk of infection due to the possibility of contact with blood or other bodily fluids from injured personnel. Adherence to universal precautions will reduce or eliminate this risk. It must be emphasized that HBV is not spread through casual contact. Though the virus can live outside the body for one to four weeks and the Minnesota Department of Health has said that though it is theoretically possible to be infected from contact with a dried specimen, it would require contact with blood or mucous membrane and the casual probability is extremely remote.

Symptoms: In the early stages, Hepatitis B Virus symptoms are similar to the flu. Nausea, vomiting, diarrhea, mild fever, and fatigue are common. More severe cases may result in jaundice, loss of appetite, cirrhosis, liver cancer, and death. An effective vaccination exists that will prevent the contraction of HBV and is available to those personnel listed in the above section as part of a post exposure evaluation.

Human Immunodeficiency Virus (HIV)

Transmission: Transmission of HIV is similar to that of HBV in that it requires fluid-to-fluid contact with an infected person. The HIV virus is extremely fragile and cannot live outside the fluid envelope. Therefore, casual contact is not a method of transmission, which only occurs through direct exposure to infected blood and/or other bodily fluids.

Symptoms: The symptoms of HIV are varied, but may include fatigue, fever, weight loss, night sweats, rashes, mouth sores, and pneumonia. There is currently no vaccine for HIV, no means of cure, and infection likely will result in death. HIV is preliminary to AIDS so precautions shall be taken.

EXPOSURE CONTROL PLAN (ECP)

Our employees will be trained in the ECP at the time of hire as well as annually following the initial training. Employees concerned about Bloodborne Pathogen exposures or the exposure control plan are encouraged to contact the Safety Coordinator.

Employee Exposure

Employee exposure to potentially infectious material is divided into two categories: direct and indirect.

- **Direct exposure** risks are limited to actions related to the care of injured personnel when providing First Aid and/or CPR. Any contact with the blood or other bodily fluid of another would also constitute a direct exposure.
- **Indirect exposure** risks are limited to work that requires contact with raw untreated sewage through sanitary sewer maintenance/repair. Current research (MN Department of Health) indicates the greatest risk of exposure with indirect exposure is oral ingestion. The risk of exposure, for example, for a person working in infectious raw sewage with an open cut is considered minimal due to the high amount of dilution and variations within the environment.

Some of the following conditions must exist simultaneously for an infection to occur. Eliminating any one or more of these conditions reduces the possibility of infection:

- A sufficiently large dose of blood or bodily fluid
- A sufficient virulence in the blood or bodily fluid
- A sufficient route of exposure
- A susceptible resistance level
- A low or non-existent dilution factor

Exposure Determination

The determination of exposure belongs to the employee. For the purposes of this program, if the employee believes they have been exposed and/or if a Direct Supervisor, Safety Coordinator, or medical personnel believes exposure has occurred, then they have been exposed. The employer may not refuse evaluation by a health care provider once the employee has reported an exposure. In the event the employee refuses to make the exposure determination, the employer may compel the employee to undergo evaluation by the health care professional.

All exposure determinations are made without regard to the use of Personal Protective Equipment as required by the standard and this policy.

In all cases, the importance of good personal hygiene and thorough hand washing is vitally important in reducing the spread of all infectious diseases.

UNIVERSAL PRECAUTIONS

All employees will use universal precautions, which require employees to ***assume that human blood or body fluids are infectious with regard to HIV, HBV, or any other potential pathogens.*** The following precautions are to be utilized to reduce exposures.

HAND WASHING

Hand washing is indicated for prevention of cross transmission of infectious agents and protection of the injured and the responder. Hand washing is indicated in situations including:

- Immediately after unanticipated contact with blood, body fluids, or sewage
- Immediately after gloves are removed
- Immediately after contact with raw sewage
- For personal hygiene, e.g. arrival or returning to the work site, use of the lavatory, before eating, etc. When hand-washing facilities are not available, antiseptic hand cleanser is available and must be used.

SHARPS SAFETY

Sharps are defined as: Needles and other sharp objects that can penetrate skin.

Staff is asked to have all injectable medications administered prior to arrival or practice self-administration during the working shift.

Safe use **must** include:

- Disposal in a puncture-resistant container immediately after use
- No routine recapping of needles - where no alternative exists, one-handed or device assisted recapping may be allowed

The discarding of contaminated needles from the public is a major concern. Employees must take additional care when handling garbage and receptacles to reduce the possibilities of needle sticks. When handling garbage:

- Keep bag away from body when handling (use mechanical handling when possible)
- Do not gather garbage with your hands (use mechanical devices when possible)
- Wear puncture resistant gloves (e.g. leather)

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment must also be utilized if occupational exposure remains after instituting engineering and work practice controls. All control measures shall be reviewed during our annual review of the complete program. Effective Personal Protective Equipment will not allow blood or other potentially infectious materials to pass through mucous membranes.

- First Aid responders including all on- and off-site employees will have quick access to kits containing gloves, ventilation devices, pocket masks, eye protection, and hand washing facilities.
- Appropriate PPE will be worn whenever contact with blood or body fluids is anticipated. All PPE will be provided at no cost to the employee.

PPE Available:

- Gloves

  Use of gloves is suggested for workers before:
  - "Reasonably anticipated" contact with blood or body fluids, patient's mucous membranes, or patient's non-intact skin
  - Handling or touching of contaminated items or surfaces
  - If the worker has non-intact skin (e.g., cut, scratches, rashes)
  - Contact with equipment or surfaces that are soiled with blood or body fluids
  - If contact with raw sewage is anticipated

- Clothing
  Use of overcoats or removable clothing is suggested for workers before:
  - "Reasonably anticipated" contact with blood or bodily fluids
- Face shields/masks and eye protection
  Use of is suggested when:
  - "Reasonably anticipated" contact with splashing or spattering of blood or bodily fluids.
- Mouthpieces, pocket masks or other ventilation devices
  Safe practices must include:
  - No unprotected mouth-to-mouth resuscitation
  - No mouth pipetting/suctioning of blood or body fluids

Note: All of the above is available to all personnel that have exposure possibilities.

General Rules for employees using PPE:

- Wash thoroughly and immediately after removal of any PPE.
- Remove protective equipment before leaving the work area.
- Place used protective equipment in appropriately designated areas or containers when being decontaminated or discarded.
- Wear appropriate PPE when it can be reasonably anticipated that you may have contact with blood or other potentially infectious materials and when handling or touching contaminated items or surfaces. Replace any article of PPE if it becomes torn, punctured, or contaminated, or if their ability to function as a barrier is compromised.
- Following contact of body areas with blood or any other infectious materials, you must wash your hands and any other exposed skin with soap and water as soon as possible. Employees must also flush exposed mucous membranes (eyes, mouth, etc.) with water.
- Never wash or decontaminate disposable PPE for reuse.
- Wear appropriate face and eye protection such as a mask with glasses when spatters or droplets of blood or other potentially infectious materials pose a hazard to the eyes, nose, or mouth.
- If blood and/or other potentially infectious materials penetrate a garment, the garment(s) must be removed immediately or as soon as feasible.

HOUSEKEEPING

The Safety Coordinator has developed and implemented a procedure for cleaning and decontaminating work surfaces and equipment contaminated with potentially infectious materials.

- Work sites shall be maintained in a clean and sanitary condition.
- Work surfaces (e.g. desks, floors, etc.), equipment, materials, and items that come in contact with potentially infectious material shall be cleaned and sanitized. A solution of sodium hypochlorite (household bleach) mixed at ¼ cup bleach to one gallon of water is considered adequate to disinfect contaminated materials. Chlorinated wipes are also available.
- Contaminated items will be handled in a safe manner minimizing further contamination or exposure. Always use mechanical means such as tongs or a brush and dustpan to pick up contaminated broken glassware; never pick up with hands even if gloves are worn.
- Discard all regulated waste through the hospital infectious control coordinator. Liquid or semi-liquid blood or other potentially infectious material; items contaminated with blood or other potentially infectious materials that would release these substances in a liquid or semi-liquid state if compressed; and items caked with dried blood or other potentially infectious materials and capable of releasing these materials during handling will require storage in a labeled and sealed biohazard container. This normally does not include Band-Aids.
- All fluid absorbing wastes (ex: gauze, pads) may be scheduled for incineration through the hospital infectious control coordinator.

Note: If the Emergency medical System (EMS) is notified and arrives, ask if they may remove all regulated waste for you. They are better equipped to handle biohazards.

Blood spills:

- Appropriate PPE will be worn.
- Sharps/broken glass shall be cleaned using mechanical means (e.g. tongs, broom, dustpan).
- Absorb the liquid material (e.g., paper toweling, chemical absorbent).
- Arrange for decontamination of the area (e.g. chlorine solution).

Laundry:

Clothing contaminated with potentially infectious material shall be labeled, bagged, and scheduled for bio-hazard cleaning through a cleaner using the following requirements:

- Handle contaminated laundry as little as possible and with a minimum of agitation.
- Use appropriate Personal Protective Equipment when handling contaminated laundry.
- Bag contaminated laundry at its location of use. Linen soiled with blood or body fluids should be placed and transported in bags that prevent leakage.
- Never sort or rinse contaminated laundry in areas of its use.
- Use red laundry bags marked with the biohazard symbol so laundry facility employees recognize the bags as contaminated and will handle materials accordingly.

POST EXPOSURE EVALUATION

Should an exposure incident occur, contact the Safety Coordinator and Direct Supervisor immediately. Each exposure must be documented by the employer/employee on an Exposure Incident Report Form **(see form at end of section**). In addition, a review of the circumstances related to the exposure incident should be conducted to determine if procedures, protocols and/or training need to be revised. A licensed physician through our local facility will conduct a confidential medical evaluation and follow-up. The following items will be addressed:

- Document the routes of exposure and how exposure occurred.
- Identify and document the source individual unless the employer can establish that identification is infeasible.
- Obtain consent and test source individual's blood as soon as possible to determine HIV and HBV infection and document the sources' blood test results **(see forms at end of section).**
- If the source individual is known to be infected with either HIV or HBV, testing need not be repeated.
- Provide the exposed employee with the source individual's test results and information about applicable disclosure laws and regulations concerning the source identity and infectious status.
- After obtaining consent, collect exposed employee's blood as soon as feasible after the exposure incident and test blood for HBV and HIV serological status. If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days.
- The employee must be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Services.
- The employee must be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee must also be given information on what potential illnesses to be alert for and told to report any related experiences to appropriate personnel.

HEPATITIS B VACCINATION

The City of Shakopee will provide information on Hepatitis B vaccinations by addressing its safety, benefits, and effectiveness as well as methods of administration and availability. With the exception of law enforcement and EMS personnel, job tasks associated with employees of the City of Shakopee do not constitute a reasonably anticipated direct occupational exposure to infectious materials. Hepatitis B vaccinations will be available and administered at the request of the employee or upon review by a licensed physician **(see form at end of section**).

The Hepatitis B vaccination series will be made available at no cost within ten days of: the request for vaccination, determination of an exposure incident, or the initial assignment of duties where an employee can reasonably anticipate occupational exposure to blood or other potentially infectious materials.

Exceptions may include:

- the employee has previously received the series
- antibody testing reveals that employee is immune
- medical reasons prevent taking the vaccination; or
- the employee chooses not to participate

If an employee chooses to decline HB vaccination, the employee must sign a statement to this effect **(see form at end of section**). Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the HB vaccination will be kept in the office with the employee's other medical records. There is currently no booster recommended for the Hepatitis B vaccine, but should one be developed this would also be offered at no charge to the employee under the provisions of this standard. The Hepatitis B Vaccine is **NOT** a live-virus vaccine; therefore, Hepatitis B **cannot** be contracted from the vaccine.

NOTE: Law Enforcement and Fire employees are considered at risk employees and are provided these vaccinations upon employment.

HEALTH CARE PROFESSIONALS

The City of Shakopee will ensure that health care professionals responsible for employee's HB vaccination, post-exposure evaluation, and follow-up be given a copy of the OSHA Bloodborne Standard.

The City of Shakopee will also ensure that health care professional evaluating an employee after an exposure incident receives the Exposure incident report **(see form at end of section)** containing the following information:

- A description of the employee's job duties relevant to the exposure incident
- Routes of exposure
- Circumstances of exposure
- If possible, results of the source individual's blood test
- If possible, relevant employee medical records, including vaccination status **(see form at end of section)**

Healthcare Professional's Written Opinion:

The physician will provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days after completion of the evaluation.

For HB vaccinations, the healthcare professional's written opinion will be limited to whether the employee requires or has received the HB vaccination.

The written opinion for post-exposure evaluation and follow-up will be limited to whether or not the employee has been informed of the results of the medical evaluation and any medical conditions that may require further evaluation and treatment. All other diagnoses must remain confidential and not be included in the written report.

COMMUNICATIONS OF HAZARDS

Labels:

The labels are required to include the Biohazard legend and be a florescent orange or orange-red color. **Safe practice must include labeling containers of possible Bloodborne Pathogens.**

Note: Under Universal Precautions, it should be assumed that any bodily fluids are contaminated with a Bloodborne Pathogen.

The City of Shakopee will ensure warning labels are affixed or red bags printed with the Biohazard symbol are used as required. Employees are to notify their Direct Supervisor or Department Head and Safety Coordinator if they discover unlabeled regulated waste containers.

Training:

All employees who have or are reasonably anticipated to have occupational exposure to Bloodborne Pathogens will receive annual training provided by the Safety Coordinator.

The classroom and/or hands on training will cover, at a minimum, the following elements:

- An explanation of the standard and where they can obtain a copy for review
- General explanation of the epidemiology and symptoms of Bloodborne diseases
- Modes of transmission
- Our Exposure Control Plan and how to obtain a copy
- Methods to recognize exposure tasks and other activities that may involve exposure to blood and other potentially infectious materials
- Use and limitations of Engineering Controls, Work Practices, and PPE
- The types, use, location, removal, handling, decontamination, and disposal of PPE
- The basis for selection of PPE
- Hepatitis B Vaccine - offered free of charge (affected personnel). Training will be given prior to vaccination on its safety, effectiveness, benefits and method of administration.
- Emergency procedures for infectious materials
- Exposure incident procedures
- Post-exposure evaluation and follow-up
- Signs and labels and/or color coding
- Question and answer session

RECORDKEEPING

Program/Policy:

A copy or this program must remain available to all employees. The Safety Manual copy must remain in the manual. If an employee requests a copy, one is available to view or copy from their Safety Coordinator or Direct Supervisor. The OSHA Standard is also available upon request.

Medical records:

- Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020.
- The Safety Coordinator is responsible for maintenance of the required medical records and where they are stored.
- All employee medical records will be kept confidential and will not be disclosed or reported without the employee's express written consent to any person within or outside the workplace.
- Employee medical records shall be maintained for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.
- Employee medical records shall be provided upon request of the employee or to arrange having written consent of the employee within 15 working days.

Training Records:
All affected employees will be trained annually on the hazards of and protection against Bloodborne Pathogens. The Safety Coordinator will maintain Bloodborne Pathogen training records. The training record shall include:

- Dates of the training sessions
- Contents or a summary of the training sessions
- Name of persons conducting the training
- Names and job titles of all persons attending the training sessions

Non-medical training records will be maintained for a minimum of three (3) years.

EXPOSURE INCIDENT REPORT FORM

Employer Name: _____

Exposure Date: _____ Today's Date: _____

Employee exposed: _____

Position/Job: _____

Routes of exposure_____

How did exposure occur (be specific, use the back of this form if needed?)

_____
_____
_____
_____
_____
_____
_____

Source of exposure_____

Have you ever been vaccinated for Hepatitis B Virus (HBV)? _____

Date of last vaccination (if applicable) _____

You are entitled to a post-exposure evaluation by a health care professional. Please discuss your options with your Direct Supervisor immediately.

Employee Medical File Form-Hepatitis B Vaccination Status

Name: _____ S.S. # _____ Date Employed: _____

Date of Initial Infection Control Training: _____

Date HBV Vaccination education information given to employee: _____

Date HBV Vaccination series offered to employee: _____

Employee received HBV Vaccinations:

_____No. If employee refuses vaccinations, he or she shall sign declination statement.

If employee did not receive HBV vaccination for any other reason,
Explain:

_____

_____

_____Yes, free of charge. If yes, record dates of injections.

1st _____ 2nd _____ 3rd _____

Employee's Initials: _____ _____ _____

Hepatitis B Virus (HBV) Vaccine Declination Statement

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring the Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B Vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B Vaccine, I can receive the vaccination series at no charge to me.

Employee Signature: _____ Date: _____

_____

_____Employee now chooses to receive HBV Vaccinations, at no charge, after originally declining
Record dates of injections:

1st _____ 2nd _____ 3rd _____

Employee's Initials: _____ _____ _____

Medical Information Release Form

I, ____ (full name of worker/patient), hereby authorize ________________________________ (individual or organization holding medical records), to release to __________________________ (individual or organization, name and address, authorized to receive the medical information), the following medical information from my personal medical records:

____

____

____

But I do not give permission for any other use or re-disclosure of this information. (Note: Several extra lines are provided below so that you can place additional restrictions on this authorization letter if you want to. You may, however, leave these lines blank. On the other hand you may want to (1) specify a particular expiration date for this letter (if less than one year); (2) describe medical information to be created in the future that you intend to be covered by this authorization letter; or (3) describe portions of the medical information in your records which you do not intend to be released as a result of this letter.)

____

____

____

- -

Full name of Employee or Legal Representative: _____________________________

Signature of Employee or Legal Representative: _____________________________

Date: _______________

Signature of Witness: __________________________ Date: __________________

Source: Appendix A to 1910.1020 Access to employee exposure and medical records.

EXPOSURE NOTIFICATION

TO: _____

FROM: _____

SUBJECT: City Employee Exposure

A City employee has reported an exposure to the blood or body fluids from your patient. Our organization is required by law to inquire whether the source patient has a Hepatitis B or HIV infection. The source patient has the right to refuse testing. However, if the source patient is deceased, consent for Hepatitis B and HIV testing is not necessary.

Date of exposure: _____

Your patient's name is: _____

You are responsible for:

1. Informing your patient an exposure has occurred and asking your patient for consent to test. (Please inform your patient the tests will be paid for by the City)

2. Placing the consent in the patient's chart.

3. Ordering blood tests that patient has consented to have drawn (HBs, Ag and HIV).

4. Informing your patient of their test results. Provide appropriate counseling and referral if the results were positive.

OR

5. Providing the results of your patient's test to your hospital's _____Department. (This is whichever Department or individual evaluates and treats occupationally acquired exposures, such as Infection Control/Occupational Health)

6. Informing the MDH if your patient's tests are positive.

SOURCE PATIENT CONSENT FOR HIV/HBV TESTING

A City employee accidentally came into contact with your blood. We are asking you to give us information about your medical history so that we can determine if you have been exposed to the Human Immunodeficiency Virus (HIV). We want to determine if you are infected with HIV to inform you of this infection and to counsel you about what this means to you and others. Any information you give us may be recorded in your hospital medical record and may be disclosed to the affected employee, a representative of the City, and/or to health care workers who are caring for the employee.

We also ask that you provide us a sample of your blood to test for the presence of antibodies for HIV. The results of your test will also be recorded in your hospital medical record. If you are infected with HIV, your test result will be given to the employee, but your name will not be given. However, we will inform the Minnesota Department of Health (MDH) of your test results and provide your name. The law requires that MDH maintain the privacy of the information.

You are not required to give the blood sample or the information. However, if you don't, you won't learn whether you are infected or receive additional information about your health if you are infected. If you refuse, we are required by law to inform the City employee and their employer that you have refused.

By signing below, you are consenting to being tested for the presence of HIV antibodies.

Date: _____ Patient's Signature: _____
(Or legal guardian or patient representative)

Section 5

Lockout/Tagout

The City of Shakopee
LOCKOUT/TAGOUT (ENERGY CONTROL) POLICY

It is the policy of the City of Shakopee to control hazardous energy by meeting or exceeding the requirements of 29 CFR 1910.147; for this reason, this policy and the corresponding lockout/tagout procedures will become an intricate part of our Safety Program.
The Public Works Departments and Building Maintenance employees are the only employees authorized to perform Lockout/Tagout within our City properties.

An **authorized** employee will completely lock or tag out equipment, machines, or powered tools when:

- Setting up
- Assembling or disassembling
- Servicing or performing maintenance
- The unexpected energizing or start-up of the machine/equipment or the untimely release of stored energy could cause injury

An **authorized** employee will lock or tag out all sources of energy to the equipment or machine, including, but not limited to:

- Electrical
- Hydraulic
- Pneumatic
- Chemical
- Mechanical
- Thermal
- Gravity
- Other

An **authorized** employee will dissipate any and all stored or residual energy affecting their task such as that found in capacitors, springs, flywheels, hydraulic and air systems, gravity, etc.

An **authorized** employee will strictly follow the specific de-energizing procedures.

In order to maintain a safe and hazard free environment for all authorized and affected employees, strict adherence to this lockout/tagout policy and procedures are required. All employees are required to notify their Direct Supervisor of any issues associated with authorized or affected employee participation or non-compliance with this policy. Currently, Building and Public Works Departments Supervisors maintain the lock and key portion of the program.

LOCKOUT/TAGOUT PROCEDURES

PURPOSE

This program is designed to safeguard all authorized and affected employees who service, maintain, replace parts, or operate machines/equipment. Failure to adhere to these policies/procedures will subject the responsible employee to the City of Shakopee's disciplinary policy which includes the possibility of dismissal.

APPLICATION

Whenever servicing or maintenance is performed on equipment or machines where unexpected energizing or start-up of the machine/equipment or the release of stored energy could cause injury, all authorized employees are required to follow the lockout/tagout procedures explained in this program to ensure a zero energy state exists.

TAGOUT DEVICES

- Shall be a tag distinguishable from other tags as "LOCKOUT EQUIPMENT"
- Shall be attachable by hand, self-locking, and non-releasable (a one-piece, all environment-tolerant nylon cable tie)
- Shall have the authorized employee's name clearly printed on the tag
- Shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate.

TAGOUT LIMITATIONS

- Tags are essentially warning devices affixed to energy isolating devices and do not provide the physical restraint on those devices that is provided by a lock.
- When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it and it is never to be bypassed, ignored, or otherwise defeated.
- Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area in order to be effective.
- Tags and their means of attachment must be made of plastic, which will withstand the environmental conditions encountered in the workplace.
- Tags may evoke a false sense of security and their meaning needs to be understood as part of the overall energy control program.
- Tags must be securely attached to energy isolating devices so they cannot be inadvertently or accidentally detached during use.

Note: Tagout must only be used when it is not practical, feasible, or possible for locks to be used in accordance with this section.

LOCKOUT DEVICES

- Authorized employees will have available key operated locks and a corresponding number of tags.
- When valves can be locked out, the employee is to use the proper valve lockout device or cable/chain system available.
- When electrical plugs can be locked out, the employee is to use the proper plug container unless the employee maintains complete control.

Note: Lockout devices and tags are to be available to any employee who must periodically perform maintenance, replace parts, or inspect any machine where injury could occur if someone inadvertently turned on the unit or to any other employee who needs to lock or tag out equipment to ensure his or her own safety.

These devices are available to all authorized employees.

KEY/LOCK CONTROL

- Duplicate keys are to be destroyed immediately when purchased or kept locked up with access limited to the Department Supervisor or Department Head.
- Only the employee who places the lock or tag is authorized to remove it. The only exception is when the authorized person is off the premises and cannot be reached and it has been determined it is safe to remove the lock/tag. Then, and only then, will the Safety Coordinator, with a witness present, remove the lock using the duplicate key or by cutting. Anytime a lock is removed because of lost keys or any other purpose, the lock can no longer be used in our program. Lockout devices will not be used for any purpose other than to lockout energy sources.
- In the case of personnel changes during an equipment lockout/tagout, there must be an orderly transfer of locks/tags between departing and oncoming employees.
- Lockout devices and/or tags are to indicate the identity of the employee using it.

NOTE: Although individual locks are issued, main Lockout Stations are also located in the maintenance shops and building maintenance areas.

TYPES OF ENERGY TO BE LOCKED/TAGGED OUT

<u>ELECTRICAL</u>

- All machines/equipment/devices
  - Remove plug from electric source, or
  - Move disconnect switch to "off" position, or
  - Move all control circuit breakers to "off" position, then
  - Remove keys from vehicle/equipment (when applicable)

Note: Plug containers are not required to be locked or tagged if employee can continuously control the plug from the beginning of the work process to the end.

<u>PNEUMATIC (AIR AND/OR GASES)</u>

- Ball Valve-Move handle 90º to the "off" position ("off" is perpendicular to direction of flow)
- Globe/Gate Valve--Screw handle clockwise to full "close" position

Note: Air will be stored under pressure between the shut off valve on the supply line and the machine (residual energy), and must be bled off to complete de-energizing. Both natural and methane gases may be present throughout our facilities. Extra caution needs to be taken when working on boilers as both gases are used as energy sources.

MECHANICAL
Secure device so no movement can be attained in any direction prior to servicing/maintenance.

HYDRAULIC
- Shut off hydraulic pump and lock/tag out its power source
- Use key blocks, wedges, etc. to secure moving parts that are operated hydraulically
- Dissipate stored energy (residual) by bleeding system

THERMAL
Shut down device creating thermal energy. Air flowing through and time are most likely needed to eliminate most thermal energies. Shade may also be needed with outdoor equipment.

CHEMICAL
Chemicals on, around, or within equipment/machinery must be isolated through draining, capping, plugging, or controlled release.

STEAM
Steam may be present or created by work done. Thermal energy must first be isolated. Steam must be controlled by controlled release, containment, or elimination through cooling.

GRAVITY
Gravity is always present. Gravity scenarios may be created by work done or in the process of preparing for a task. Remember that things that are “up” may come “down”.

RESIDUAL/STORED:
After eliminating its source, bleed off all stored energy in capacitors, flywheels, trapped compressed air, hydraulics etc. before attempting servicing or maintenance.
Note: Frequently, hydraulic pressure is used as a "brake" to hold the hydraulic driven portion of the machine in place. When hydraulic pressure is relieved (bled), gravity becomes the energy source and the hydraulic driven device falls uncontrollably. Consequently, it is important to perform the following (LOCKOUT/TAGOUT PROCEDURES) in proper sequence.

LOCKOUT/TAGOUT PROCEDURES

Procedures for de-energizing and re-energizing each machine must be followed exactly in the order they are written. All procedures will be reviewed/re-approved annually.

- Before working on equipment/machines, authorized employees and their Direct Supervisor or Department Head must evaluate the authorized employee's skill level (**see form at end of section**) to include:
  - Knowledge of specific equipment's mechanics
  - Knowledge of known energy sources within the specific equipment/machine
  - Knowledge of possible unknown energy sources created by work done within the specific equipment/machine
  - A review of specific Lockout procedures for that equipment/machine

The City-specific procedures are in a separate lockout manual located in areas of specific lockout applicable equipment. The Lockout Procedures Form will be used to develop additional specific procedures **(see form at end of section)**.

LOCKOUT PROCEDURE EXEMPTIONS

Below are the exceptions to Lockout Procedures according to the OSHA Standard.
The employer need not document the required procedure for a particular machine or equipment when **all** of the following elements exist:

- The machine or equipment has no potential for stored or residual energy or re-accumulation of stored energy after shut down which could endanger employees, and
- The machine or equipment has a single energy source which can be readily identified and isolated, and
- The isolation and locking out of that energy source will completely de-energize and deactivate the machine or equipment, and
- The machine or equipment is isolated from that energy source and locked out during servicing or maintenance, and
- A single lockout device will achieve a locker-out condition, and
- The lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance, and
- The servicing or maintenance does not create hazards for other employees, and
- The employer, in utilizing this exemption, has had no accidents involving the unexpected activation or re-energizing of the machine or equipment during servicing or maintenance.

General Procedures are as follows:

DE-ENERGIZING

- Notify affected employees that equipment is being de-energized.
- Shut down machine using normal stopping procedures.
- Remove all energy sources:
  - Electrical
  - Pneumatic
  - Mechanical
  - Hydraulic
  - Chemical
  - Thermal
  - Steam
  - Gravity
- Dissipate stored (residual) energy if present.
- Attach lock or tag where needed.
- Ensure equipment has been disconnected from all energy sources by:
  - Clearing all personnel
  - Attempting to start machine/double check isolation
  - Returning operating controls to neutral or "off" position

RE-ENERGIZING

- Check equipment and immediate area to ensure all tools etc. have been removed and equipment components, guards and shields are in place.
- Check work area to ensure that employees are clear and notified the energy control devices are being removed.
- Verify that controls are in the "off" position (if electrical, use voltmeter to ensure the circuit is not live).
- Remove lock or tag and re-energize the equipment.
- Notify affected employees the equipment is ready for use.

TESTING

- Notify affected employees that lockout devices will be temporarily removed for testing.
- Remove/clear away tools, replace guards.
- Remove Lockout devices.
- Re-energize and test.
- De-energize and reapply Lockout devices.

PERIODIC INSPECTIONS (see form at end of section)

- Periodic inspections will be performed annually by a qualified person to ensure the procedures and requirements of CFR 1910.147 are being followed. Corrections will be made if any deviations or inadequacies are identified.
- The inspection will consist of:
  - A review with each authorized employee about the procedure to de-energize and re-energize all machines/equipment the employee may service, maintain, or operate.
  - Certification of each employee's competence, in writing, showing the date certified, the employee's name, and the inspector's name.

Training

- All authorized employees will receive annual training that meets or exceeds the training required by CFR 1910.147.
- All affected employees will receive annual training that meets or exceeds the training required by CFR 1910.147.

Retraining

- All authorized and affected employees will receive retraining if there is:
  - A change in job assignment
  - A change in machines, equipment, or process that creates a new hazard
  - A change in the energy control procedures
  - A periodic inspection shows an inadequacy or deviation in the employee's knowledge or use of lockout/tagout procedures
- All training or re-training will be documented in writing and kept filed with the Direct Supervisor and Human Resources.

Outside Contractors

- All outside contractors must adhere to these Lockout/Tagout procedures in order to perform service, maintenance, installation etc. on any machines or equipment. Consistent failure to understand and abide by these procedures will prohibit them from performing any work in any of our facilities.
- The specific Department Supervisor or Department Head will review our policy and procedures with the outside contractors to ensure their procedures meet or exceed ours.
- Outside contractors will supply and use their own locks, hasps, tags & lockout devices. If for any reason they must remove their devices before the work is complete, our locks, tags, and hasps will replace theirs prior to the removal of their lockout devices.
  Note: If we have any concerns with contractor safety we must report this to our Direct Supervisor immediately. The Supervisor or Department Head should then report to the Safety Coordinator.

Group Lockout

- The Safety Coordinator must be notified and present to directly supervise.
- When more than one authorized employee is performing service, removal, replacement, or maintenance on a machine or equipment, all employees involved will lock or tag all sources of energy by placing their respective locks/tags on the lockout device(s) when used.
- As each employee finishes, they may remove their respective locks/tags. However, all de-energizing and re-energizing procedures must be strictly followed.

Energy Control Procedure for: _____

DATE: _____

Scope: The Lockout/Tagout Program scope covers employees performing servicing and/or maintenance on the previously described equipment. The equipment needs to be completely shut down to perform any service or maintenance.

Purpose: To provide specific guidance in accordance with 29 CFR 1910.147 to authorized personnel on how to de-energize, isolate, and re-energize the equipment to prevent the unexpected start-up or release of energy that could result in injury or death to an employee or authorized others.

Authorization: Maintenance and/or authorized employees trained in lockout and tagout procedures are to install lockout and tagout devices in accordance with established procedures. Lockout/tagout devices will only be removed by the installer. If installer is unavailable, refer to the Lockout/Tagout Policy located in your Safety Manual.

Violations/Discipline: Everyone is accountable. Violations of the Lockout/Tagout Program will be handled subject to the existing progressive disciplinary procedures outlined in the Personnel Policy.

SHUTDOWN PROCEDURES – (Must perform in exact order listed)

1. **Notify affected employees that equipment/machine is being de-energized.**
2. **Shut down machine normally by:** _____
3. **Remove/Isolate energy sources: (**Shut-Down/isolate in Order Listed**)** **Circle Required LOTO Devices**

_____	Electrical	Install (Lock/Tag—Chain—Block)
_____	Pneumatic	Install (Lock/Tag—Chain—Block)
_____	Mechanical	Install (Lock/Tag—Chain—Block)
_____	Hydraulic	Install (Lock/Tag—Chain—Block)
_____	Gravity	Install (Lock/Tag—Chain—Block)
_____	Thermal	Install (Lock/Tag—Chain—Block)
_____	Chemical	Install (Lock/Tag—Chain—Block)
_____	Steam	Install (Lock/Tag—Chain—Block)

4. _____**Dissipate stored energy for:** _____
5. **Ensure equipment has been disconnected from all energy sources by:**
   a) **Clear all personnel (ensure they remain clear until procedures are completed)**
   b) **Attempt to start machine/check for energy by:** _____
   c) **Insure operating controls are switched back to the neutral or "OFF" position**

START-UP PROCEDURES

1. **Check equipment and immediate area to ensure that tools etc. have been removed and equipment components, guards and shields are in place.**
2. **Check work area to ensure that employees are clear and notified that energy control devices are being removed.**
3. **Verify that controls are still in the "OFF" or neutral position.**
4. **Remove locks/blocks/chains and/or tags from energy sources in reverse order as listed above.**
5. **Notify affected employees that equipment is ready for use.**

Additional Comments: _____

Annual Review By	Date	Comments	Initials

Periodic Inspection (testing)

EMPLOYEE NAME_____**DATE** _____**TIME** _____

MACHINE/EQUIPMENT/WORK PERFORMED_____

SHUTDOWN PROCEDURES – (Must be performed in exact order on approved procedure)

Did Employee:

6. Notify affected employees that equipment/machine is being de-energized. **(Yes/No)**
7. Shut down machine normally by: (How)_____ **Correct? (Yes/No)**
8. Remove/Isolate all energy sources: (Shut-Down/isolate must be done in order)

(ORDER) (HOW DONE) (DEVICE)

_____ Electrical_____install (_____) **Correct? (Yes/No)**

_____ Pneumatic_____install (_____) **Correct? (Yes/No)**

_____ Mechanical_____Install (_____) **Correct? (Yes/No)**

_____ Hydraulic_____Install (_____) **Correct? (Yes/No)**

_____ Gravity_____Install (_____) **Correct? (Yes/No)**

_____ Thermal_____Install (_____) **Correct? (Yes/No)**

_____ Chemical_____Install (_____) **Correct? (Yes/No)**

_____ Steam_____Install (_____) **Correct? (Yes/No)**

9. _____ Dissipate stored energy for:_____ **Correct? (Yes/No)**
10. Ensure equipment has been disconnected from all energy sources by:

d) Clear all personnel-insure they remain clear until procedure are completed_____ **Correct? (Yes/No)**

e) Attempt to start machine/check for energy by:_____ **Correct? (Yes/No)**

f) Insure operating controls are switched back to the neutral or "OFF" position_____ **Correct? (Yes/No)**

START-UP PROCEDURES

1. Check equipment and immediate area to ensure tools etc. have been removed and equipment components, guards and shields are in place. **Correct? (Yes/No)**

2. Check work area to ensure all employees are clear and notified that energy control devices are being removed. **Correct? (Yes/No)**

3. Verify controls are still in the "OFF" or neutral position. **Correct? (Yes/No)**

4. Remove locks/blocks/chains and/or tags from energy sources in reverse order as listed above. **Correct? (Yes/No)**

5. Notify affected employees that equipment is ready for use. **Correct? (Yes/No)**

☐ The employee named above was observed performing lockout/tagout and re-energizing procedures listed above. The employee demonstrated understanding of and proficiency in our published procedures.

☐ The employee named above was observed performing lockout/tagout and re-energizing procedures on the machine listed above. The employee **DID NOT** demonstrate proficiency or understanding of our published procedures in the above areas not checked. The employee will be re-trained and re-tested until proficiency is demonstrated.

EMPLOYEE SIGNATURE_____

OBSERVER/TESTER SIGNATURE_____

Section 6

Ergonomics

The City of Shakopee
ERGONOMICS PROGRAM

The City of Shakopee has developed the following Ergonomics program in order to provide our employees with a safer workplace, as well as attempt to comply with OSHA's GENERAL DUTY CLAUSE. This program is intended to allow employees to recognize and identify both the risk factors and the warning signs of an impending musculoskeletal disorder (MSD) and to set forth policies for responding to such incidents.

The Ergonomics program will address the following:

- Definitions
- Overview
- Job Hazard Analysis
- Risk Factors
- Signs and Symptoms of MSDs
- Procedures for Reporting MSDs

DEFINITIONS

Carpal Tunnel Syndrome: Compression of the median nerve of the hand and wrist in the carpal tunnel, usually resulting in numbness in the fingers, pain, and loss of grip strength.
Covered MSD: A MSD which occurs in direct correlation with a worker's job.
Epicondylitis: An irritation of the tendons attached to the epicondyle in the elbow (more commonly known as "tennis elbow").
Ergonomics: An applied science that matches the demands of tasks to the capabilities and limitations of the individuals who perform the tasks.
Musculoskeletal Disorder (MSD): An injury or disorder of the muscles, tendons, ligaments, joints, cartilage, or spinal discs.
Posture: The relative arrangement of body parts, specifically the orientation of the limbs, trunk, and head during a work task.
Static Work: A work configuration that requires the employee to hold a stressful posture for a period of time.

OVERVIEW

Ergonomics is the study of fitting the job to the worker and not attempting to fit the worker to the job. The word ergonomics is derived from the Greek *ergoni* (work) and *nomo*s (law), or the rules of work. Ergonomics provide a system for adapting tools and tasks in the workplace to fit the worker. When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, MSDs occur.

The reason for studying ergonomics and attempting to improve the task/worker relationship is injury reduction. Each year approximately 600,000 workers suffer a lost-time injury related to overexertion of repetitive motion. Additionally, every year about 1.8 million workers experience one of more than one hundred recognized work-related MSDs. Work-related musculoskeletal disorders such as back injuries and carpal tunnel syndrome are the most common, most expensive, and most preventable type of injuries in the workplace today.

JOB HAZARD ANALYSIS (JHA)

All job hazard analysis (JHA) should also include provisions for observing the possibility of ergonomic injury. The following tools or methods are to be used to conduct a job hazard analysis:

- A job hazard analysis conducted by a professional trained in ergonomics.
- Any other reasonable method that is appropriate to the job and relevant to the risk factors being addressed.

It is for these reasons that an ergonomics program is being created for this workplace. When designing ergonomics programs, there are several factors that must be considered:

- People come in all shapes and sizes, yet the workplace is often set up in a "one size fits all" scenario. This creates a situation in which many workers are working in less than ideal situations.
- People have limitations. The body cannot tolerate working in extreme positions for long periods, whether reaching or bending.
- The human body has a fixed design and therefore, this fact must be accounted for in the design of equipment and tasks. When there is a mismatch between the design of humans and the design of equipment or tasks, the equipment and tasks must be changed.
- People have predictable reactions by relating certain responses to certain signals. When we flip a light switch up, we expect the lights to come on. Recognizing this element of human behavior can result in better design of equipment and tasks.

When performing workplace analysis, there are ten simple principles that should be considered when dealing with task design:

- Keep everything within easy reach. Long reaches create undue stress on the structures of the body. Eliminating long reaches can eliminate this stress.
- Work at proper heights. When the height of the surface on which the employee is working is not correct, awkward or contorted positions result. As a general rule, work should be done at elbow height unless it is particularly heavy work, which should be done below elbow height, or particularly light work, which should be done above elbow height.
- Work in good posture. Working in awkward and contorted postures results in increased physical stress on the body and decreased strength. All work should be done with the body in a neutral position with the back in its natural "S" curve, elbows held naturally at the sides of the body, and the wrists in a neutral position.
- Reduce excessive forces. Needless and excessive forces load the muscles, creating fatigue. Efforts should be made to minimize the exertion required to perform a particular task.
- Minimize fatigue. This is most critical when dealing with static load, or continuous exertion of the same muscle group over a period of time.
- Reduce excessive repetition. Repeated motion results in undue wear and tear on the affected body part.
- Provide adequate clearance and access. Obstructions between a person and the items needed to accomplish a task must be eliminated.
- Minimize contact stress. Besides being uncomfortable, contact stress can inhibit nerve function and blood flow.
- Provide mobility and change of posture. The opportunity to change positions, move around, or alternate between sitting and standing is the hallmark of good ergonomic design.
- Maintain a comfortable environment. It is important to provide adequate lighting, avoid temperature extremes, and isolate or eliminate vibration.

RISK FACTORS

The following are risk factors that can increase the risk of developing a MSD. The more factors involved and the greater exposure to each results in a much greater chance of developing an MSD.

COMMON RISK FACTORS

Repetition: The same motion over and over again puts stress on muscles and tendons

- How often the movement is repeated
- Speed of the movement
- Number of muscles involved
- Force required

Forceful Exertion:

- The amount of physical effort required to perform a task
- Effort needed to control equipment or tools
- Type of grip
- Weight of object
- Body posture
- Type and duration of task

Awkward postures:

- Reaching
- Twisting
- Bending
- Kneeling
- Squatting
- Working overhead
- Holding fixed positions

Contact stress:

- Pressing your body against a hard or sharp edge
- Puts pressure on nerves, tendons, and blood vessels
- Allowing your wrist to rest on the keyboard when typing
- Holding tools with hard hands

OTHER FACTORS THAT CONTRIBUTE TO MSDs

Vibration: Exposure to vibrating tools or equipment, either a hand-held tool or whole body vibration.
Temperature extremes: Exposure to excessive heat or cold.
Physical condition: Poor personal fitness can be a contributing factor to MSDs.
Off-the-job activities: Activities people do in their free time may contribute to MSDs.
End range position: Moving a joint in the body as far as it will go or close to its maximum.
These risk factors can be identified through reviewing the employee's job description, Job Hazard Analysis (JHA), or simple observation of the employee at work.

SIGNS AND SYMPTOMS OF MSD

Any MSD should be diagnosed by a health professional, but early recognition of symptoms and prompt treatment will minimize the severity of the injury. Because the symptoms are not visible to others, it is the employee's responsibility to report the existence of symptoms. Listed below are common symptoms of MSD.
Localized pain focused on the joints, specifically the fingers, wrists, elbows, shoulders, neck, and lower back are the most common. However, any joint can be exposed to a MSD.

Common Signs of an MSD

- Stiffness in the above mentioned joints
- Restricted range of motion
- Swelling of joints
- Numbness and/or tingling
- Less strength for gripping
- Loss of muscle function
- Inability to do everyday tasks
- Painful joints such as wrists, shoulders, forearms and knees
- Pain, tingling, or numbness in hands or legs
- Shooting pain in arms or legs
- Swelling, inflammation, or a burning sensation in extremities
- Fingers or toes turning white
- Back or neck pain and stiffness

The signs and symptoms listed above are the most common, but there may be others. If an employee suspects they may be suffering symptoms of an MSD, it is important it be reported immediately. Early detection and treatment will surely minimize the effects of the injury as well as alert Management to the need to analyze the task the employee is doing and attempt to prevent further injury.

PROCEDURES FOR REPORTING MSD

Because early detection is critical to minimizing the effects of an MSD, there must be procedures in place to allow and encourage reporting of symptoms of suspected MSD. Upon recognition of symptoms of an MSD, the employee should report this condition immediately to the assigned personnel. The importance of early detection and treatment cannot be overstated. Employees should never be discouraged from reporting symptoms.

General Reporting Procedure

- Identify MSD sign or symptom
- Report sign or symptom to Direct Supervisor or Department Head
- Report sign or symptom to designated personnel
- Contribute work-practice controls for job hazard evaluation

WORKSTATION ASSESMENT CHECKLIST

(ERGONOMICS)

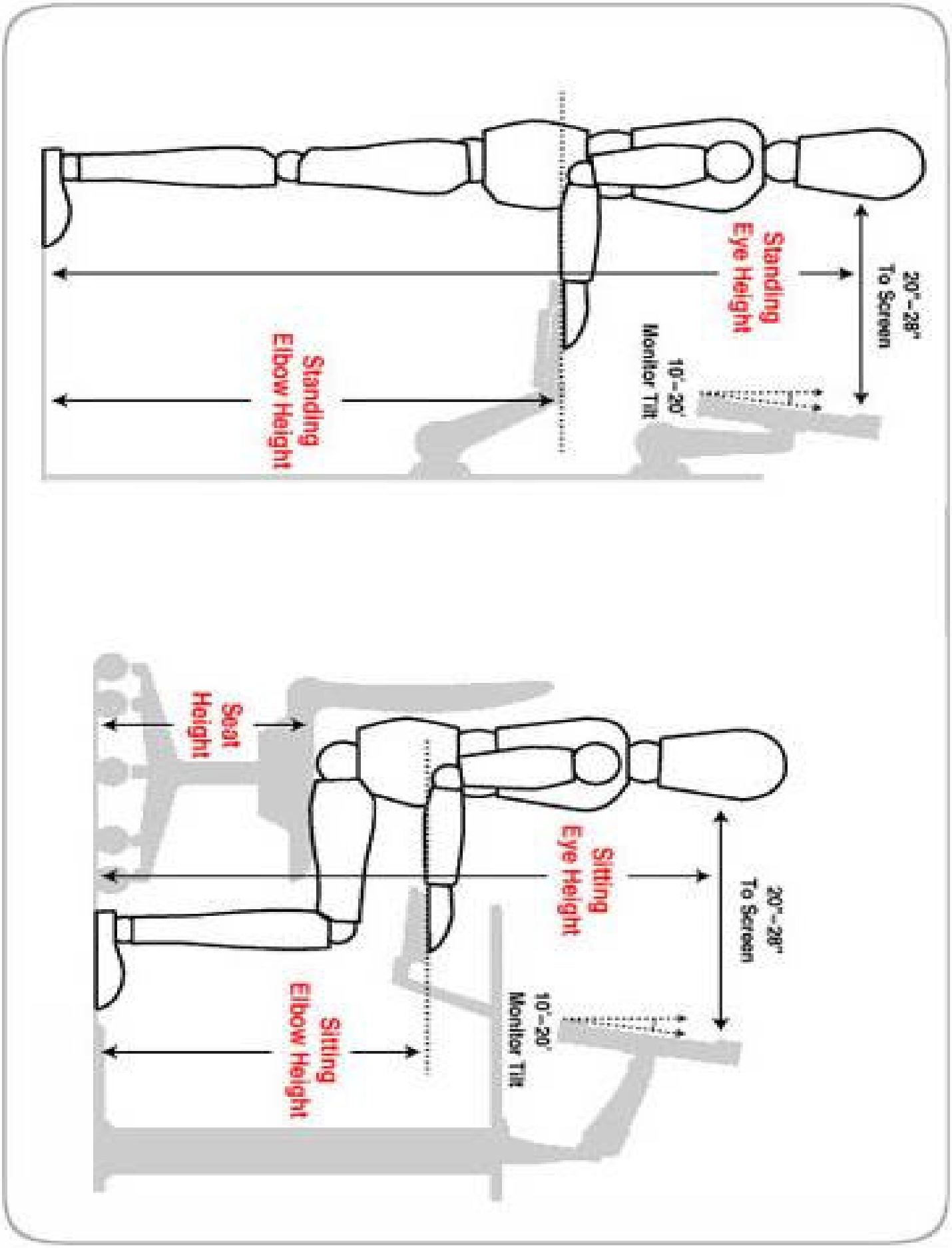
Evaluator: _____ Date: _____

Department or organizational unit being evaluated: _____

Step	Assessment Checklist	Yes	No
1.	Is the elbow joint bent at approximately a 90 angle while the employee is using the keyboard (the angle can range from 70 to 110) If no, adjust the chair height and/or keyboard height. If they cannot be adjusted, try a different chair and/or desk. Most organizations have a storage area that is a good source of old furniture. Consider buying a different chair or desk if there is no other way to achieve the correct elbow angle.	☐	☐
2.	Is the hip joint bent at approximately a 90 angle (the angle can range from 90 to 110)? If no, adjust the chair height or try a different chair.	☐	☐
3.	Are the ears, shoulders, and hips lined up vertically (the head can be tipped slightly forward at a comfortable angle of 5 to 10)? If no, adjust the chair height, the angle of the backrest, the viewing distance to the VDT, or the keyboard height.	☐	☐
4.	Are the wrists straight? If no, adjust the chair height or the keyboard height. Try a different chair and/or desk if the workstation cannot be properly adjusted. Also, consider using a wrist rest.	☐	☐
5.	Is a mouse used at the workstation? If yes, perform steps 5a, 5b, 5c.	☐	☐
5a.	Is the elbow bent at a 90 angle while the employees is using the mouse (the angle can range from 70 to 110)? If no, move the mouse closer to the person. An arm support can also be used.	☐	☐
5b.	Is the upper arm close to the body? If no, move the mouse closer to the person.	☐	☐

WORKSTATION ASSESMENT cont.

Step	Assessment Checklist	Yes	No
5c.	Is the wrist deviated? If yes, adjust the height of the mouse and/or use a wrist rest.	☐	☐
6.	Are the knees bent at a 90 angle (the angle can range from 70 to 110)? If no, adjust the chair height or to try a different chair.	☐	☐
7.	Are the feet supported? If no, give the employee footrest because at the point the workstation has been adjusted for the employee's elbows, hips, wrists, and knees.	☐	☐
8.	Is the VDT at the proper viewing distance (approximately the employee's arm length)? If no, adjust the distance of the monitor from the employee's eyes, moving the monitor forward or back until it is positioned correctly. A monitor arm can help you achieve the correct position.	☐	☐
9.	Is there adequate thigh and leg clearance? If no, try a desk with a thinner top to provide more leg clearance. Remove items stored underneath the desk.	☐	☐
10.	Is the part of the screen the employee uses most within the normal cone of vision, which + 5 (above the horizontal axis) to –30 (below the horizontal axis)? If no, adjust the height of the VDT. This can be done by removing the monitor base if the monitor is too high or adding a monitor base if the monitor is too low. A monitor arm can also be used to raise or lower the VDT.	☐	☐
11.	Are any sharp edges pressing into the employee? If yes, pad the items that are causing problems with light foam rubber or remove them.	☐	☐
12.	Return to step 1 and repeat steps 1-11 to ensure that the body alignment is still correct in every aspect.	☐	☐


Standing
Eye Height
20"-28"
To Screen
Standing
Elbow Height
10°-20°
Monitor Tilt
Seat
Height
Sitting
Eye Height
20"-28"
To Screen
Sitting
Elbow Height
10°-20°
Monitor Tilt

Section 7

Proper Lifting

The City of Shakopee
PROPER LIFTING

In order to prevent back injuries, the City of Shakopee has committed the time and resources in training and enforcement by implementing the following policy, which includes:

Introduction

- Planning the Lift/Move
- Stretching
- Proper Lifting
  - Lifting
  - Carrying
  - Lowering
- Summary

Introduction

Not all back injuries are a result of sudden trauma - most are of a cumulative type, where a repeated minor injury has flared up, or continued use of a heavy tool in the same position has caused pain, or a great deal of time is spent in the same position.

Care/Stretching

Your back is the foundation and the structure which the rest of your body relies for balance and support. Used improperly, your back can suffer injuries that can literally change the way you live. That's why care and maintenance of your back is every bit as important as the care and maintenance of your vehicle, your home, or your tools. However, this most important asset of our physical being is commonly overlooked or neglected.

Common causes of back injuries:

- Heavy lifting
- Twisting and lifting
- Bending and overexerting / awkward positions
- Lifting objects with odd shapes
- Reaching and lifting
- Sitting or standing too long in one position
- Slipping on water or ice
- Sleep in a poor position or on a poor mattress (too soft)

Things which increase the risk of back injury:

- Poor physical condition
- Poor posture
- Extra weight (overweight)
- Stress (tense muscles)
- Overdoing it (afraid to say "too heavy for me")

Planning The Lift

Proper lifting technique is critical to back safety, but perhaps more important is proper planning.

Look at what you're lifting. The load may have sharp edges, protruding nails, slivers, splinters, oil, grease, or moisture to make it slippery. You should know about it before you hold it in your hands. You may need to wear gloves.

Take a long hard look at a load before you lift it. If it's too heavy (over 40 lbs.) or bulky, get someone to help you. If you get help before you try to lift you will not need medical help afterward.

- Do you need to lift the item manually or can it be done with available mechanical equipment (a dolly or a forklift)?
- Check the footing to be sure that floor is clear.
- Long objects, regardless of weight, should be carried by two or more persons when possible, walking in step. If you handle it alone, keep the front end as high as possible. Long objects can easily sway up and down or sideways.
- Where are you moving the item from?

- Where does the item have to go?
- Is a spot cleared for the item?
- What route do you have to follow?
- Can I walk with the load and see clearly where I'm going?
- Are there any stumbling blocks in my path? Make sure you can see where you are walking.
- Know where you are going to put down the load.
- Avoid walking on slippery and uneven surfaces while carrying something.
- Look around before you lift and look around as you carry.
- Test the load.
- Push the object lightly with your hands or feet to see how easily it moves. This tells you about how heavy it is (a small size does not always mean a light load-maximum of 40 lbs.).
- Make sure the weight is balanced and packed so it won't move around. Loose pieces inside a box can cause accidents if the box becomes unbalanced.
- Always use a ladder when you're lifting something over your head. You can be injured if you arch your back when lifting a load over your head.
- Make sure you have enough room to lift safely. Clear a space around the object before lifting it.

Stretching

You will work better if you start each day with slow stretches. These warm-ups let you ease comfortably into your workday and help you avoid injuries.

Leg and back warm-up

- Prop one foot on a chair or a stool for support.
- Take a deep breath.
- Ease forward slowly -- keep your back slightly curved.
- Blow slowly outward as you ease forward to a seven count.
- Repeat seven times.
- Switch and do the same with the other foot.

Backbend

- Stand with your feet about 12 inches apart.
- Support the small of your back with your hands.
- Hold your stomach in firmly and take a deep breath.
- Arch backward -- bend your head and neck as you go, blowing air slowly out for seven counts.
- Repeat seven times.

PROPER LIFTING

Lifting, carrying, and lowering are power jobs -- when you lift and carry the wrong way, you can damage your back. Each worker should know the proper method of lifting heavy objects.

Lifting the load

- To lift a load shoulder high or above your head: first, lift it waist high, rest it on a support, and change your grip. Then, bend your knees to get added power for the big push.
- Drums or barrels should be rolled with your hands against the sides. Grasping the ends with your hands can mean crushed fingers and using your feet can mean crushed toes.
- Use slow and smooth movements. Hurried, jerky movements can strain the muscles in your back.
- Keep your body facing the object while you lift. Twisting while lifting can hurt your back.
- Keep the load close to your body. Having to reach out to lift and carry an object may hurt your back.
- "Lifting with your legs" should only be done when you can straddle the load. To lift with your legs, bend your knees to pick up the load, not your back. Keep your back straight.
- Be sure you have a tight grip on the object before you lift it.
- Plant your feet firmly well apart and squat down.
- Watch for sharp edges. Get a good grip before lifting.
- Keep your back straight. Lift slowly (don't jerk) by pushing up with your legs.
- Don't twist your body while handling the load - **s**hift your feet instead.
- Wear gloves when handling rough equipment or material.
- Be sure of a good grip and good footing.
- Keep the load close to the body.
- See that your fingers and toes are in the clear.
- Bend your knees and use your leg muscles.
- Don't twist your body while lifting.
- Stand close to the load.
- Bring the load close to your body.
- Lift head and shoulders first, and with your back straight, use the strength of your legs to slowly and smoothly push up.
- Make sure that you can see over the load.
- Footing is as important in lifting as it is in the batter's box. Your feet should be close to the object and far enough apart for good balance, or about shoulder-width apart. One foot slightly ahead of the other is best for many.
- Bend your knees, go down to a crouch, but not a full squat. It takes double the effort to straighten up a full squat as it does from a crouch. Keep back as straight as possible and do not arch it.
- Get a good, firm grip; no lifting until your hold is strong and slip-proof.
- Lift object by straightening your legs, keeping load close to you as you come up.

Carrying the load

- Don't try to change the position of a load while you're carrying it. Set it down or rest it against some object, and then readjust your grip.
- Try to carry the load in the space between your shoulder and your waist. This puts less strain on your back muscles.
- DON'T TWIST YOUR BODY. Torque action can be especially dangerous. Move your feet first to change direction.
- When you carry a load, watch where you're going. Don't skin your knuckles at doorways and tight places.
- If you have to change direction, don't twist your body. Lift object to carrying position. Then, turn your whole body by changing position of your feet

Lowering/Setting down the load

- Set it down the way you picked it up - by bending your knees, with your back straight, but don't set it on your hands. Put down one corner of the load first and then slide your hands away.
- Bend your knees to lower the load
- Keep your fingers from under the load
- Lower slowly and smoothly
- In setting the load down, go down with back straight knees bent, to a crouch.

Summary

Most back injuries can be attributed to one of these five causes:

- Stressful Living
- Loss of Flexibility
- Poor Conditioning
- Body Mechanics/Work Habits
- Posture

Ways to prevent back injuries:

- Slow down
- Stretch first
- Rest your back (take frequent breaks)
- Sleep on firm mattress
- Avoid lifting whenever possible
- Push, don't pull
- Avoid twisting at the waist
- Get help lifting awkward and/or heavy (over 40 lbs.) objects
- Use carts / hand trucks
- Work in safe zone between shoulders and waist
- Lift correctly

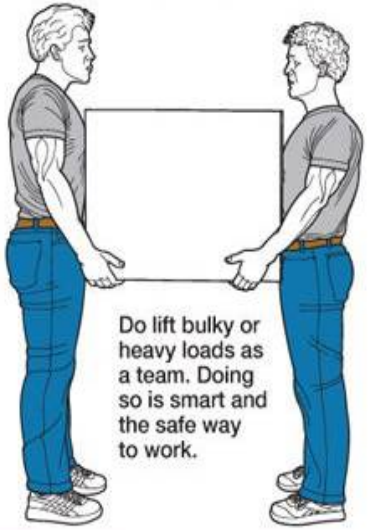
BEWARE WHEN YOU'VE BEEN AWAY
Even if you're a rugged, seasoned lifter, remember that muscles quickly get out of shape during vacation or a spell of illness. Be doubly careful those first few days back on the job; ease into it gradually.

REMEMBER
Whenever conveyors, hand and lift trucks, or other mechanical-handling equipment can do the job, let it take the strain and spare your spine. Don't rely on a back belt to protect you; it has yet to be definitively proven that back belts can protect you from back injury.

Care of your back is a lifelong endeavor that requires commitment, intelligence, and common sense. Remember that back care isn't just about lifting properly; it is also about proper diet, exercise, reducing stress, and eliminating hazards whenever possible. Just as the health of your back can affect your lifestyle, your lifestyle and work habits can affect the health of your back.

LIFTING DO'S & DON'TS

DO LIFT AS A TEAM



Do lift bulky or heavy loads as a team. Doing so is smart and the safe way to work.

DO TURN WITH LEGS

Do move your legs and feet when turning or lowering the load. Avoid twisting at your waist.

DO USE YOUR LEGS

Do lift the load using your powerful leg and buttocks muscles. Your feet should be wide apart, head and back upright. Keep abdominal muscles tight and the load in close.

DO USE EQUIPMENT

Do use equipment like hand trucks, dolly's, or forklifts to do the heavy lifting. It's much less work and less risk of injury.

DON'T LIFT BULKY LOADS ALONE

Don't lift bulky or heavy loads alone. Doing so puts great stress on your low back muscles and spine.

DON'T TWIST WHEN LIFTING

Don't twist when lifting, lowering, or carrying any load as this increases your risk of back injury.

DON'T USE YOUR BACK

Don't lift the load with your rear end high and your lead low. Use your leg muscles, not your weaker low back muscles.

DON'T LIFT HEAVY LOADS

Don't lift heavy loads when you can use equipment. It is less work and less stress on your low back.

Section 8

OSHA Recordkeeping

The City of Shakopee
OSHA RECORDKEEPING

In order to assure compliance with 29 CFR 1904, regarding the recordkeeping requirements for this organization, the City of Shakopee has created the following program. This program will outline the methods, principles, and techniques for properly maintaining all records and forms required under the above OSHA standard.

The content of this program is as follows:

- Overview
- Mechanics of OSHA Recordkeeping
- Location, Retention, and Maintenance of Records
- Determining Employment
- Determining Recordability
- First-Aid Treatment
- Filling Out the OSHA 300 Log
- Access to OSHA Records
- Posting Requirements
- Correcting an Incorrect Form
- Frequently Asked Questions
- First Aid Treatment

OVERVIEW

Nearly all employers in the United States are covered under the Occupational Safety and Health Act of 1970, and therefore also subject to OSHA recordkeeping and reporting requirements. There are three documents used in OSHA recordkeeping: the Log of Occupational Injuries and Illnesses (OSHA No. 300), the Supplementary Record of Occupational Injuries and Illnesses (OSHA No. 301- or its equivalent), and the Summary of Work-Related Injuries and Illnesses (OSHA Form 300A). These documents provide information on the occurrence, extent, and outcome of all workplace illnesses and injuries for the year. Proper completion, retention, and posting of these documents are required by law and failure to do so, or to do so improperly, may result in citations and significant fines. Recordkeeping violations are the number one violation and source of fines forOSHA.

MECHANICS OF OSHA RECORDKEEPING

Log and Summary of Occupational Injuries and Illnesses, OSHA Form #300

- Commonly known as the OSHA 300 Log.
- Used to record and classify occupational deaths, injuries, and illnesses, and to document specific information on each case.
- OSHA 300 Log consists of three parts:
  - Descriptions Section: Identifies the employee and describes the injury or illness
  - Extent of Injuries Section: Identifies the extent of the injuries to the employee
  - Extent and Type of Illness Section: Identifies the type and extent of illness to the employee
- The Log indicates:
  - Whether the case resulted in a fatality
  - When the injury or illness occurred
  - To whom it occurred
  - The job title of the affected person
  - The department in which the employee normally works
  - Whether the case was an injury or illness
  - How much time was lost as a result of the injury or illness

Supplementary Record of Occupational Injuries and Illnesses, OSHA **Form #301** (or its equivalent)

- Fulfills the requirement for a detailed description of every illness and injury
- This record describes the following:
  - Employee information
  - Physician or other health care professional information
  - How the accident occurred
  - The objects or substances involved
  - Nature of the injury or illness
  - The parts of the body affected
- Information must be recorded within seven calendar days after you receive information that recordable work-related injury or illness has occurred.
- Other forms may be used in lieu of Form #301
  - State's "first report of injury"
  - Workers' compensation forms
  - Insurance forms

Summary of Work-Related Injuries and Illnesses, OSHA Form 300A

- Summary Form includes the following information:
  - Number of Cases during work year
  - Number of Lost Days
  - Injury & Illness Types
  - Establishment Information
  - Employment Information
  - Organizational Executive Sign-Off
- All establishments must complete the OSHA 300A Summary Form, even if no work-related injuries occur during the year.
- Employees, former employees, and their representatives have the right to review the OSHA Form 300A in its entirety.

LOCATION, MAINTENANCE, AND RETENTION OF RECORDS

Location

- Establishments are defined as a single physical location where business is conducted, or where services or industrial operations are performed.
- Injury or illness records must be kept at every physical location where operations are performed.
- Log may be maintained at an alternate location, or by means of data processing equipment, or both. Requirements under this exception are as such:
  - Information must be at the alternate location within six days.
  - A copy of the log must be at the establishment within 45 calendar days.
  - Worksite must have the address and telephone number of the place where records are maintained.
  - Employees must be informed of the alternate location of records.
- Records must be maintained at each establishment for five years plus the current year.
- New owners of the business must also preserve the records for the remainder of the five-year period.
- New owner is not responsible for updating the records of the previous employer.

DETERMINING WHO IS AN EMPLOYEE

- Is the injured person your employee? If “yes” can be answered to at least one of the following, the person is your employee:
  - Do you pay the worker’s wages?
  - Do you withhold the worker’s Social Security taxes?
  - Did you hire the worker?
  - Do you have the authority to terminate the worker?
  - Do you supervise the worker’s day-to-day activities?
- The employer is only responsible for recording its employees’ injuries and illnesses.
- Contractors and others working on-site are each responsible for recording their own employees’ injuries and illnesses.

DETERMINING RECORDABILITY

In the event of any occupational injury or illness, the employer needs to determine if the injury or illness is recordable. It must always be remembered that according to OSHA, "recording an injury or illness under the OSHA system does not necessarily imply that Management was at fault, that worker was at fault, that a violation of an OSHA standard has occurred or that injury or illness is compensable under workers' compensation or other systems." The purpose of this system is not to document blame or responsibility, but merely to determine and record what happened.

The first step is to determine if a case has occurred. Has there been an occupation-related death, injury, or illness?
Secondly, determine whether the incident is a new case or a recurrence of an existing case.
The third step is to establish the work relationship.

OSHA is only interested in injuries and illnesses on the job. The employer must determine if the injured person is working at the time of the injury or illness. There are two general scenarios considered: "on premise" or "off premise".

- On premise recordability:
  - Work relationship is presumed
  - Do not record when employee is on premises as a member of the general public
  - Do not record when symptoms surface on the employer's premise but are not work related
- Off premise recordability:
  - Work relationship is not presumed
  - Work relationship is established if employee is engaged in work-related activities regardless of physical location
- There are special situations that apply in determining work relationship.
  - Injuries in restrooms, hallways, and cafeterias are normally considered on the premises
  - Injuries in parking lots are generally considered part of the employer's premises
  - Injuries on company athletic facilities are not work related unless employees are required to participate
  - Traveling employees performing work activities (representing the organization) are work related
  - Traveling employees that deviate from his or her work activities are not work related
  - Traveling employees involved in normal living activities are not work related

The forth step is to determine if an injury or illness has occurred.

- Injury—Instantaneous event that has been determined to be work related.
- Illness—Results from anything other than an instantaneous event.
  - Classify an event as either an injury or illness, not both.

The fifth step is to determine recordability of work-related injuries

- Record all work-related deaths and illnesses.
- Record specific cases of non-fatal injuries when:
  - Medical treatment beyond first-aid is given
    - Injuries do not have to be treated by medical personnel
    - Injuries that impair bodily function
    - Injuries that result in damage to the physical structure of a non-superficial nature
    - Injuries that involve complications requiring follow-up medical treatment
  - Loss of consciousness
    - Always recordable
  - Restriction of work or motion
    - Physically or mentally unable to perform normal work activities
    - All or any part of the work shift
    - Applies to either a lost or non-lost work time injury
  - Employee must be transferred to another job

The sixth step is to record occupational illnesses.

An illness is defined as any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases, which may be caused by inhalation, absorption, ingestion, or direct contact.

- Determine if an illness had been diagnosed before recording.
- Any person trained and experienced can make the determination.
- Record each illness in one of the five categories on the log.
- Never accept suspected illness as an occupational illness without investigation.
- Observe behavior and emotional status.
- Send employee to competent medical personnel for specific examination for health effects.
- Compare the date of illness onset with occupational history.
- Evaluate previous biological or medical monitoring and physical examinations.
- Evaluate laboratory tests.
- Review literature such as MSDS and other reference documents.
- Determine if the illness is occupationally related.
- Was the illness the result of or aggravated by conditions of the work environment?
- Are the suspected agents in or have they been in the workplace?
- Was the employee exposed to these agents?
- Was duration of exposure sufficient to cause an illness?
- Was the illness attributable solely to a non-occupational exposure?

Exceptions to presumption of work relationship include:

- Member of the general public
- Symptoms arising on premises totally due to outside factors
- Voluntary participation in wellness program
- Eating, drinking, and preparing one's own food
- Personal tasks outside working hours
- Personal grooming, self-medication, self-infliction
- Motor vehicle accident in parking lot/ access road during commute
- Cold or flu
- Mental illness, unless employee voluntarily presents a medical opinion stating that employee has a mental illness that is work-related

FIRST AID TREATMENT

First aid treatment is defined as any one-time treatment and any follow-up visit for the purpose of observation of: minor scratches, cuts, burns, splinters, or any other injury which do not ordinarily require medical care. Such one-time treatment, as well as follow-up visit for the purpose of observation, is considered first aid even if it is provided by a physician or registered professional personnel.

- First Aid (Not Recordable)
  - One-time treatment and subsequent observation, and
  - Treatment of only minor injuries, not emergency treatment of serious injuries
- Recordability—Three categories of recordable cases are:
  - Fatalities
  - Injuries and illnesses with lost workdays
  - Injuries and illnesses without lost workdays
- Record all lost workday cases
  - Injured or sick days away from work
  - Inability to work because of injury or illness
  - Employee-restricted work activity
  - Assigned to another job
  - Work less than full time in regular job
  - Cannot fulfill normal job functions
- Count calendar days, starting the day after the incident for the number of lost work days.
  - Day of injury does not count, count first full lost day
  - Vacation and sick days that were not preplanned count as lost workdays

The safest way to determine the legitimacy of an employee's injury or illness is to conduct thorough investigations, have a doctor evaluate any injury or illness, and talk with the employee, the employee's Direct Supervisors and Department Head and any witnesses that may be involved.

COMPLETING THE OSHA 300 LOG

Descriptive Section: Columns A-F

Column A

- Enter a number that is unique to this case
- Consecutive numbering is best

Column B

- Enter full name of injured/ill employee, with middle initial.

The following types of injuries or illnesses are considered to be privacy concern cases and do not require the employee's name on the OSHA 300 Log:

- An injury or illness to an intimate body part or to the reproductive system
- An injury or illness resulting from a sexual assault
- A mental illness
- A case of HIV infection, hepatitis, or tuberculosis
- A needle stick injury or cut from a sharp object that is contaminated with blood or other potentially infectious material
- Other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log

You must not enter the employee's name on the OSHA 300 Log for these cases. Instead, enter "privacy case" in the space normally used for the employee's name. You must keep a separate, confidential list of the case numbers and employee names for the establishment's privacy concern cases so that you can update the cases and provide information to the government if asked to do so. If you have a reasonable basis to believe that information describing the privacy concern case may be personally identifiable even though the employee's name has been omitted, you may use discretion in describing the injury or illness on the OSHA 300 form. You must enter enough information to identify the cause of the incident and the general severity of the injury or illness, but you do not need to include details of an intimate or private nature.

Column C
- Enter regular job title, even if he or she was doing another job at the time of the injury or illness

Column D
- Enter date of injury or onset of illness
- Cases do not necessarily fall consecutively

Column E
- Enter where the event occurred

Column F
- Briefly describe the nature of the injury or illness and the body part that was affected

Classifying the Case Section: Columns G-M

Column G
- Enter a check if injury results in a fatality, otherwise enter nothing
- Correct the column if death occurs within five years due to the injury

Column H
- Check the column if the case involves days away from work and/or days of restricted activity
- This column will determine seriousness

Column I
- Check if the injury involves job transfer or restriction

Column J
- Enter other recordable cases

Column K
- Enter the number of days the injured or ill worker was away from work

Column L
- Enter the number of calendar days the injured or ill worker was;
  - On job transfer
  - Performing restricted work

Column M (1-6)
- Evaluate illnesses individually
- Choose the classification of the injury or illness. Check the Injury Column or choose one type of illness.

ACCESS TO OSHA RECORDS

- Maintain records for five years, plus the current year
- Make available to federal and state officials
- Allow employees, former employees, and their representatives to view the 300 logs. Also make logs available for inspection and copying by the aforementioned parties
- Employees can only view the records for their own facility
- Provide access to the OSHA 300 Log in a reasonable manner and at a reasonable time
- The OSHA 300 Log is not confidential

POSTING REQUIREMENTS

- Post copies of the OSHA 300A Summary Form with a certifying signature at each establishment from February 1st to April 30th of the year following the year covered by the form
- Post logs even if no injuries or illnesses were experienced
- Post the OSHA 300A Summary Form no later than February 1
- Do NOT send the OSHA 300A Summary Form to OSHA
- The most common recordkeeping violation is failure to post

CORRECTING AN INCORRECT FORM

- Correcting an unrecorded injury or illness:
  - Add the entry in the next available space.
  - Strike out the bottom totals and update to reflect new entry.
- Correcting an entry that should not be on the log:
  - Strike out the entry.
  - Strike out and correct the bottom totals.
  - Initial and date the correction on the 300 Log and explain the change on the First Report of Injury Form.
- If the outcome or extent of an injury or illness changes after you have recorded the case:
  - Draw a line through the original entry or,
  - Delete or white-out the original entry.
  - Write the new entry where it belongs. (Remember, you need to record the most serious outcome for each case)

FREQUENTLY ASKED QUESTIONS

Does an employee report of an injury or illness establish the existence of the injury or illness for recordkeeping purposes?
No. In determining whether a case is recordable, the employer must first decide whether an injury or illness, as defined by the rule, has occurred. If the employer is uncertain about whether an injury or illness has occurred, the employer may refer the employee to a physician or other health care professional for evaluation and may consider the health care professional's opinion in determining whether an injury or illness exists.

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

Which work-related injuries and illnesses should you record?
Record those work-related injuries and illnesses that result in:

- Death
- Loss of consciousness
- Days away from work
- Restricted work activity or job transfer
- Medical treatment beyond first aid

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

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

First Aid Treatment

Do NOT record the case if it involves only:

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

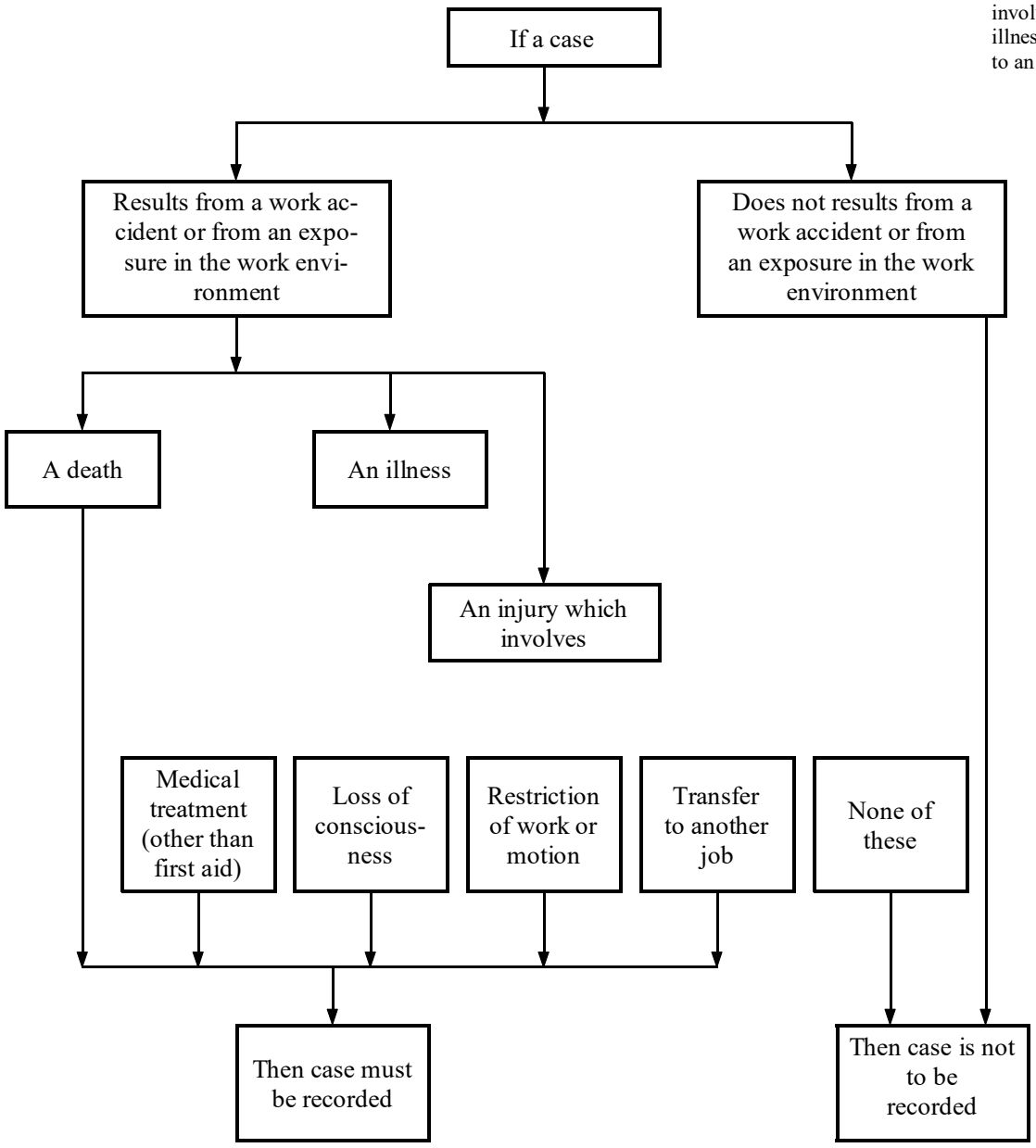
Medical Treatment

RECORD the case if it involves:

- Treatment of infection
- Application of antiseptics during second or subsequent visit to medical personnel
- Treatment of second or third degree burns
- Application of sutures
- Application of butterfly dressing or Steristrips™ in lieu of sutures
- Removal of foreign body embedded in eye
- Removal of foreign bodies from wound if procedure is complicated because of depth, size, or location of embedded foreign body
- Use of prescription medications, except for a single dose administered on first visit for minor injury or discomfort
- Use of hot or cold soaking therapy during second or subsequent visit to medical personnel
- Application of hot or cold compresses during second or subsequent visit to medical personnel
- Cutting away dead skin (surgical debridement)
- Application of heat therapy during second or subsequent visit to medical personnel
- Use of whirlpool bath therapy during second or subsequent visit to medical personnel
- Positive x-ray diagnosis (fractures, broken bones, etc.)
- Admission to a hospital or equivalent medical facility for treatment

Guide To Recordability Of Cases Under The Occupational Safety And Health Act

Note: A case must involve a death, illness, or injury to an employee



Section 9

Fleet Safety

The City of Shakopee

FLEET SAFETY PROGRAM (Not OSHA Required-Recommended by LMC)

The City of Shakopee is committed to instituting and maintaining a Fleet Safety Program. The goal of the Fleet Safety Program is to take the proper steps to prevent loss of life, injury, or property damage to all employees and members of the general public. The City recognizes the responsibilities for safety and loss prevention must be shared by everyone.

Although applicable to all City employees, additional department driving and operating policies/procedures may be available through individual department managers.

The following Fleet Safety Program will cover the following:

- General Responsibilities
- Operator Responsibilities
- Driver Selection
- Driver Training and Review
- Accident Investigation
- Accident Review
- Vehicle Selection
- Maintenance
- Inspections
- Maintenance Files
- Breakdowns
- Defensive Driving Program

GENERAL RESPONSIBILITIES

Management

- Assume responsibility for the driving record of employees while they are on duty.
- Frequently check for compliance of the established requirements and policies in which all personnel are required to adhere to.
- Personally review the decisions on accidents and take all steps necessary to prevent a recurrence.
- Establish and adhere to policies on disciplinary actions in accordance with the policy regarding actions that will be taken against employees who show a repeated disregard for good driving practices.
- Insist that assigned vehicles are maintained adequately for safe operation.
- Establish periodic inspection of assigned vehicles for safety discrepancies, malfunctions, signs of abuse, unreported damage, and cleanliness. Have repairs made as soon as possible.
- Fully support the City's driver training program to promote defensive driving.
- Review each preventable vehicle accident and unsafe driving report with the employee and Direct Supervisor to emphasize Management's intolerance of irresponsibility behind the wheel.
- Establish an aggressive campaign to enforce the wearing of seat belts during all vehicle uses.
- Consult with Safety Coordinator on post-accident investigation.

Supervisors and Department Heads

- Ensure that employees do not drive any City vehicle unless they have a valid driver's license and are familiar with City driving rules and regulations.
- Ensure that only authorized personnel be allowed to operate City vehicles, special purpose vehicles, and trucks.
- Must be alert in observing unsafe practice of employees and ensure that action is taken immediately to correct the driver.
- Review all preventable vehicle collisions with employees at safety meetings and discuss each unsafe act that was responsible.
- Periodically ride with the vehicle drivers to check for compliance with operating instructions and traffic regulations.
- Ensure that unsafe vehicles are not driven until safety discrepancies have been corrected.
- Fully utilize the decisions and recommendations handed down by the Safety Committee.

Employees

Employees who drive City vehicles are responsible for following all of the guidelines set forth in the Fleet Safety Program. These responsibilities include:

- Safely operating vehicles to ensure the safety of passengers and cargo
- Having a valid driver's license in their possession
- Inspecting the vehicle which they are about to drive, in accordance with established policies
- Reporting any vehicle accidents

Safety Coordinator

The Safety Coordinator will be in charge of implementing the policies the Fleet Safety Program. Responsibilities include:

- Monitoring the driving experience of employees who operate City vehicles
- Be sure proper maintenance procedures are being followed to keep vehicles in a safe operating condition
- Verify that adequate insurance and insurance limits are maintained by drivers who use their personal vehicle for City business
- Re-evaluate driving records post-incident and report concerns to Management (remember, the drivers record is confidential and only Management may review this information).

OPERATOR RESPONSIBILITIES

The driver is responsible for checking the safety and general condition of the vehicle, including gas, oil, and other fluid levels, as well as lights and brakes. With the assistance of the Safety Coordinator, Supervisors and Department Heads will furnish vehicles with inspection checklists *(***see form at end of section**). If there is something wrong with the vehicle which may affect safety, repairs will be made before use.

Vehicle Abuse
No employee will use a vehicle or equipment for any purpose for which it was not designed, operate it beyond its designed limits, operate in areas or locations for which it was not designed, or cause damage through neglect, misuse, improper driving techniques, and/or improper handling.

No Distractions
Drivers must always be aware of their surroundings and avoid any activity which may distract them from the driving task.
Drivers may not do the following while within the right of way:

- Adjusting mirrors.
- Use a cell phone (exceptions see next section)

Drivers should avoid doing the following while driving:

- Adjusting the radio
- Eating or drinking

Cell phone Use

What can I do under the law?
The law allows a driver to use their cell phone to make calls, text, listen to music or podcasts and get directions, but only by voice commands or single-touch activation without holding the phone. Remember, hands-free is not necessarily distraction-free.
What can't I do with my phone under the law?
You may not hold your phone in your hand. Also, a driver may not use their phone at any time for video calling, video live-streaming, Snapchat, gaming, looking at video or photos stored on the phone, using non-navigation apps, reading texts and scrolling or typing on the phone.
Can I ever hold my phone?
Yes. Hand-held phone use is allowed to obtain emergency assistance, if there is an immediate threat to life and safety, or when in an authorized emergency vehicle while performing official duties.
Can I use a GPS navigation device?
Yes. GPS and other systems that can only be used for navigation are exempt from the Hands-Free law. In-car screens and systems are also exempt. In both cases, most of these systems lock when the vehicle is moving.
Is it against the law to hold a phone in a hijab or other type of headscarf or wrap?
Having a cell phone tucked into a headscarf or head wrap is not against the hands-free cell phone law. The phone must be securely situated to remain hands-free and must not block the driver's vision in any way.
What would be against the law is if the driver removed the phone and held it in their hand while they were a part of traffic.
At no time may a driver hold the phone in their hand unless it's to obtain emergency assistance, if there is an immediate threat to life and safety, or when in an authorized emergency vehicle while performing official duties.

The law does allow a driver to use their cell phone to make calls, text, listen to music or podcasts and get directions, but only by voice commands or single-touch activation without holding the phone.

Unauthorized Use of Vehicles
Unless specific permission is given by a Supervisor, County vehicles are to be used for County business only.
Persons found using County vehicles (without permission) for their personal errands may be subject to disciplinary action.

Operation and Occupancy of County Vehicle by Unauthorized Persons
Employees will not permit unauthorized employees or non-employees to ride in County vehicles, except when such persons are conveyed in the performance of duty or authorized to ride by Supervisory staff.

Parking Vehicles
All employees will park their vehicles in a legal and proper manner (unless illegal or improper parking is required for road maintenance - consult the MUTCD for more information). Employees will remove the keys and lock the vehicles, except when specifically instructed otherwise. Employees will not park on the wrong side of a street or highway, unless it is mandatory to park in such a location to perform a job.
All signs, cones, lights, and warning devices as required by law will be used when vehicles are parked or in use in a public travel lane (consult the MUTCD for more information). Employees will use all safety brakes, lockout devices, and other parking safety methods when parking equipment.

Use of Personal Vehicles for County Business
Supervisors and Department Heads will identify and authorize those employees who are required, as part of their normal job duties to use their personal vehicle to conduct County business. The employee's own insurance policy is the primary coverage and, therefore, Shakopee County will not be responsible for any claims that arise out of any motor vehicle accident the employee is involved while operating their personal vehicle.

Transporting Equipment
Employees using County vehicles will exercise caution when transporting equipment, packages, or other materials in the driver/passenger compartment that would became flying projectiles in the event of an accident. Items such as briefcases, laptop computers, tools, etc. need to be transported in the trunk of passenger vehicles. Pickups, whether standard cab or extended, should have secured storage capabilities in the bed of the vehicle, such as tool storage, if they are used with any regularity to transport items that could injure the driver or passenger(s) in the event of an accident. It is always important to keep the driver/passenger compartments as free as possible of objects that could distract their attention because of unexpected movement.

DRIVER SELECTION

The City of Shakopee believes knowing the ability, experience, and attitude of drivers is a key factor in the selection process. An important area in this process is to establish qualification standards for new employees and existing employees that have driving duties. To enforce these standards, the City of Shakopee has implemented the following driver qualification procedures.

Driver Age Requirements
All drivers must be a minimum of 16 years of age.

Application for Employment
All driver applicants shall complete an Application for employment including driving information. The City of Shakopee's hiring standards also require driver applicants to list all former employers for the past ten years.

License
- The City of Shakopee will obtain a legible copy of the license of all driver applicants. A review of the license will be conducted to ascertain the validity, expiration date, and appropriateness for the class of vehicles in which driving is required.
- Whenever driving City vehicles or operating their personal vehicle for City business, employees must have a valid driver's license in their possession. Employees will notify their Direct Supervisor or Department Head if their license is suspended, revoked, or expired.
- Employees who drive vehicles, which require a Commercial Driver's License (CDL), will comply with the Minnesota State Department of Motor Vehicles' requirements for medical examinations and license renewal.
- Supervisors and Department Heads will maintain a system that ensures all employees operating vehicles have the proper class of license and check licenses for current status at frequent intervals.

MVR Check and Evaluation
- The City of Shakopee will request an MVR for driver applicants being considered for employment in which driving city vehicles or operating their own vehicle for city business will be required.
- The Safety Coordinator will review all MVR information to determine if driver applicant meets the qualification standards regarding driving records.
- A formal review of the driver's MVR will be conducted on an annual basis (or more frequently where warranted) to ensure that existing drivers are meeting the established qualification standards for the type of vehicle they are driving.
- MVR's are personal and confidential and should only be discussed with the driver or other authorized persons. The Safety Coordinator will receive results of the MVR check and any needed corrective action will be applied in a timely manner.
- No potential new or existing driver will be allowed to drive a City vehicle or other vehicle on City business if their MVR reveals current revocation or past violations considered unacceptable by City Management.
- An employee who receives any moving violation must notify his/her Direct Supervisor or Department Head of the incident within ten days.
- All former and current employer information gathered from the inquiries must be noted and retained in the driver's (if hired) qualification file. In the event a former or current employer refuses to release information, a note stating this will be placed in the file.
- The Safety Coordinator will review all former and current employer information to determine if the driver applicant meets the hiring standards regarding past and current employment, and to determine if the applicant was truthful about information listed on the employment application.

Driver Qualification File
The driver selection process includes developing a driver qualification file. Elements of this file will include such items as:
- Employment application
- Interview notes
- MVR checks
- Driver training information
- Driver evaluation and performance reviews

DRIVER TRAINING AND REVIEWS

The City of Shakopee's goal is to have a process in place to hire only qualified and safe drivers. Once on board, the City is committed to retaining these drivers. In order to keep drivers, Supervisors, and Department Heads well trained and informed, the City has instituted a number of policies regarding driver training. These policies include driver orientation, periodic driver meetings, and driver performance evaluation and reviews.

Driver Orientation

The City of Shakopee has an orientation program which all employees are required to complete. The orientation program consists of comprehensive classroom training that will cover a variety of subjects. Among the topics are established Safety Policies and procedures, regulatory compliance, vehicle maintenance and inspections, accident/injury reporting procedures, and defensive driving procedures *(see below for Defensive Driving Policy).*

After successfully completing the classroom portion of the orientation, all new drivers will be assigned to a driver trainer. The purpose is to evaluate the new employee's overall driving skills and techniques, and to apply what has been learned in classroom to an actual job situation. This time should also be used to familiarize the new driver with paperwork procedures relating to vehicle maintenance and inspections and to answer any questions or concerns that were not addressed in the classroom training.

Driver Meetings

Every two months a safety training is conducted directed by a Supervisor or Department Head. These meetings are held to meet OSHA requirements, share news and information, and to give our drivers a forum to discuss issues, questions, or concerns. All drivers are expected to participate in these meetings, and all driver input is welcomed and appreciated.

Driver Evaluation and Performance Reviews

Driver Supervisors and Department Heads are responsible for conducting a structured performance review with each of their drivers. It is important for City drivers to understand their performance will be evaluated on an ongoing basis, and they may request, or their Direct Supervisor or Department Head may recommend, a review at any time.

On-Road Performance Evaluation

The on-road evaluation is conducted by the employee's Direct Supervisor or Department Head to monitor the performance of current drivers by riding with them or following them. The Supervisor or Department Head should document the results and counsel drivers concerning problems or deficiencies that were observed. This is the best way for the Supervisor to ensure that driver is following the proper vehicle inspection and defensive driving procedures.

The Performance Review

Driver performance reviews should be held in private and away from the operation area. The review is considered the driver's time and interruptions should not be allowed.

The actual driver performance review should cover, but is not limited to, four basic areas:

- The measurement of the driver's actual results against established goals and standards of the City
- Recognition of the driver's contributions and accomplishments
- Correction of any new or existing performance problems
- Establishment of goals or standards for the next review period

Once the driver and his/her Supervisor or Department Head have concluded their discussion of past performance, addressed any development, training, or corrective action needs, and have established new goals and standards for the future, they are expected to reach mutual agreement and wrap up the review. The wrap-up should include the following:

- A positive summary of the performance review discussion including all mutually agreed upon plans and goals
- An opportunity for the driver to react, ask questions, and give additional ideas and suggestions
- A sincere and meaningful expression of appreciation for the driver's participation, time, and efforts
- A written record of what was discussed, agreed upon, and further plans for corrective action/training

Recordkeeping
A copy of the written performance review and MVR check shall be given to the driver, the employee's Direct Supervisor, and the original placed in the driver's personnel file.

ACCIDENT INVESTIGATION

The City of Shakopee's policy is to fully investigate any accident involving City personnel and vehicles. All accidents involving a City vehicle regardless of the severity must be reported immediately. The investigation of minor accidents involving City property only is the responsibility of the driver and Direct Supervisor only.
The Safety Coordinator will be in charge of the investigation of accidents in which serious property damage or death to a City employee has occurred. The Safety Coordinator will also be in charge of accident investigations in which a third party is involved. Management may initiate any other investigations deemed appropriate.

Accident Investigators/Law Enforcement
At the scene, law enforcement will carefully survey the scene, noting the position of any debris from the accident. In a more serious accident, the investigator(s) should take photos of the scene with careful notes of what the photos depict. A map of the site may also be drawn, noting the position of any landmarks near the scene. The more accurate the police report, the easier it is to discuss what happened. Supervisors and Department Heads may want to work with law enforcement during or immediately after the accident.

Driver Responsibility in Accident Investigation
Certain driver responsibilities must be carried out at the scene of an accident.
Two main concerns at the scene of an accident are to deal with immediate problems and to gather and report pertinent accident information promptly. These two items can be broken down into a 5-step accident procedure for drivers to follow.
Step 1: Stop, stay calm.
Step 2: Turn on your emergency flashers as an immediate warning signal. Then do a quick evaluation of accident victims, if any, and provide assistance (call 911).
Next, set out emergency warning devices on the roadway.
Step 3: Contact your Direct Supervisor or Department Head yourself or arrange to have someone do it for you. Be courteous and cooperative when providing information to authorities. Never admit guilt or liability at the scene of an accident. Never leave the scene of an accident.
Step 4: Write down names, license numbers and other information regarding the accident and those people involved in it. Draw a simple diagram of the accident scene. The more detail you can provide, the better it will be for insurance and/or legal purposes later. If you have a camera for use at the

accident scene, document the situation with photographs from various angles. However, ensure you are not disrupting traffic or law enforcement.
Step 5: Complete Vehicle Accident Report provided by law enforcement (at the scene if possible).

ACCIDENT REVIEW

The Safety Committee will review all vehicle accidents to determine the true cause and whether it was preventable or non-preventable. A preventable collision is one in which the driver failed to do all that could be reasonably expected of them to avoid the collision. The functions of the Committee in reviewing vehicle collisions are as follows:

- Convene as soon as possible after a collision involving a City vehicle to objectively consider the evidence presented. This evidence includes any information given by the driver or their Direct Supervisor as well as the police report of the accident. These same rules also apply to employees officially authorized to drive their personal cars during official City business.
- Determine the true cause of the collision and whether it was preventable or non-preventable.
- Report the Committee's findings and the recommendations for corrective action in writing to Management.
- In the case of a preventable ruling, schedule a personal one-on-one meeting with the driver to discuss the decision, possible remedial training, and/or possible disciplinary action. This meeting will be scheduled as soon as possible after the preventability determination has been made. The employee's Direct Supervisor will determine who all will attend the meeting.

VEHICLE SELECTION

It is important to ensure that vehicles selected for a specific function are adequate in design and capability for the intended purpose. It is the responsibility of each driver to select the appropriate vehicle to be used in performing tasks.

MAINTENANCE

It is the policy of the City of Shakopee to keep all vehicles well maintained and in safe and efficient operating condition at all times.
A good preventive maintenance program lowers repair frequency and lowers overall maintenance cost.
The service portion of Preventive Maintenance is actually scheduled maintenance.
City vehicles will be given Preventive Maintenance according to the following schedule:

- Daily vehicle inspections
- 3000 mile inspection

INSPECTIONS

The City of Shakopee is committed to following a strong daily inspection program. All vehicles are to be inspected every day they are operated.

Driver Pre-Trip Inspections
All drivers must be satisfied that their assigned vehicle is in proper working condition prior to operating (**see forms at end of the section**). All drivers must also ensure that any cargo is properly distributed and secured.
The driver will also review the last completed Driver's Vehicle Inspection Report to verify that any needed repairs were made to the vehicle. If the defects noted were not acknowledged by an authorized signature, the driver shall not drive the vehicle until the defects are handled appropriately.

Driver On-The-Road Inspections
Once on the road, the driver must examine any cargo and its load securing devices and make any necessary adjustments.
If a problem is found, the driver will notify his/her Direct Supervisor or Department Head and either have the necessary repairs or adjustments made prior to operating the vehicle, or safely travel to the nearest repair facility.

When a driver reports safety related problems or vehicle damage, the Vehicle Inspection Report should be submitted to his/her Direct Supervisor or Department Head. The Supervisor or Department Head will sign the report indicating that repairs have been made (or are not required to be made).
The original inspection report and certification of repairs will be retained in the Vehicle Maintenance File.
The original inspection reports on which no defects were noted and on which defects were noted, and the certification of repairs, will be retained in the Vehicle Maintenance File.

MAINTENANCE FILES

A complete record on each vehicle in the fleet will be kept. It will include basic vehicle information, the nature and due date of any inspection or maintenance operations to be performed on the vehicle, and a record of any inspections, repairs, and maintenance already performed on the vehicle in question, including dates performed and specifics on the nature of the operations.

BREAKDOWNS

Driver's responsibilities when a breakdown happens include:
- Safely stopping and securing the vehicle and load
- Safely placing the warning devices
- Diagnosing and calling in the breakdown to their Direct Supervisor

Supervisor or Department Head responsibilities when a breakdown occurs include:
- Determining the nature of the breakdown and best course of action
- Locating, contacting, and dispatching maintenance personnel or a vendor to facilitate repairs

DEFENSIVE DRIVING PROGRAM

The City of Shakopee is strongly committed to a sound and thorough defensive driving policy. While operating City vehicles, drivers should always drive in the safest manner possible. Specifically, our drivers must operate City vehicles in accordance with all provisions of this and the complete Fleet Safety Program.

It is imperative that employees strictly adhere to the procedures as outlined in this Section. These procedures are designed to protect employees and the public from vehicle related injuries/fatalities.

The procedures contained in this document will address the following:

- **Training Requirements**
- **Defensive Driving Procedures**

TRAINING REQUIREMENTS

Full-time and designated part-time employees driving the City of Shakopee vehicles shall be required to attend Defensive Driving Training.

- Assignments for classes shall be made by the employee's Direct Supervisor to ensure class quotas are met and to maintain satisfactory work schedules.
- Frequency of employee attendance of Defensive Driving Courses shall be once per year.
- New employees required to drive City vehicles shall be required to review this program before starting their driving assignment.

The core concepts of this training are:

- Recognize the hazard
- Understand the defense
- Act in time

DEFENSIVE DRIVING PROCEDURES (KEY POINTS)

Intersection
Getting into and out of intersections without an accident is a mark of a good defensive driver. Besides your own skill level, intersections also demand anticipation of the actions of other drivers and taking appropriate evasive action as required.

Backing
Backing is an extremely hazardous maneuver. Avoid backing whenever possible. Consider pulling through or backing into parking spaces to ensure complete visibility when pulling out. If a spotter is not available, always walk to the rear of your vehicle to ensure you are clear of obstacles. Even if you are backing with the assistance of a spotter, the ultimate responsibility for the safety of the backing maneuver remains with you, the driver. DO NOT RELY ON MIRRORS!

Front-End Collisions
The primary way to avoid front-end collisions is by maintaining a safe and adequate following distance. You should be prepared for possible obstructions on the roadway, either in plain sight or hidden by curves or the crests of hills. A special situation occurs at night, when speed should be kept to a level that will allow you to stop within the distance illuminated by the headlights of your vehicle.

Rear-End Collisions
As a driver, you risk being struck from behind if you do not maintain an adequate margin of safety in your own following distance. If enough space is not allowed in front of your vehicle, the chance that somebody can (and will) impact you from the rear is greatly increased.

Passing
Failure to pass safely indicates faulty judgment on your part as a defensive driver and failure to consider one or more of these factors:

- Is there enough room ahead?
- Is there adequate space to move back into your lane of traffic after passing?
- Have you signaled your intentions?
- Is it legal to pass?

Being Passed
As a driver, you must be aware of the actions of other drivers, and give way if another driver begins to crowd you or cut you off. A good defensive driver will avoid problems with this kind of accident situation.

Encroaching on Other Traffic Lanes
Observant defensive drivers will not usually get trapped when other drivers change lanes abruptly. In the same manner, entrapment in merging traffic can be successfully avoided by a good defensive driver with a little pre-planning and willingness to yield. Blind spots are not valid excuses for this kind of accident – allowances must be made in areas of limited sight distance.

Railroad Grade Crossings
Driving across railroad crossings, or in areas where there are rail vehicles of some sort, demands special care.

Oncoming Traffic
A defensive driver will avoid a collision with an oncoming vehicle at all costs. Even if the vehicle enters your lane of traffic, an accident can be avoided with evasive maneuvers (usually to the right).

Turning
Turning, like passing, is a dangerous maneuver, and demands special care and an observant eye from you as a defensive driver. You should be aware of other vehicles in your path and of the complete configuration of the turn you are about to undertake.

Pedestrians
As a sensible defensive driver, always assume that if there is a pedestrian (or small vehicle of some sort) involved in a situation, slowing down is your best defense. Be certain to give people and small vehicles the benefit of a doubt.

Extreme Weather and Road Conditions
Bad weather and other road hazards place special stress upon any defensive driver. The best rule in any kind of bad weather or extreme road condition is get off the road safely and as soon as possible. If you absolutely must continue, slowing way down and increasing following distance are your best defenses along with increased awareness of potential hazards.

Fog
Fog reduces available visibility and impairs distance perception, making it perhaps the most dangerous type of extreme weather condition.
Because of this, it is City policy that, whenever possible, drivers are to avoid driving in foggy conditions. Pull off the road and park safely until such time as the fog dissipates or is burned off, if at all possible. If you cannot safely pull off the road, follow these procedures:

- You should never assume the depth or thickness of any fog. Fog can range from a momentary blurring of the windshield to being several miles thick.
- Slow your vehicle's speed. Reduction in speed should be done gradually in order to avoid becoming a hazard for other motorists. Determining a correct and safe speed depends on the thickness of the fog and is left to your best judgment.
- Avoid the use of high-beams. Water particles that make up fog will reflect more light back at you than onto the roadway when high beams are used, and will further reduce visibility for you. The specific use of low-beam headlights when driving in fog serve two purposes:
  - They help you see the immediate roadway
  - They allow other motorists to see your vehicle.

- You should make use of windshield wipers and the defroster when driving in fog. Driving in foggy conditions will cause a constant fine mist of water to develop on the vehicle's windshield, reducing visibility in the process. Using the windshield wipers and defroster will alleviate this condition.
- Avoid passing other vehicles while driving in fog.
- You should avoid stopping on any roadway while driving in foggy conditions unless absolutely necessary. If you must stop, use the emergency, shoulder, or breakdown lane, activate your emergency flashers, turn off the headlights, and follow the City's breakdown procedures **(see the Vehicle Breakdown & Road Repair policy)**.

Rain

Rain causes roadways to become slippery, especially when it first begins. Roadways become covered with a thin layer of oil and other residues. When rain mixes with this layer, it results in an extremely slippery and dangerous road surface. This condition remains until additional rain can break down and wash away the oily mixture from the pavement. This process can take anywhere from a few minutes to several hours, depending on the severity of the rain.

Water on the road surface can also create a potential hazard of hydroplaning. Hydroplaning happens when a thin layer of water separates the vehicle's tires from the road surface. When a vehicle is hydroplaning, it is literally riding on water. When the tires ride on water, they lose all traction and create an extremely dangerous situation.

The faster a vehicle travels on standing water, the greater the chance of hydroplaning. Reducing speed is the best and safest way to avoid hydroplaning.

Rain also reduces visibility. Because rain presents these hazards, drivers are expected to adhere to the following procedures when driving in rainy conditions:

- You should slow the vehicle's speed to avoid hydroplaning. Reduction in speed should be done gradually in order to avoid becoming a hazard for other motorists. Determining the correct and safe speed depends on how heavy the rain is and will be left to your best judgment.
- You are expected to increase your following distance from other motorists. Since rain causes the road surface to become slippery, you need to allow for greater stopping distance if the need to stop arises.
- You should make use of windshield wipers and the defroster when driving in rain. Driving in rainy conditions will cause a constant film of water to develop on the vehicle's windshield, reducing visibility in the process. Using the windshield wipers and defroster will alleviate this condition.
- You should avoid passing other vehicles while driving in rain. Additionally, you are encouraged to follow other vehicles at a safe distance since vehicles traveling ahead will throw water off the pavement and leave "tracks". Driving in these tracks will give you the best possible traction under rainy conditions.

Snow

Snow, depending on the type and severity, can present a variety of dangerous conditions. Because of this, the following procedures have been developed for this defensive driving policy:

- Light, powdery snow presents few problems since it is quickly blown off the road surface. However if there is enough of this type of snow to cover the roadway, it will form a slick, smooth surface. You should reduce speed and increase following distance. Determining the correct speed and safe following distance will be left to your best judgment.
- Heavier, slushy snow can affect vehicle control. If snow becomes hard packed it can cause an ice hazard on the road surface. Again, you should reduce speed and increase following distance. Determining the correct speed and safe following distance will be left to your best judgment.
- All slow maneuvers such as starting out, steering, backing, and turning should be done smoothly and with extreme care to minimize skids and slides.

- Falling or blowing snow can greatly reduce visibility. In addition, falling and blowing snow can make it hard to see the road, road markings, road signs, and off ramps. If you must continue in snowy conditions, reducing speed and increasing following distance are the best techniques a driver can use to maintain vehicle control.
- As with driving in foggy conditions, the use of high beam headlights while driving in snowy conditions should be avoided at all times. The high-beam "shooting" light will reflect off falling and blowing snow and reflect back at you, further reducing visibility.
- Drivers will also be educated on the dangers of "snow hypnosis." Snow hypnosis occurs when a driver is traveling directly into heavy snow and begins to focus on the falling snow instead of the road ahead. This can cause a hypnotic-like effect on the driver. The danger of snow hypnosis is especially prevalent at night.

Ice

All drivers need to be aware of changes in road surface conditions that may affect the vehicle's traction. To help, the following procedures for driving on icy roads for this defensive driving policy have been developed:

- As with all extreme weather conditions, if you must continue, the safest techniques to employ are to reduce speed and increase your following distance. But of these two, increasing following distance is by far the most important. Depending on the temperature and road conditions, stopping distance (distance needed to come to a complete stop) on icy roads can increase four to ten times versus stopping from the same speed on a dry road.
- “Black Ice” forms when temperatures drop rapidly and any moisture on the road surface freezes into a smooth, almost transparent layer of ice. What makes black ice particularly dangerous is that you may not realize you are on it until it's too late. Determining the correct speed and safe following distance will be left to your best judgment.
- Bridges and overpasses are other areas to which you should give special attention. Ice will tend to form first on bridges and overpasses because cold air circulates both above and below these structures causing the temperature to drop more rapidly. Any moisture on the road surface of a bridge or overpass will freeze quicker and harder than elsewhere on the road. Extreme caution/reduction in speed should be used while traveling over bridges and overpasses.

Night Driving

All drivers need to be aware of the potential hazards while driving at night. These hazards include fatigue, reduced visibility, poor lighting, other (impaired) motorists, and animals on the road. To help drivers better prepare for driving at night, the following procedures have been developed for this defensive driving policy:

- Fatigue is perhaps the most dangerous hazard of driving at night. Nothing we do is worth anyone getting hurt. Fatigue usually sets in at night, but a tired driver, at any time of day, is an unsafe driver. Fatigue reduces drivers' reaction time and perception. All drivers are to review the following fatigue warning signs. ***If you experience any of these signs, it's time to get off the road as soon as safely possible and get some rest.***
    - Your eyes close or go out of focus by themselves.
    - You can't stop yawning.
    - You are experiencing trouble keeping your head up.
    - You experience short-term memory loss, e.g. you can't remember the last several miles you have driven.
    - Your thoughts wander or you begin to daydream.
    - You start drifting into other lanes of traffic, tailgate, or miss traffic signs.
    - You experience an inability to maintain a constant rate of speed.
    - You must jerk the steering wheel hard to correct a drift and get back into your lane.

- Reduced visibility is a hazard of driving at night. At night, visual acuity (degree of perception) and peripheral vision (side vision) are reduced, and the eyes may have difficulty adjusting from light to darkness. These factors all contribute to reduced visibility while driving at night. The best and safest techniques to counteract these night driving hazards are to reduce your speed and increase your following distance. Reducing speed is also the best way to prevent "out driving" your headlights.
- Poor lighting on the open highway or on rural roads is another hazard drivers should be made aware of. At night, with poor or no lighting aside from the vehicle's headlights, hazards in the road are much more difficult to see and avoid. You should reduce speed and use extra caution when traveling on poorly lit or unfamiliar roads.
- Impaired motorists (drunk drivers) are a hazard to everyone on the road. Drivers should be especially cautious when driving between the hours of midnight and 03:00 am (typical bar and tavern closing times). Drivers should be wary of motorists driving in an erratic manner including weaving in and out of traffic lanes, having difficulty maintaining a constant rate of speed, or braking suddenly. If you, as a driver, suspect that you are sharing the road with an impaired motorist, reduce your speed, let the motorist pass, and increase following distance.
- Animals on the road present another kind of hazard while driving at night. Drivers are to be especially alert when driving on roadways lined by woods or tall grass. Animals, especially deer, can jump out in front of an oncoming vehicle with little or no warning. The best techniques to avoid collisions with animals are to not "outdrive" your headlights and to reduce speed. If a collision with an animal is unavoidable, you should drive "through" the animal. This will help prevent a jackknife or rollover type accident.

Distracted Drivers

Below are some indications a driver of a vehicle is distracted and should be avoided:

- Drifting into your lane or into another lane
- Swerving suddenly to avoid an animal, a car, or another highway hazard
- Slamming on their brakes because they didn't see the car in front of them stop
- Running a stop sign or red light
- Looking down repeatedly

Road Construction

We realize that chances are good that from time to time our drivers will be faced with having to drive on roadways that are being repaired or under construction. Road construction presents several hazards. Because of this, our drivers are expected to approach road construction work zones the same way they would any adverse driving situation and follow these procedures:

- You should reduce speed and maintain a safe following distance.
- You should drive at or under all special or reduced posted speed limits while traveling through road construction work zones. Safe following distance will be left to your best judgment.
- You should be constantly aware of your immediate surroundings, anticipate the possible actions of other motorists, and expect sudden stops.
- You should watch for construction workers or vehicles crossing the roadway.
- You should use the lane furthest from a construction zone when possible.
- You should avoid sudden lane changes and use headlights and four-way flashers when traveling through construction zones.

Road Hazards
Drivers should be aware of the potential danger of encountering various types of road hazards including:

- Soft shoulders or severe pavement drop-offs that can cause rollover type accidents
- Road debris such as tire recaps, metal or lumber can cause severe damage to tires, tire rims, electrical systems, and brake lines. You should be aware of the road ahead to identify potential road debris early and take safe and appropriate avoidance maneuvers.

Underpasses
Hitting a bridge, underpass, or viaduct is a danger you should be constantly aware of. This type of accident, often referred to as "topping" a trailer, is always preventable. Drivers need to be aware that posted height of an underpass is not always accurate. Re-paving and packed snow can reduce the clearance of an overpass enough to cause a problem. In addition, an empty trailer will ride higher than when it is loaded. You should make thorough trip plans. When in doubt of the clearance of an underpass, you should get out of your vehicle and make a visual inspection or find an alternate route.

Fixed Objects and Special Intersections
A good defensive driver will observe items in the area around the vehicle that might cause problems. Checking to be certain there is adequate clearance is the primary thing to watch. In areas such as driveways, alleyways, or plant entrances, the effective defensive driver will analyze the situation carefully, slow down, sound a warning when appropriate, and be ready to yield to the other driver involved.

Physical and Mental Condition
Drivers are expected to manage their physical and mental condition. That especially means keeping a positive attitude when behind the wheel and taking good care of their physical health. Fatigue is an especially dangerous factor while driving and should be avoided to prevent incidents.

Following Distance
Tailgating is probably the single most common complaint lodged by the general driving public against truck drivers. Here are some specific following distance guidelines:

- 3-second interval at speeds up to 40 mph
- 4-second interval at any speed over 44 mph
- add extra time in bad weather or poor road conditions
- add extra following distance if you are being tailgated

Driving Speed
You should drive consistent with posted speed limits, with due regard given to existing traffic, weather, and highway conditions. Never overdrive your headlights at night. That means you should be able to stop safely in the distance you can see clearly in your headlights.

Right of Way
As a defensive driver, you should never attempt to exercise the right of way principle. Let the other driver go first. Keep to the right except to pass, or when getting into position to turn left. In town, when you enter a main thoroughfare from a side street, alley, driveway or a highway ramp, make a full stop at any crosswalk, then another full stop before actually moving into traffic.

Meeting Other Vehicles

Keep to the right when meeting other vehicles on a roadway. If a vehicle approaches on your side of the road, slow down and pull to the right as far as you safely can. If you have to take this kind of evasive action, and have actually gone off the highway onto the shoulder, be certain you slow the vehicle down sufficiently before you attempt to come back onto the highway. Never pull to the left to avoid an oncoming vehicle.

When merging onto a highway drivers are expected to:

- Signal early
- Be patient and watch for an opening
- Build speed and merge smoothly
- Check mirrors constantly

When exiting a highway drivers are expected to:

- Signal and change into the right-hand lane early and safely
- Signal intentions to exit early
- Check mirrors constantly
- Reduce speed and exit

Curves and Turns

The biggest thing to remember in successfully negotiating curves and turns is to slow down. That way you will be able to make any adjustments in steering, etc. as necessary.

Remember: The definition of DEFENSIVE DRIVING is: driving to save lives, time, and money **in spite** of the conditions around you and the actions of others.

Vehicle Pre-Trip Inspection Report)

Driver:	Today's Date:
Vehicle ID No:	License Plate No:
Expiration Date:	Odometer Reading:

X = Satisfactory O = Requires Attention

	DATES										
VEHICLE INSPECTION:											
PRE-START UP	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	**COMMENTS**
Check Oil											
Radiator, Washer Fluid											
Battery Fluids, Connections											
INTERIOR (Start Engine)											
Fuel Level											
Alternator Function											
Heat/Defrost/AC											
Interior Lights											
Upholstery, Loose Object											
Child Car Seats/Booster											
Seatbelts/Straps/Cutter											
First Aid Kit/Body Fluids Kit											
Fire Extinguisher											
Emergency Exits/Doors											
Registration/Insurance											
Radio/Cell Phone											
Horn											
Brakes (Travel/Feel)											
Steering Wheel (Play)											
WINDOWS/MIRRORS											
Cleared of Ice/Snow											
Foot Brake/Parking Brake											
Wipers/Washers											
Mirrors/Glass/Scraper											
EXTERIOR											
Head Lights (High/Low)											
Turn Signals (Front/Rear)											
Emergency Flashers											
Tires (Wear, PSI w/gauge)											
Tail Lights/Back-Up Lights											
Exhaust (Sound, Emissions)											
TRUNK/STORAGE AREA											
Spare Tire (Pressure)											
Emergency (Chains, Flares, Flashlight, Blankets)											
UNDER VEHICLE											
Obvious Leaks											
Loose/Hanging Objects											
OPERATION											
Lift											
Transmission											
Engine/Idle Speed											
DRIVER'S INITIALS											

Section 10

Contractors Safety Program

Contractor Health & Safety Program

(not required by OSHA-Recommended by LMC)

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COMMITMENT/SIGNATURE PAGE Page U

Definitions

- Contract: A legally binding agreement between the City of Shakopee and a contractor to provide goods or perform services. All contracts shall be written.
- Contractor: A contractor is any person or entity hired to perform work on a contract basis. Contractors are not the City of Shakopee employees, are not directly supervised by the City of Shakopee employees, and are paid according to terms of the contract. Also referred to as an Independent Contractor.
- On-call Contractor: A contractor who is used on an ongoing basis for the City of Shakopee to perform work as needed.
- Sub-contractor: Any entity or person hired by the contractor to complete parts of the project.

Program Requirements

- Contractor Safety Records
  - The City of Shakopee will make efforts to hire contractors with good safety records. The bid specifications for contract work will, when possible, include a requirement that contractors have a workers' compensation modifier of 1.1 or lower. Alternatively, bid specifications will include language that weighs workers' compensation modifiers when determining who will be awarded the contract.
  - Before a contractor may be awarded a contract, the contractor must provide the City of Shakopee with proof of workers' compensation and liability insurance. The coverage must be adequate to provide proper protection to the City of Shakopee.
- Insurance Requirements
  - When a new contract is awarded, the contractor must name the City of Shakopee on all relevant policies as an "Additional Insured."
  - On-call contractors must provide updated coverage information annually as well as when their coverage changes and when their policies are renewed.
  - Prior to beginning work, the contractor must provide the City of Shakopee with the appropriate certificates of insurance.
- Indemnification
  - Transfers risk to the contractor.
  - The contractor should agree to defend and indemnify the City of Shakopee for any claim against the City of Shakopee or the City of Shakopee's employees, officers, or agents arising from the contractor's acts or omissions.
- Unsafe acts
  - If a City of Shakopee employee witnesses a contractor or sub-contractor performing an unsafe act, the employee should report the act to their Direct Supervisor immediately. If action is necessary after evaluating the report, the Supervisor shall report the unsafe act to a person who can stop the act or communicate with the contractor or sub-contractor to stop the act.
  - If a citizen or other non-employee reports an unsafe act, the City of Shakopee employee who receives the report should provide the report to their Direct Supervisor. It is the responsibility of the Supervisor to investigate the report and, if necessary, stop the act.
  - Employees who are working in conjunction with a contractor or sub-contractor may refuse any work they perceive as dangerous to life or health.

- Written Safety Programs and training
  - Bid specifications should include a requirement that contractors provide any pertinent written Safety Programs to the City of Shakopee prior to being awarded the contract.
  - Pertinent written Safety Programs are any written Safety Programs that would normally be required by OSHA, other regulatory bodies, or the City of Shakopee to perform the work in question.
  - The City of Shakopee will provide any pertinent written Safety Programs to the contractor prior to the beginning of the job.
  - Bid specifications will normally include a requirement that contractors provide records of any pertinent safety training to the City of Shakopee prior to being awarded the contract.
  - Pertinent safety training is any training that would normally be required by OSHA, other regulatory bodies, or the City of Shakopee to perform the work in question.
  - Likely jobs/tasks with the appropriate laws/standards are included in the Contractors Handout at the end of this policy. All contractors must read, agree to, and sign this document as part of the contract awarded.
  - After the contract is awarded, but prior to beginning work covered under the contract, the City of Shakopee will provide the contractor and any sub-contractors with an orientation of the City of Shakopee operations. This orientation will focus on workplace and project safety. If the contractor has already received this orientation and has all the information that is provided in the orientation, the orientation is not necessary. Orientation topics will normally include but not be limited to:
    - Safe Access to the Work Site
    - The City of Shakopee Safety Policies
    - Emergency Contact Information
    - The City of Shakopee Emergency Response Procedures
  - Any City of Shakopee employees who are affected by the contract work must be provided with, read, and understand the contractors and sub-contractors pertinent written Safety Programs.
  - The primary contractor on any project will determine which Safety Program(s) to follow for the contractor's employees and for sub-contractors.
- Sub-contractors
  - Sub-contractors are bound by the same obligations as contractors for the purposes of this program. All sub-contractors must provide certificates of insurance and name the City of Shakopee as an "Additional Insured" on their policies.
  - Supervision of sub-contractors is the responsibility of the primary contractor who has hired the sub-contractor.
  - The primary contractor is responsible for ensuring that sub-contractors, if any, perform their work in a safe and healthful manner.
  - Sub-contractors must provide a copy of any pertinent written Safety Programs and records of pertinent safety training to the City of Shakopee and to the primary contractor prior to beginning any work.
- Supervision
  - The City of Shakopee will designate one manager or Supervisor to act as a liaison to the contractor.
  - The designated representative of the City of Shakopee has the authority to immediately halt any acts performed by the contractor and sub-contractors.
  - Contractors are responsible for the supervision of their personnel and sub-contractors at all times.
  - All problems must be communicated promptly.

- Large projects
  - Details of fire safety and site security for a large project should be determined prior to awarding a contract and should be written into the bid specifications and the contract. If these details change while the project is in progress, the contract should be amended.
  - If the City of Shakopee provides employees for Fire Watch, security, etc., those employees are to be supervised by a City of Shakopee Supervisor.
  - The City of Shakopee employees who participate with the contractor or any sub-contractor as Fire Watch, security, etc. should receive training on any non-routine work they are performing.
- Use of equipment
  - Every effort should be made for contractors and sub-contractors to use their own equipment, and for the City of Shakopee employees to use the City of Shakopee equipment. If equipment is shared, there should be a written agreement between the parties on how to handle liability and property damage.
  - In an emergency, a contractor or sub-contractor may use the City of Shakopee equipment (e.g. using a(n) the City of Shakopee fire extinguisher to put out a fire).

Contract Requirement Checklist

Project/Contract:_____

_____ Contract bid specifications include a requirement of workers' compensation modifier of 1.1 or below, OR include language that weighs the contractors' safety records.

_____ the City of Shakopee is named on the contractor's policy as an "Additional Insured".
List coverage periods:_____

_____ The contractor has provided a certificate of insurance to the City of Shakopee for both liability and workers' compensation. List coverage periods:_____

_____ Contractor agrees to defend and indemnify entity as well as the employees, officers, and agents of the City of Shakopee for any claims filed against the City of Shakopee arising from the contractor's actions.

_____ The contractor has provided the City of Shakopee with the following written Safety Programs:

_____ _____

_____ _____

_____ _____

_____ _____

_____ The contractor has provided the City of Shakopee with the following safety training records:

_____ _____

_____ _____

_____ _____

_____ _____

_____ The contractor has attended an orientation session for working with the City of Shakopee.
List date:_____

CONTRACTOR HANDOUT

(To be read, signed, and returned by all contractors before they start work for the City of Shakopee)

The purpose of the Contractors Safety Program is to provide contractors with a clear and concise understanding of the safety requirements and responsibilities while working on the City of Shakopee's property as well as to reduce exposures that cause personal injury, property damage, and liability losses due to construction, renovation, and demolition of City-owned buildings, facilities, and property. The requirements within this document are not all inclusive but offer guidance in the most common OSHA Standards applicable to contractual work within the City.

Contractor Safety Program Objective

- Inform contractors of their responsibilities when working on City property.
- Protect employees, visitors, property, and the environment from potential hazards.
- Comply with all federal and state safety and environmental regulations.

Contractor General Responsibilities

- Contractors are expected to implement their own environmental health and Safety Programs.
- Prior to starting a project, each contractor is required to review the work site and identify hazards that may occur while performing the job.
- The contractor shall ensure proper environmental health and safety precautions are followed in accordance with the Occupational Safety and Health Administration's (OSHA) and the Environmental Protection Agency's (EPA) Code of Federal Regulations (CFR).
- The contractor shall ensure individuals working at the site are trained and are aware of potential hazards. Contractors shall also ensure these individuals are provided with proper safety equipment to prevent accidental injury in accordance with OSHA's CFR.
- The contractor shall ensure all personnel follow the guidelines of OSHA, EPA, and the City, in addition to any guidelines of the jurisdiction(s) in which the operations will be performed.

Project Manager Responsibilities

- Ensure contractors are aware of their responsibilities under the Contractor Safety Program.
- Ensure contractors have their own Environmental Health and Safety Programs in place in accordance with federal and state regulations.
- Ensure all potential work-site hazards are addressed in the pre-construction planning process.
- Notify City Management of any new developments in the project potentially affecting site environmental health and safety hazards.

Hazard Information

- Prior to the start of the project, the contractor shall contact the Project Manager to ensure they have received pertinent information for the project including permits, floor plans, and utility information.
- The contractor shall be responsible for the removal and/or disposal of hazardous waste generated from the project. Hazardous waste generated from the project must be removed and disposed of in accordance with federal and state regulations. The Project Manager is available to address any related hazardous waste concerns and must be consulted prior to the removal of any hazardous waste from City property.

All contractors performing inspections, construction, and repairs on City property are to comply with the requirements of this manual. Failure to adhere to these requirements may result in an immediate shutdown of the work site and a breach of contract with the City.

ASBESTOS

PURPOSE

The purpose of this policy is to inform contractors of their responsibilities under the Asbestos Management Program in order to prevent the unintentional disturbance of Asbestos Containing Materials (ACM). On-site buildings built before 1980 are assumed to contain asbestos until proven otherwise. Types of ACM found in City buildings may include:

- Thermal system insulation (pipe, boiler, breaching, fume hoods)
- Fireproofing (spray-applied insulation, fire doors)
- Compounds (caulking, mastics, adhesives, plaster, joint compound)
- Flooring (vinyl floor tile, sheet goods, resilient)
- Textiles (cloth, rope, fire curtains)
- Cementitious (countertops, chalk boards, roofing and siding shingles)
- Acoustical (ceiling and wall tile).

RESPONSIBILITIES

Before undertaking any projects of repair, renovation, or construction that may impact asbestos, contractors shall:

- Request from the Project Manager the location of asbestos containing building materials in the work area.
- Ensure all work is compliant with all applicable federal and state regulations.
- Understand if a suspect material is encountered, they should immediately stop work and notify the Project Manager.
- In the event that asbestos is impacted, take all necessary precautions to protect City employees, residents, and visitors from the exposure to asbestos fibers or contamination.
- Make certain their employees and subcontractors have had the appropriate level of awareness training as required by OSHA.
- If negative exposure assessments are mutually agreed upon, the contractor will perform the evaluation and provide their employees with the appropriate personal protection.
- Contact the Project Manager and/or a Supervisor with any questions regarding asbestos.

REGULATIONS

OSHA 29 CFR 1910.1001, Toxic and Hazardous Substances; OSHA 29 CFR 1926.1101, Asbestos Construction; DOT49, CFR 171-172, Hazardous Materials Transportation Regulation; EPA 40 CFR 61, Subpart M, NESHAP

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

BARRICADING/FENCING/TRAFFIC CONTROL

PURPOSE

To inform contractors of their responsibility to maintain a safe and accessible path-of-travel for all pedestrians (including those with disabilities) around and/or through construction sites. Barricades act as warning devices, alerting others of the hazards created by construction activities, and should be used to control traffic, both vehicular and pedestrian, safely through or around the work site.

ACTIVITIES

While barricades and traffic control shall be used wherever necessary for the physical protection of people or property, the following is a list of activities where their use may be required:

- Wherever construction debris is dropped without the use of an enclosed chute.
- Areas with temporary wiring operating at more than 600 volts.
- Work areas for electrical equipment with exposed, energized parts.
- The swing radius of the rotating superstructure of cranes, backhoes or other equipment.
- Wherever equipment is left unattended near or on a roadway at night.
- Excavations.
- Areas used for the preparation of explosive charges or blasting operations.
- Street openings, such as manholes.
- Construction areas in energized electrical substations.

RESPONSIBILITIES

The contractor shall:

- Erect and maintain for the duration of the Contract proper barricades and traffic control including fencing material, traffic cones, A frames, caution tape, and temporary curb ramps complying with all access codes and regulations at all closed crosswalks and existing closed curb ramps.
- Obtain all applicable permits required by the regulations.
- Furnish, erect, and maintain all necessary signs, barricades, lighting, fencing, bridging, and flaggers that conform to the requirements set forth by the newest version of the MUTCD Field Manual and OSHA.
- Ensure that no construction materials be stored and/or placed on the path-of travel.
- Maintain the construction barriers in a sound, neat, and clean condition.
- Not occupy public sidewalks except where pedestrian protection is provided. Unless absolutely necessary, the Contractor shall not obstruct free and convenient approach to any fire hydrant, alarm box, or utility box.
- Remove barriers and enclosures upon completion of the work in accordance with applicable regulatory requirements.
- Provide protection for pedestrians consistent with all state and federal codes, including the Americans with Disabilities Act.

REGULATIONS

OSHA 29 CFR 1926 Subpart G - Signs, Signals, and Barricades; OSHA 29 CFR 1926 – Demolition; OSHA 29 CFR 1926, Subpart K – Electrical; OSHA 29 CFR 1926 Subpart N - Cranes, Derricks, Hoists, Elevators, and Conveyors; OSHA 29 CFR 1926 Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations; OSHA 29 CFR 1926 Subpart P –Excavations; OSHA 29 CFR 1926 Subpart U - Blasting and Use of Explosives; Current Version MUTCD (Minnesota Uniform Traffic Control Devices) field manual, OSHA 29 CFR 1910 General Industry, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

BLOODBORNE PATHOGENS

PURPOSE

To inform contractors of their responsibilities regarding employee exposure to Bloodborne Pathogens (BBP).

ACTIVITIES

The Occupational Safety and Health Administration (OSHA) defines work related exposure to potential Bloodborne Pathogens as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties. Construction related work activities such as repair work and renovation projects create an environment where serious injuries, and thus exposure to BBP, are likely to occur.

RESPONSIBILITIES

Prior to allowing employees access to job sites where work activities related to repair, renovation, or construction projects are completed, contractors shall:

- Identify any potential work activities likely to cause injury, or serious physical harm.
- Establish a written Exposure Control Plan designed to eliminate or minimize potential employee exposure in accordance with federal and state regulation containing the following elements:
    - Employee exposure determinations.
    - The schedule and method for plan implementation.
    - The procedure for the evaluation of circumstances surrounding exposure incidents.
- The Exposure Control Plan must be accessible to all employees.
- The Exposure Control Plan must be reviewed at least annually.
- The Exposure Control Plan must be evaluated by employees potentially exposed to injuries, blood, or other potentially infectious materials.
- Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials.
- Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.
- Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, Personal Protective Equipment shall also be used.
- Ensure all employees have received sufficient training in compliance with federal and state regulations.
- Ensure all employees are provided with adequate Personal Protective Equipment as required by regulations.

REGULATIONS

OSHA 29 CFR 1910.1030, Bloodborne Pathogens Standard; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

CHAINSAW OPERATIONS

PURPOSE

To inform contractors of their responsibilities when performing chainsaw activities on City property to ensure all persons are properly protected.

ACTIVITIES

Required safety practices, means, methods and operations for all types of logging, regardless of the end use of the wood, typically tree trimming and tree removal operations.

RESPONSIBILITIES

The contractor shall:

- Provide employees with the proper Personal Protective Equipment (PPE) to include but not limited to:
  - Chainsaw chaps
  - Hard hat
  - Eye and face protection
  - Boots made of cut-resistant material
- Have available for use a “Loggers First Aid Kit”.
- Provide training to all employees in accordance to the appropriate state and federal standards including first aid for those in that position.
- Insure the cutting edge of each tool is sharpened in accordance with manufacturer's specifications whenever it becomes dull during the work shift.
- Insure chain saws are started on the ground or where otherwise firmly supported. **Drop starting a chain saw is prohibited.**
- Insure chain saws are not used to cut directly overhead.
- Maintain and repair all mechanical and safety devices according to manufacturer’s recommendation.
- Provide and use tools only for purposes they have been designed.
- Secure all equipment/tools when transporting.
- Insure that prior to felling any tree, the chain-saw operator clears away brush or other potential obstacles that might interfere with cutting the tree or interfere with the retreat path.

REGULATIONS

29 CFR 1910.266 Logging Operations; 29 CFR 1910.95 Occupational Noise Exposure; 29 CFR 1910 Subpart O, Machinery and Machine Guarding; 29 CFR 1910.212, General Requirements for All Machines, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

CONFINED SPACE ENTRY

PURPOSE

To inform contractors of their responsibilities when performing confined space entry activities on City property. Workers must be protected from toxic, explosive, or asphyxiating atmospheres, and from engulfment when working in and around confined spaces.

ACTIVITIES

Types of confined space entries include, but are not limited to: telecommunication manholes, HVAC systems, lift stations, crawlspaces, boilers, injector pits, tanks, and water-meter manholes.

RESPONSIBILITIES

The contractor shall:

- Identify permit-required confined spaces and fill out approved permit.
- Evaluate each confined space for the following:
  - Presence of explosive gases equal to or greater than 10% of the lower explosive limit (initial/continuous).
  - Oxygen Deficiency and Oxygen Enriched Atmospheres (19.5-23.5% only acceptable) (initial/continuous).
  - Concentrations of Carbon Monoxide not more than 35 ppm (initial/continuous).
  - Concentrations of Hydrogen Sulfide not more than 10 ppm (initial/continuous).
  - Concentrations of any other suspect atmospheric hazard (initial/continuous).
  - Electric shock, burns, walking/working surfaces, heat stress, noise hazards, and/or any other recognized hazard.
- Control potential hazards with the following measures:
  - Mechanical – Use proper lockout/tagout procedures when needed to prevent hazards within the confined space.
  - Ventilation – A ventilation fan shall be used for the duration of the job.
  - Slips and Falls – Use caution if shoes and /or ladders are wet or oily. Inspect shoes prior to entry.
  - Burns and Heat Stress – The use of a ventilation fan will provide cooler temperatures. Use caution around hot equipment and avoid overexertion within the space. Take frequent breaks if needed.
- To prevent an explosion, do not use equipment that may cause flame or sparks in an oxygen-enriched atmosphere.
- Personal Protective Equipment (goggles, gloves, dust mask, etc.) shall be worn when a potential hazard exists.
- Retrieval systems (harness, winch, tripod, etc.) in a permit space must be used for rescue and fall protection.
- Obtain any available information about permit space hazards and entry operations from City Management.
- Evaluate and monitor confined space hazards.
- Coordinate entry operations when employees are working in or near the area.
- Inform the Project Coordinator of entry procedures that will be followed.
- Provide documentation of their company's entry procedures to the safety coordinator before work begins.

RESCUE OPERATIONS

In the event of an emergency requiring entry rescue services, the attendant shall immediately CALL 911 and request a "Confined Space Rescue Team".

REGULATIONS

MN Statute 5207.0300-.0304 and OSHA 29 CFR 1910.146, Permit Required Confined Spaces; OSHA 29 CFR 1926.353(b), Ventilation for Welding, Cutting, and Heating; OSHA 29 CFR 1926 Subpart E, Subpart M, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

EARTHMOVING EQUIPMENT

PURPOSE

To inform contractors of their responsibilities on City property when working around earthmoving equipment.

ACTIVITIES

When working around equipment to include but may not be limited to scrapers, loaders, crawler or wheel tractors, bulldozers, compaction equipment, off-highway trucks, graders, agricultural, rubber tired skid-steer equipment, backhoe, dump and industrial trucks.

RESPONSIBILITIES

The Contractor shall

- Coordinate a joint contractor-employee safety awareness meeting with employees on site before operations begin.
- Train and monitor affected employees on:
  - Being aware of their surroundings when working around earthmoving equipment.
  - Safe operating procedures of equipment on the work site.
  - Working around utilities and the importance of locates (see also trenching section).
  - Properly approaching mobile earth-moving equipment using visual, voice, or signal communication.
  - Identification of blind spots within vehicles.
  - Equipment inspections.
  - Loading and unloading of equipment and machinery.
- Ensure communication signals between operators and ground personnel are reviewed daily.
- Require and audit the use of Personal Protective Equipment including but not limited to:
  - Class 3 Safety Vest
  - Hardhat
  - Safety Glasses
- Ensure equipment has:
  - An operational backup alarm
  - Proper lighting for conditions
  - Been serviced and maintained according to manufacturer recommendations.
- Ensure significant areas of concern are addressed with employees and subcontractors.

REGULATIONS

29 CFR 1926.600, 29 CFR 1926.602, Motor Vehicles, Mechanized Equipment, and Marine Operations, Minnesota Statute 5207.1000, Earthmoving Equipment, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

ELECTRICAL SAFETY (GENERAL)

PURPOSE

To inform contractors of their responsibilities when performing work activities that may impact electrical systems on on-site property.

ACTIVITIES

Construction activities frequently impact electrical systems as part of the planned work activity. Such activities include, but are not limited to:

- Installation of electrical systems, components, machinery, and equipment.
- Alterations of electrical systems, components, machinery, and equipment.
- Maintenance of existing systems and equipment.
- Demolition of existing systems.
- Temporary planned outages.
- Tests and diagnostics.

RESPONSIBILITIES

Prior to performing activities related to repair, renovation, or construction potentially impacting electrical system components and energized or non-energized machinery, equipment, parts, or systems, contractors shall:

- Identify any potential sources of electrical energy likely to cause death, injury, or serious physical harm.
- Notify the City Project Manager of impact activities prior to the start of work.
- Coordinate planned outages with the Project Manager.
- Ensure all employees performing impact activities have received sufficient training in compliance with federal and state regulations.
- Ensure all employees are provided adequate Personal Protective Equipment (PPE) as required by regulations.
- Ensure all work is performed in accordance with the guidelines of federal and state regulations listed below.
- Ensure all affected employees, contractors, and residents are notified through the City Project Manager prior to impacting building/home electrical systems.
- Follow Lock-Out/Tag-Out procedures for the Control of Hazardous Energy as specified in the OSHA 29 CFR 1910.147 Standard.

REGUALTIONS

OSHA 29 CFR 1910.301-.399, Electrical Standard; OSHA 29 CFR 1926, Subpart K, Electrical; OSHA 29 CFR 1910.137, Electrical Protective Devices; and OSHA 29 CFR 1910. Subpart I, Revised PPE Standards; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

EMPLOYEE RIGHT TO KNOW/HAZARD COMMUNICATION

PURPOSE

To inform contractors of their responsibilities under the hazard communication policy regarding potentially hazardous materials present on City job-sites and in City buildings.

NOTIFICATION

The City is responsible for disclosing site-specific hazards to the contractor. Site-specific hazards may include the presence of chemical, radiological, or biological materials. Disclosure of any site-specific hazards should occur prior to the solicitation process so any precautions to address the identified hazards can be taken into account.

RESPONSIBILITIES

Contractor shall:

- Maintain and have accessible copies of Safety Data Sheets/Material Safety Data Sheets (MSDS/SDS's) for hazardous chemicals brought onto City property.
- Before use, forward SDS/MSDS's of hazardous materials (that produce strong odors) to City Management for review.
- Maintain an effective hazard communication program.
- Use and store all hazardous or flammable chemicals, liquids, or gases brought onto the project site in approved containers conforming to applicable federal and state regulations.
- Secure permits, if applicable, for the temporary storage of hazardous materials on the project site.
- Ensure that spills of hazardous materials are contained and cleaned-up immediately and that the necessary means and materials are maintained at the work site to accomplish this task.
- Notify the Project Manager immediately of a hazardous material spill.
- In the event the contractor encounters a hazardous material on the project site (e.g. asbestos, lead, PCBs) which has not been rendered harmless, the contractor shall report the condition to the Project Manager.

ACCESS TO SDS/MSDS

The City will provide SDS/MSDS copies of all hazardous chemicals on site. SDS/MSDS information is available from two sources 24 hours a day:

- Office of Safety Coordinator
- Project Manager

REGULATIONS

OSHA 29 CFR 1910.1200, Hazard Communication; OSHA 29 CFR 1926.59, Hazard Communication; MN Statute 5206.0100 thru 5206.1200; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

FALL PROTECTION

PURPOSE

To inform contractors of their responsibilities when performing work at elevated locations on City property.

ACTIVITIES

Contractors working at unguarded locations above six feet must provide their employees with fall protection. Potential activities requiring fall protection may include working on:

- Water towers
- Below ground confined spaces
- Portable and fixed ladders
- Aerial lifts
- Scaffolds
- Roofs
- Elevated work locations and platforms

RESPONSIBILITIES

Contractors have the responsibility to:

- Reduce the hazards associated with falls
- Control fall hazards first through engineering controls
- Institute personal fall arrest systems, administrative controls, and training when engineering controls are not feasible
- Have a formal fall protection program in accordance with OSHA requirements
- Have the necessary fall protection equipment to safely perform the job
- Have workers properly trained in the use of fall protection equipment
- Have Supervisors (or competent personnel) who ensure the use of fall protection equipment as required

REGULATIONS

The contractor's fall protection program shall include, but not be limited to the regulations below: OSHA 29 CFR 1926 Subpart M, Fall Protection; OSHA 29 CFR 1910 Subpart D, Walking and Working Surfaces; OSHA 29 CFR 1910 Subpart F, Powered Platforms, Man Lifts, Vehicle-Mounted Platforms; OSHA 29 CFR 1926 Subpart L, Scaffolds; OSHA 29 CFR 1910.67, Vehicle-Mounted Elevating and Rotating Work Platforms; OSHA 29 CFR 1926.453, Aerial Lifts; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

HAND AND POWER TOOL SAFETY

PURPOSE

To inform contractors of their responsibilities under the City's Power Tool Safety Program to ensure the safe working condition of tools and equipment.

ACTIVITIES

Each contractor shall be responsible for the safe working condition of tools and equipment used by its employees, which may include hand and portable power tools and other hand-held equipment.

RESPONSIBILITIES

Prior to performing activities related to repair, renovation, or construction, contractors shall eliminate or minimize any potential unsafe tools or equipment by implementing the following procedures:

- Each employer shall be responsible for the safe condition of tools and equipment used by its employees.
- Tools shall be inspected at regular intervals and shall be repaired in accordance with the manufacturers' specification.
- Before using a tool, the operator shall inspect it to determine that operating moving parts operate and that the tool is clean.
- Power tools shall be maintained in accordance with the manufacturer's specifications.
- Appropriate Personal Protective Equipment should be worn due to hazards that may be encountered while using portable power tools and hand tools.
- Tools should only be used for their intended purposes.
- All employees should receive instruction on regulations and the safe use of each power tool.

REGULATIONS

OSHA 29 CFR 1910.242 - Hand and Portable Powered Tools and Equipment; OSHA 29 CFR 1910.243 - Guarding of Portable Powered Tools; OSHA 29 CFR 1910.244 - Other Portable Tools and Equipment; OSHA 29 CFR 1926.302, Power-operated Hand Tools; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

HOT WORK PERMIT

PURPOSE

To inform contractors of their responsibilities when performing hot work activities on City property. The Hot Work Permit is designed to reduce the potential of an uncontrolled ignition of materials in a hot work area.

ACTIVITIES

Hot work is any activity that creates heat, flame, sparks, or smoke. Examples of hot work include but are not limited to:

- Brazing/cutting/grinding
- Soldering gas or arc welding
- Torch-applied roofing
- Grinding on metal

RESPONSIBILITIES

The contractor is responsible for the following on City property:

- Understanding and complying with the City's Hot Work Permit program.
- Having trained employees and approved fire prevention equipment on site prior to performing work.
- Obtaining a Hot Work Permit from the appropriate City department and/or Project Manager prior to the hot work activity.
- Acquiring a Hot Work Permit prior to performing hot work within:
    - Occupied or unoccupied facilities.
    - 35 feet of a building or potential hazard such as a fuel storage tank.
    - Confined spaces regardless of location.
- Coordinating with Facilities Management or Building Management the temporary shutdown of fire systems to prevent possible fire alarm activation and disruption of normal business operations.
- Posting the Hot Work Permit at the job site in an accessible and conspicuous location.
- Submitting the Hot Work Permit to the appropriate City department at the completion of the activity.
- Knowing that copies of the City's Hot Work program are available.
- Conducting their hot work activities in a sound fire safe manner and following the precautions outlined on the Hot Work Permit.
- Assuring that a firewatcher (if applicable) remains on the job for 30 minutes after the completion of the hot work activity.

REGULATIONS

OSHA 29 CFR 1926 Subpart J, Welding and Cutting; OSHA 29 CFR 1910 Subpart Q, Welding, Cutting, and Brazing; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

INDOOR ENVIRONMENTAL QUALITY

PURPOSE

To inform contractors of their responsibility to minimize the impact construction-related activities have on indoor environmental quality within City facilities.

ACTIVITIES IMPACTING AIR QUALITY

Many construction-related activities generate and disperse contaminants that adversely impact indoor environmental quality.

- Activity contaminant/physical agent
- Sanding and grinding create dust, fibers & particulates
- Roofing coal tar pitch volatiles
- Flooring, painting with Volatile Organic Compounds (VOCs)
- Welding and cutting lead, carbon monoxide, nickel, ozone, and heated/burned paint/surface residue
- Demolition asbestos
- Jack-hammering noise, vibration

RESPONSIBILITIES

Prior to performing construction-related activities including repair projects, contractors shall eliminate or minimize any potential contaminant/physical agent exposures by implementing the following procedures:

- Maintain good housekeeping habits to contain dust and construction debris. Use a HEPA filtered vacuum to minimize recirculation of contaminants.
- Implement engineering controls, such as dilution or stale exhaust ventilation and isolation of mechanical systems.
- Install critical barriers made of polyethylene sheeting on doors, windows, vents, etc. in order to isolate the specific work area.
- To minimize dust, use wet methods when appropriate.
- Have trained employees and approved equipment on site prior to performing work.
- Conduct work activities in a safe manner.
- Use the least toxic material suitable for the application (for example, latex paint rather than oil-based).
- Communicate with City Project Manager to implement effective strategies (for example, working off hours) to minimize occupant exposure.
- Relocate sources of contamination (for example, a diesel generator or tar kettle) away from the building air intake.

REGULATIONS

The current regulatory permissible exposure limits (PEL's) as set by the Occupational Safety & Health Administration, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

LEAD BASED PAINT

PURPOSE

To inform contractors of their responsibilities under the City's Lead Management Program and to provide guidelines to contractors who may potentially impact lead-based paint on City property.

GENERAL

On-site buildings constructed before 1978 are assumed to contain lead-based paint unless determined by the Office of Safety Coordinator not to contain lead-based paint. Although lead-based paint materials may not present any health hazards while intact, any impact created by demolition or other activities related to renovations or repair projects may present significant health hazards. In the construction industry, most overexposures to lead are found in the trades, such as welding, painting, and demolition.

RESPONSIBILITIES

Before undertaking any projects of repair, renovation, or construction that may impact lead-based paint, contractors shall:

- Request from the Project Manager the location of lead-containing building materials in the work area.
- Ensure all work is compliant with all regulations cited below.
- In the event that lead-based paint is impacted, take all necessary precautions to protect City employees, residents, and visitors from the exposure to lead dust or contamination. Such measures may include using plastic sheeting to isolate the work area, using wet techniques, and/or using a HEPA vacuum.
- Contact the Project Manager with any questions regarding lead-based paint.

REGULATIONS

OSHA 29 CFR 1910.1025, Lead in General Industry; OSHA 29 CFR 1926.62, Lead in Construction; OSHA 29 CFR 1926.103, General Industry Respiratory Standard; EPA 40 CFR 745, Lead-Based Paint Poisoning in Certain Residential Structures; D.C. Law 11-221, Lead-Based Paint Abatement and Control Act of 1996; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

LOCKOUT/TAGOUT

PURPOSE

To inform contractors of their responsibilities when performing lockout/tagout activities on City property to ensure all persons potentially affected by de-energizing or re-energizing of building systems are properly protected and notified.

ACTIVITIES

Hazardous energy must be isolated or “locked and tagged out” before servicing and/or maintenance activities are performed. The following types of hazardous energies are typically found on City property:

- Electrical
- Pneumatic
- Mechanical
- Thermal
- Hydraulic
- Chemical
- Steam

RESPONSIBILITIES

The contractor is responsible for the following on City property:

- Having a lockout/tagout program prior to performing work
- Having trained employees prior to performing work
- Understanding and complying with the City’s lockout program
- Informing City Management if their program deviates from the City’s program
- Coordinating with City representatives prior to performing lockout/tagout activities
- Providing their own lockout/tagout equipment that meet OSHA standards
- Performing lockout/tagout activities in accordance with OSHA standards.
- Knowing that copies of the City’s program are available.
- Following special procedures for jobs requiring multiple lockout devices and those involving shift or personnel changes.

REGULATIONS

OSHA 29 CFR 1910.147, The Control of Hazardous Energy; OSHA 29 CFR 1926.417, Locking and tagging of circuits; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

OCCUPATIONAL NOISE EXPOSURE

PURPOSE

To inform contractors of their responsibilities regarding noise to ensure the City remains in compliance with applicable regulations.

ACTIVITIES

There are several different types of rules regarding noise for contractors to be mindful of as follows:

- OSHA regulations regarding noise.
- OSHA noise standards consist of a two-stage program:
    - A hearing conservation program must be implemented when employees are exposed to 85 dB on a Time Weighted Average (*TWA) (*see below) or more in an 8-hour day. These programs include annual audiometric testing and require hearing protection devices, such as earplugs.
    - Engineering or administrative noise controls are required when exposure exceeds 90 db. Engineering controls include redesigning the space to reduce machinery noise, replacing machinery with quieter equipment, enclosing the noise source or enclosing the noise receiver. Administrative controls include mandating the length of time an employee can be exposed to a particular noise source.
- The City may restrict noisy operations during certain designated times (especially night). Generally, restrictions will be discussed prior to issuance of the construction permit.
- The City may impose additional time limitations on particular projects expected to make noise such as not starting work until after 9:00am where work is performed near dormitories when school is in session.

TWA:
(1) When the sound level, L, is constant over the entire work shift, the noise dose, D, in percent, is given by: D=100 C/T where C is the total length of the work day, in hours, and T is the reference duration corresponding to the measured sound level, L, as given in Table G-16a or by the formula shown as a footnote to that table.
(2) When the work shift noise exposure is composed of two or more periods of noise at different levels, the total noise dose over the work day is given by: D = 100 (C(1)/T(1) + C(2)/T(2) + ... + C(n)/T(n)), where C(n) indicates the total time of exposure at a specific noise level, and T(n) indicates the reference duration for that level as given by Table G-16a.
(3) The eight-hour time-weighted average sound level (TWA), in decibels, may be computed from the dose, in percent, by means of the formula: TWA = 16.61 log (10) (D/100) + 90. For an eight-hour work shift with the noise level constant over the entire shift, the TWA is equal to the measured sound level.
(4) Further explanation and a table relating dose and TWA are given in OSHA 29 CFR 1910.95 App A Section II.

RESPONSIBILITIES

Contractors must protect their own workers in accordance with OSHA regulations; the public by obeying the regulations and the City polices related to noise. If the City is fined for non-compliance with these regulations, the City will seek retribution from the contractor(s) involved.

REGULATIONS

29 CFR 1910.95, Occupational Noise Exposure, and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

PERSONAL PROTECTIVE EQUIPMENT

PURPOSE

To inform contractors of their responsibilities under OSHA's Personal Protective Equipment (PPE) standard while performing work on City property.

RESPONSIBILITIES

Contractors shall provide their employees with Personal Protective Equipment (PPE) including:

- General Requirements. (OSHA 1910.132)
  Protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be used wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact.
- Eye and Face Protection. (OSHA 1910.133)
  Each affected employee shall use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
- Respiratory Protection. (OSHA 1910.134)
  Each affected employee shall use appropriate respiratory protection when potentially exposed air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors and when such hazards cannot be reduced or eliminated by effective engineering controls.
- Head Protection. (OSHA 1910.135)
  Each affected employee shall wear protective helmets when working in areas where there is a potential for injury to the head from falling objects. Protective helmets shall also be worn to reduce electrical shock hazards when near expose electrical conductors which could contact the head.
- Foot Protection. (OSHA 1910.136)
  Each affected employee shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling and rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.
- Hearing Protection. (OSHA 1910.95(K)(1)-(3))
  Each affected employee shall wear protective earwear whenever noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels and when engineering controls cannot reduce or eliminate the hazard (see also "Occupational Noise Exposure section).
- Hand Protection. (OSHA 1910.138)
  Each affected employee shall wear protective gloves when working in areas where hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.
- Provide training to each employee who is required to use PPE.
  Each affected employee must show understanding of training to their specific PPE. Contractors shall provide this training. Upon completion, each employee shall be tested and certified in writing by the trainer. If at any time the trained employee changes work activities requiring different PPE, or exhibits lack of understanding of the required PPE, the employee shall be retrained and re-certified.

REGULATIONS

OSHA 29 CFR 1910 Subpart I, Personal Protective Equipment; OSHA 1910.95(K)(1)-(3), Occupational Noise Exposure; OSHA 29 CFR 1926.52, Occupational Noise Exposure; OSHA 29 CFR 1926 Subpart E, Personal Protective and Life Saving Equipment; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

POWERED INDUSTRIAL TRUCKS

PURPOSE

To inform contractors of their responsibilities under the City's Industrial Truck Program involving the operation and maintenance of applicable vehicles.

ACTIVITIES

Powered Industrial Trucks include but are not limited to: fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors or internal combustion engines.

RESPONSIBILITIES

Prior to allowing employees access to job sites where industrial lift trucks are used, contractors shall ensure:

- Vehicles are inspected daily.
- Employees obey all safe operating procedures.
- Any power-operated industrial truck not in safe operating condition shall be removed from service.
- All repairs shall be made by authorized personnel.
- All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent to those used in the original design.
- No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
- Unauthorized personnel shall not be permitted to ride on powered industrial trucks.
- Operators will sound the horn and use extreme caution when meeting pedestrians, making turns, and traveling through doors.
- When loading trailers, dock plates will be used. Operators will assure dock plates are in good condition and will store on edge when not in use.
- Operators are instructed to report all accidents, regardless of fault and severity.
- All employees are trained in the operation and handling in accordance with federal and state regulations.
- Shall ensure that powered industrial truck engine exhaust gases do not contain more than one percent carbon monoxide for propane fueled trucks or two percent carbon monoxide for gasoline fueled trucks.
- Internal combustion powered industrial trucks operated indoors to ensure that carbon monoxide levels do not exceed those given in Code of Federal regulations, title 29, section 1910.1000 and 5205.0116.

REGULATIONS

OSHA 29 CFR 1910.178, Powered Industrial Trucks; 29 CFR 1910.1000 Hazardous Substances, 5205.0116 Carbon Monoxide Monitoring; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

SCAFFOLDS

PURPOSE

To inform contractors of their responsibilities, while performing work on City property, in the use and/or erection of scaffolds.

RESPONSIBILITIES

Before undertaking any projects of repair, renovation or construction, that may require the use of scaffolds, contractors shall:

- Ensure all employees have received training in compliance with federal and state regulations.
- Contact the City Project Manager with questions regarding scaffolds safety and required precautions.

The contractor shall ensure that scaffolds be:

- Erected and dismantled by competent workers under the supervision of knowledgeable and experienced Supervisors.
- Erected on sound and rigid footing, capable of carrying the maximum intended load without settling or displacement.
- Securely fastened with all braces, pins, screw jacks, base plates, and other fittings installed as required by the manufacturer.
- Limited to Authorized Personnel only, especially after working hours.
- Equipped with standard guardrails and toe boards on all open sides and ends of platforms four (4) to ten (10) feet in height.
- Provided with a screen with maximum ½ inch openings between the toe board and the guardrail, where persons are required to work or pass under the scaffold.
- Replaced or repaired immediately if scaffolds and accessories have any defective parts.
- Provided with an access ladder or equivalent safe access.

The contractor shall ensure that planking be:

- Scaffold grade or equivalent.
- Overlapped a minimum of 12 inches or secured from movement.
- Extended over their end supports not less than 6 inches or more than 12 inches.

REGULATIONS

OSHA 29 CFR 1926, Subpart L, Scaffolds; OSHA 29 CFR 1910.28, Safety requirements for scaffolds; and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

TRENCHING/EXCAVATIONS

PURPOSE

To inform contractors of their responsibilities while performing trenching and excavation operations on City property.

GENERAL

Excavations include, but are not limited to, operations such as drilling, digging and trenching.

RESPONSIBILITIES

Contractors shall apply the following safety controls.

- Before any excavation work begins, underground utilities shall be identified and the locations of underground pipes, electrical conductors, gas lines, or other structures shall be marked.
- Evaluation is required of the trenching site by a "competent person" who knows and is trained to identify soil types, proper protective systems, and hazardous conditions.
- Contact Gopher State One Call at 1-800-252-1156 or 651-454-0002 for procedures and notification requirements.
- Conduct a daily inspection of the excavation and the adjacent areas prior to work and as needed during the workday. If there are any unsafe conditions, work shall stop in the excavation and personnel removed until the problems are corrected. Inspection forms are available through the Project Manager.
- Monitor and recognize hazardous atmospheres and conditions such as vibration, external loads, weather conditions, ground water conditions and confined spaces.
- Check all protective material or equipment for any damage.
- When excavations are deeper than 4 four feet, ladders or steps shall be located so that a worker does not need to travel more than 25 feet in the excavation before being able to exit. See Confined Space Standard 5207.0300-.0304 and OSHA 29 CFR 1910.146 for testing before employees enter excavations greater than 4 feet in depth.
- Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with OSHA Standard 1926, Subpart P.
- Examination of the ground by a competent person for excavations less than five (5) feet in depth must present no indication of a potential cave-in hazard. If a cave-in hazard exists, protective systems are required.
- When excavations are deeper than five (5) feet, the sides shall be provided with a protective system (shored, braced, or sloped sufficiently) to protect against hazardous ground movement.
- When heavy equipment will be operated nearby, the shoring or bracing shall be able to withstand this extra load regardless of the depth of the excavation. For any excavation that a person will enter, all dirt, debris, and excavation material shall be effectively stored or retained at least two (2) feet from the edge of the excavation.
- Adequate protection from hazards associated with water accumulation should be in place before working in excavations.
- Signs and Barricades shall be displayed at all excavation/trenching sites.
- All excavations into which a person could fall or trip shall be guarded. While work is being performed in or near the opening, the guards surrounding the area shall be maintained.
- Barricades should be at least three (3) to five (5) feet high shall be spaced no further than ten (10) feet apart and yellow and black "Caution, Do Not Enter" construction tape shall be stretched securely between the barricades.
- A registered professional engineer shall design excavations more than twenty feet deep.
- Excavations should be covered and not left open overnight, whenever possible.

REGULATIONS

OSHA 29 CFR 1926, Subpart P, Trenching and Excavations; OSHA 29 CFR 1926.650-652, Excavation requirements and any other applicable regulations.

ACCOUNTABILITY

Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.

TO ALL CONTRACTORS

Attached is the City of Shakopee's Safety Program Guidelines for Construction, Maintenance, and Services. This Guide is for all contractors, subcontractors, vendors, suppliers, consultants, their employees, and all others who may be involved in work on City property. This program must be read and strictly observed by all when working on any City property. There are no exceptions to these guidelines. Any contractor, subcontractor, supplier, vendor, or consultant not complying with these guidelines may be ordered to stop the job until the condition is corrected and are subject to dismissal. Any costs incurred by non –compliance will be borne by the contractor, subcontractor, vendor, supplier or consultant.
If there are any questions about any part of this Guideline the contractor, subcontractor, vendor, supplier or consultant is to contact the City Project Manager immediately.
Prior to commencement of work the contractor, subcontractor, vendor, supplier or consultant must initial below applicable sections and sign/return this page to the Project Manager for filing.

- ☐ INTRODUCTION
- ☐ ASBESTOS
- ☐ BARRICADING /FENCING/TRAFFIC CONTROL
- ☐ BLOODBORNE PATHOGENS
- ☐ CHAINSAW OPERATIONS
- ☐ CONFINED SPACE ENTRY
- ☐ EARTHMOVING EQUIPMENT
- ☐ ELECTRICAL SAFETY (GENERAL)
- ☐ EMPLOYEE RIGHT TO KNOW/HAZARD COM.
- ☐ FALL PROTECTION
- ☐ HAND AND POWER TOOL SAFETY
- ☐ HOT WORK PERMIT
- ☐ INDOOR ENVIRONMENTAL QUALITY
- ☐ LEAD BASED PAINT
- ☐ LOCKOUT/TAGOUT
- ☐ OCCUPATIONAL NOISE EXPOSURE
- ☐ PERSONAL PROTECTIVE EQUIPMENT
- ☐ POWERED INDUSTRIAL TRUCKS
- ☐ SCAFFOLDS
- ☐ TRENCHING & EXCAVATIONS

I have read the applicable sections (as initialed above), understand them, and will follow the City of Shakopee's Contractor Safety Program Guidelines while working on any City property. I will ensure that my employees, subcontractors, and suppliers have received a copy of and will comply with the criteria set out in the City of Shakopee's Contractor Safety Guidelines.

_____
BUSINESS/CONTRACTOR NAME

_____
ADDRESS/PHONE#

_____
SIGNATURE/TITLE

_____
DATE

Section 11

Confined Space

City of Shakopee
CONFINED SPACE POLICY

The City of Shakopee is committed to complying with both the spirit and intent of the Confined Space Standard as outlined in 29 CFR 1910.146 as it pertains to contractual work for our customers.

It is imperative that employees strictly adhere to the procedures as outlined in this Section. These procedures are designed to protect entrants, attendants and rescue personnel from the hazards associated with confined space entry.

This policy is applicable to all Public Works employees entering or monitoring the entry of confined spaces as described in the OSHA Standard and within this policy.

The procedures contained in this document will address the following:

- Definitions
- Testing
- Identification
- Permits
- Fall Protection
- Operating Procedures
- Rescue Operations
- Training/Program

TESTING

Testing the space before entering is an intricate part of Confined Space Entry. If the space is not monitored or the monitor is not functional or available, the hazards are unknown. Thus, we unknowingly put employees at risk. The following are the critical components of an effective testing system that must be followed:

Calibrating/Use

The monitor must be gas calibrated according to manufacturer's recommendations to assure accuracy (**see form at end of section**). It is very important that detectors are calibrated to assure an accurate/reliable tester is used before every entry. In addition, the following must also be done before monitoring can be done:

- **Ensure worker has satisfactory knowledge of and training with monitor and its functions before operation.**
- **Inspect instrument sticker indicating last calibration and gases calibrated along with the initials of the tester. If this has not been done within the manufactures recommendations, make arrangements to use another monitor for pre-entry.**
- **To ensure an accurate reading within a space, ensure the extension tube (if used) is long enough to reach, at a minimum, twelve inches from the bottom or end of the deepest space you may enter.**
- **"Fresh Air" calibration. This can only be done in open/fresh air away from space to assure instrument readiness/proper calibration. The air monitors we use automatically conduct a "fresh air" calibration when turned on.**

Pre-entry/testing

First, initial testing of the confined space **before each entry** must be done and recorded on a permit if applicable.

For accurate hazard analysis, the Entry Supervisor must do the following initial monitoring and be made available to all entrants through the permit form **(see form at end of section)**.

Ensure the following is done (in order):

- **Ensure permit is completed if applicable (see section B and form at end of section for "permit required" spaces)**
- **Remove cover/lid/door immediately and wait a minimum of one minute**
- **Mechanically ventilate space**
- **Attach hose when applicable (ensure it will reach within 12" of bottom/end)**
- **Ensure monitor is still operational**
- **Insert hose to within 12" of bottom/end or lower whole monitor slowly within 12" of the bottom**
- **Pull monitor up slowly (push peak button) and record readings**
- **Secure monitor**
- **Bring monitor up (if lowered). If the hose is used and lowered, wait a minimum of two minutes for accurate reading**
- **Record readings on permit (if applicable). Use peak readings (highest readings throughout space)**
- **Issue permit if applicable**
- **Continuously monitor space**

IDENTIFICATION

Identifying possible confined space hazards is crucial to the safety of all entrants. We will not enter or will evacuate a confined space when any of the following occurs:

- Initial atmospheric testing indicates:
  - O2 readings are not within 19.5-23.5 % (before ventilation)
  - L.E.L. is above 10% (before ventilation)
  - H2S is above 10 ppm. (before ventilation)
  - CO is above 35 ppm. (before ventilation)
  - Any other gas being monitored is above its Permissible Exposure Level
- Monitor beeps due to:
  - Battery low
  - Sensor failure
  - Low flow
- Atmosphere cannot be monitored due to:
  - Unidentified gases
  - Monitor not available
  - Monitor not working
  - The employee feels possible effects of unidentified gases
- Past evidence (monitoring) indicates atmosphere cannot be sustained through ventilation methods only
  - Mechanical ventilation does not remove all gases. We must ventilate during all entries.
  - Any of the above occurs while occupying a NON-PERMIT space.
- Any operation which may create a possible hazard to personnel

Note: Be aware when performing any task which has the **possibility** of creating additional hazards such as:

- Disturbing sludge or other material
- Performing maintenance on, or removal of, pump or other machinery
- Using welding/grinding equipment

WARNING: If any of the above is true, we must assume the space is IDLH (Immediately Dangerous to Life or Health). We will not enter the space.

NOTE: We currently have confined spaces considered "PERMIT REQUIRED" spaces. This means all permit requirements MUST be adhered to.

PERMITS

The Permit (if applicable) must be completed and signed by the Entry Supervisor, all Entrants, and all Attendants. The controlling Supervisor must be notified of pending entry. All confined spaces employees may enter within the City have been classified as “permit” and “non-permit” as required by the Standard.

Permit Requirements:
The conditions of this permit are presented in the order of accomplishment.

- Notify your Direct Supervisor of the pending entry.
- Ensure monitor calibration (gas) has been done (noted on monitor).
- Ensure ATTENDANT is available (we rely on the host to supply an attendant).
- Calibrate monitoring equipment to “fresh air.”
- Permits will be filled out by one of the above listed employees, signed by all, and placed on clipboard at the confined space entrance. In wet weather, place the permit on the vehicle seat (clearly visible from the outside and doors unlocked).
- Continuously ventilate confined space prior to and during entry.
- Ensure a lifeline and harness is used. Fall protection or fall prevention means must also be used (if deeper than six feet or otherwise not secured) to ensure safe entry and exit of space. A tri-pod might not have to be used if another fall protection system is utilized (see also section 5). Remember, a lifeline must always be used when entering a permit required confined space.
- Notify site Supervisor when entry is terminated.

Note: ***Hot Work Permit*** protocol is required any time oxygen consuming equipment (welder, torch) or spark producing equipment (grinder, chisel) is used within a confined space.

Additional precautionary steps besides those listed above include:

- Additional purging of the space of all explosive, hazardous substances or enriched Oxygen.
- Initial testing of the space for accepted oxygen concentrations, LEL (lower explosion limit), CO2, and H2S.
- If testing alarms sound, do not enter the space until additional purging and ventilation has occurred. Re-testing of the confined space atmosphere is required along with acceptable atmospheric condition prior to entry.
- Continuously monitor atmospheric conditions during entry.

Permit Record Keeping
Ensure your Direct Supervisor knows a permit is to be opened and when it will expire. Opened permits will be kept near the confined space opening until canceled at which time they will be filed and kept for three years.

FALL PROTECTION

Although fall protection is not covered under the Confined Space Standard (CFR 1910.146), we must be able to retrieve persons or equipment if problems emerge. Many of the spaces we enter are below ground or elevated and many are over six feet deep. Because of this, the following requirements may apply:

- Tri-pods should be:
  - Used as designed and engineered. Do not use retrieval systems for fall protection or only fall protection when a retrieval system is necessary.
  - Inspected for cracks/corrosion (pins, legs, hardware, etc.) according to requirements before use.
  - Rated (printed on pod) for the heaviest possible user (only one person hooked up at a time).
  - Maintained according to manufacturer requirements.
- Harnesses should:
  - Be inspected before use and quarterly (documented) for tears, burns, stretching, or any other deterioration which may affect its quality and effectiveness as a protective device (see form at end of this section).
  - Be discontinued (thrown out) after five years of use.
  - Be used with proper connectors (locking).
  - Be hooked up to the single ring on the upper center of the entrants back or the shoulder rings in conjunction with a y- lanyard.
  - Be maintained according to manufacturer's specifications
- Synthetic ropes should:
  - Be inspected before use and quarterly (documented) for tears, burns, stretching, or any other deterioration that may affect quality and effectiveness as part of a protective system.
  - Be discontinued (thrown out) after five years (see form at end of this section).

Note: When only a lifeline is used in lieu of fall protection (under six feet) it must also be of sufficient quality (rated) for removal of entrant in an emergency.

OPERATING PROCEDURES

ENTRY SUPERVISOR (this position most likely will be held by the attendant outside the space or the site supervisory authority)

Pre-Entry:

- Ensure attendant is available (we require a minimum of one attendant per space).
- Supervise locking out of equipment, lines, & valves (see also Lockout/Tagout).
- Examine potential hazards of interconnected spaces.
- Eliminate any ignition sources.
- Monitor oxygen-consuming equipment/material.
- Examine oxygen enrichment possibilities.
- Fire protection system (fire extinguisher on site/nearby).
- Ensure availability, maintenance, and inspection of harness and lifeline/tripod.

Entry:

- Periodically monitor entrant(s).
- Initial and continuous monitoring of gases.
- Periodically ensure permit requirements are being met.
- Cancel permit in emergency or when entry is complete.

ENTRANT(S) (those entering the space)

Pre-Entry:

- Notify the Entry Supervisor of pending entry.
- Review entry procedures (operating and rescue-call 911).
- Ensure oxygen-monitoring equipment is adequate.
- Review and verify accuracy of permit.
- Ventilate confined space prior to and during entry.
- Lockout all appropriate equipment as required.
- Ensure availability, maintenance, and inspection of harness and lifeline/tripod.
- Have all PPE that is to be used on hand (see also Personnel Protective Equipment).
- Review prearranged normal and emergency signals.
- Know and review with Entry Supervisor signs of O^2 deprivation (see below).
- Immediately check for gases exceeding limits. If an alarm sounds or the monitor fails -- immediately discontinue, re-evaluate the planned entry and issue a new permit.

Entry:

- Abandon space immediately upon command of Entry Supervisor and/or attendant.
- Abandon space immediately if signs/symptoms of O^2 deprivation occur (see below).
- Abandon space immediately if anything unusual occurs inside or outside the confined space (accident, explosion, odd happenings, etc.).
- Abandon space immediately if any sensor fails.
- Abandon space immediately if sensor alarm sounds.
- Abandon space if feelings or suspicions of O2 deprivation or contaminant exposure exist.

ATTENDANT(S)

Pre-Entry:

- Review procedures (operating and rescue-call 911).
- Review and verify accuracy of permit.
- Ventilate confined space prior to and during entry.
- Lockout all appropriate equipment, as required.
- Have on hand all PPE that is to be used (see also Personnel Protective Equipment).
- Review prearranged normal and emergency signals.
- Know and review with Entry Supervisor signs of O^2 deprivation (see below).
- Immediately check for gases exceeding limits. If alarm sounds or monitor fails -- immediately discontinue, re-evaluate the planned entry and issue a new permit.
- Observe/monitor/communicate with entrant.

Entry:

- Evacuate entrant immediately upon command of Entry Supervisor.
- Evacuate entrant immediately if signs/symptoms of O^2 deprivation occur (see below).
- Evacuate entrant immediately if anything unusual occurs inside or outside the confined space.
- Evacuate entrant immediately if any sensor fails.
- Evacuate entrant immediately if sensor alarm sounds.

Note: Attendants and entrants are both required to know and review the signs and symptoms of *oxygen deprivation* prior to entry. Some of these are as follows:

Difficulty Breathing, Mental Confusion, Rapid Breathing, Ringing in Ears, Euphoria, Tingling Fingers, Lack of Coordination, Blue Fingernails and/or Lips, Belligerence

If any of these signs are "felt" by an entrant or witnessed by the attendant, evacuation of all entrants must be accomplished **immediately**. Re-entry is **not** permitted until space is safe.

Cancellation of Permits

- A Permit is canceled when:
  - Duties in the space are complete and all entrants are out.
  - When an emergency evacuation is ordered or takes place.
- All permits are canceled when unauthorized personnel enter the space
- It is the city policy not to share a confined space with other contractors or host personnel.

Post Entry:

- Return confined space entry equipment, noting any repairs or problems with equipment.
- Return the entry permit to the confined space manual for record keeping.

CONFINED SPACE RESCUE OPERATIONS

Emergency:

Although lowering and retrieving equipment is used, equipment and processes can fail. If retrieval is not possible without entering the space, the following checklist must be followed.

- Call 911 and request a fire department confined space rescue.
- Notify Site Supervisor.
- DO NOT ENTER THE SPACE YOURSELF OR ALLOW ANYONE ELSE TO ENTER UNTIL RESCUERS ARRIVE.
- Shut off all oxygen consuming equipment (welder/gas cylinders).
- Continue to and add additional ventilation until rescue has been completed.

TRAINING/PROGRAM

The written program will be reviewed annually as part of our "Annual Safety Program Review." Training will be conducted, at minimum, annually for the Entry Supervisor, all attendants, and all entrants. Training for these individuals will consist of the following:

Non-Entrants

- Definition of a confined space
- Locations of spaces
- Hazards of spaces
- Authorized entry

Entrants

- Hazard recognition
- Atmospheric testing
- Pre-entry duties
- Permits/Permit spaces
- Rescue/Self rescue
- Post entry duties

Attendants

Attendants must know the duties of **ENTRANTS** as well as the following:

- Exposure effects
- Activation of rescue
- Improper entrance
- Post entry duties
- CPR/First Aid

Entry Supervisor

In addition to the duties of **ENTRANTS** and **ATTENDANTS**, the Entry Supervisor will know the following:

- Confined space entry permits
- Permit spaces
- Activation of rescue
- Ventilation requirements
- Post entry duties

Note: Re-training or training modification is required whenever there is a change of assigned duties or permit space operation that has not been covered during previous training. All training will be documented and kept in the respective employee's personnel file and/or current training document book.

CONFINED SPACE PERMIT

Scope & Application: This TEN (10) step permit contains requirements for practices and procedures to protect employees in general industry from the hazards of entry into permit-required confined spaces. This form is designed to comply with OSHA 29 CFR 1910-146.
ALL areas must be filled out. You may not enter if "NO" would be a response in any section.

Date & Time Issued:_____ Date & Time Expires:_____

Job Site/Space ID:_____ Entry Supervisor:_____

Equipment to be worked on:_____

Work to be performed:_____

_____

Hot Permit Required: (Welding, Grinding, Etc.) Yes ( ) N/A ( )

Attendant(s):_____

Authorized Entrant(s):_____

1. Initial Atmospheric Checks:

Time	_____	
Oxygen	_____%	19.5-23.5
Explosive	_____ % L.E.L.	< 10
H(2)S	_____ PPM	< 10
CO	_____ PPM	< 35

Tester's Name/Signature: _____

2. Source Isolation Needed/Done (Lockout/Tagout):

	N/A	Yes
Electrical	( )	( )
Pumps Valves (water engulfment)	( )	( )
Force Mains Valves (water engulfment)	( )	( )
Other Hazardous Energies_____	( )	( )

3. Ventilation Modification: ( ) ( )

4. Atmospheric Check After Isolation & Ventilation:

Time	_____	
Oxygen	_____%	19.5-23.5
Explosive	_____ % L.E.L.	< 10
H(2)S	_____ PPM	< 10
CO	_____ PPM	< 35
CL	_____ PPM	< 1

Tester's Name/Signature: _____

5. Communication Procedures:

Voice ☐ Radio ☐ Hand Signals ☐ Other ☐_____

Rescue Procedures:

	N/A	Yes
• Call 911 (ask for confined space rescue)	( )	( )
• Contact Base (ask for confined space rescue)	( )	( )

6. Entry Supervisor, Entrant, and Entry Attendant

Successfully Completed Required Training: ( )

7. Equipment:

- Gas Monitor – Self Test Successful/Calibrated ( )
- Safety Harnesses and Lifelines for Entrant ( )
- Hoisting Equipment ( )
- Powered Communications ( )
- Protective Clothing (PPE) ( )

8. Continuous Monitoring Test(s) To Be Taken

Record Continuous Monitoring Results Every 2 Hours

	1st	2nd	3rd	4th	5th	6th
• Oxygen Percent 19.5% to 23.5%	____	____	____	____	____	____
• Lower Flammable Limit < 10% LEL	____	____	____	____	____	____
• Hydrogen Sulfide TLV < 10 PPM	____	____	____	____	____	____
• Carbon Monoxide TLV < 35 PPM	____	____	____	____	____	____
• Chlorine < 1 PPM	____	____	____	____	____	____
• _____	____	____	____	____	____	____

9. Report all special situations, unexpected problems, and equipment deficiencies to your Direct Supervisor immediately. Replace equipment when necessary.

REMARKS/POSSIBLE ADDITIONAL HAZARDS: _____

_____

_____

INSTRUMENT(S) USED	**MODEL AND/OR TYPE**	**SERIAL AND/OR UNIT #**
_____	_____	_____
_____	_____	_____

We have reviewed the work authorized by this permit and the information contained herein. Written instructions and safety procedures have been received and are understood. This permit is not valid unless all items above in each section are completed.

Pre-Entry Checklist Prepared By: _____

Reviewed By (Entry Supervisor): _____ (Printed Name) _____

_____ (Signature) _____

This permit is to be kept at the job site. Return job site copy to department office following job completion.

City of Shakopee

CONFINED SPACE IDENTIFICATION/LOCATIONS

Identification	Location	Classification (Circle One)
All Sanitary Manholes	Throughout City	Permit
All Storm Sewers	Throughout City	Permit
Pool Clean-Out	Sand Venture	Permit
Water Service Manhole	Tahpah Park	Permit
Surge Tank	Sand Venture	Non-Permit
Lift Stations???		Permit or Non-Permit
Pump Houses???		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit
		Permit or Non-Permit

Body Harness and Lanyard Monthly Inspection Report

(see back of this form for specific criteria)

Inspector: Date:

Instructions:

1. All parts of the body harness and its attachments must be inspected for wear and damage.
2. This √ symbol is for YES or OK. This x symbol is for NO or REPLACE.
3. Inspect and document monthly using criteria on the back of this form
4. Maintain the completed inspection report for three years.

Type (Harness/Lanyard)		Mfg.'s Serial Number	Harness Webbing and/or Leather	All Stitching	Rivets & Eyelets	D-Ring(s) & Buckle(s) if	Lanyard & Deceleration Device	Hook Safety Latch	Certification or Data Tag	INITIALS OF	COMMENTS

HARNESS INSPECTION

Webbing: Grasp the webbing with your hands 6 to 8 inches apart. Bend the webbing in an inverted "U". The surface tension resulting makes damaged fibers or cuts easier to detect. Follow this procedure for the entire length of the webbing, inspecting both sides of each strap. Look for frayed edges, broken fibers, pulled stitches, cuts, burns, and chemical damage.

D-Rings: Check D-rings for distortion, cracks, breaks, and rough or sharp edges. The D-ring should pivot freely.

Attachment of Buckles: Inspect for any unusual wear, frayed or cut fibers, or broken stitching of the buckle or D-ring attachments.

Tongue/Grommets: The tongue receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets. Webbing should not have additional holes punched.

Tongue Buckles: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on the frame. Check for distortion or sharp edges.

Friction and Mating Buckles: Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment point at the center bar.

LANYARD INSPECTION

When inspecting lanyards, begin at one end and work to the opposite end, slowly rotating the lanyard so that entire circumference is checked.

Hardware

a. ***Snaps:*** Inspect closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes.

b. ***Thimbles:*** The thimble must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble must be free of sharp edges, distortion, or cracks.

Steel Lanyard: While rotating the steel lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyard.

Web Lanyard: While bending webbing over a pipe, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.

Rope Lanyard: Rotation of the rope lanyard while inspecting from end-to-end for any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period.

Shock Absorber Pack: The outer portion of the pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to D-rings. Belts or lanyards should be examined for loose strands, rips, and deterioration.

Shock-Absorbing Lanyard: Shock-absorbing lanyards should be examined as a web lanyard (described in Item 3 above). However, also look for the warning flag or signs of deployment. If the flag has been activated, remove this shock-absorbing lanyard from service.

Section 12

Earthmoving Equipment

The City of Shakopee
EARTHMOVING EQUIPMENT

The City of Shakopee is intent on protecting all employees, vendors, outside contractors, and the public from the hazards of Earth Moving Vehicles. We as a City will train and implement this written program in compliance with…
29 CFR 1926.600
29 CFR 1926.602
Minnesota Statute 5207.1000

This policy is applicable to all Public Works employees operating and working around earthmoving equipment such as scrapers, loaders, crawler or wheel tractors, bulldozers, compaction equipment, off-highway trucks, graders, rubber tired skid-steer equipment, and backhoe, dump, or industrial trucks as described in the OSHA Standard and within this policy.

These rules apply to all operators and ground personnel working with and around the earthmoving equipment listed above.

The training program will include the following:

- General Safety
  - Working Around Equipment
  - Safe Operating Procedures
  - Working Around Utilities
  - Contractors
- Approaching Mobile Earth-Moving Equipment
  - Visual, Voice, or Signal Communication
  - Blind Spot Identification
- Daily Equipment Instruction
- Equipment Inspection
- Loading and Unloading
- Training/Testing

GENERAL SAFETY FOR EARTH-MOVING EQUIPMENT

Working Around Equipment

Working around earth-moving equipment is a hazardous part of your job. Because of this, the following are important to remember:

- Always back towards equipment.
- If you observe abnormalities (front wheels off ground and spinning etc.), notify operator immediately.
- Ensure communication is understood at all times.
- Keep all hand tools (shovels etc.) away from equipment.
- When marking a depth or spot for operator, move well away from area marked.
- Ensure ground or trench remains stable while working.
- Each employee working on the ground shall be provided with and required to wear a high visibility warning vest or other high visibility garments.
- Employees shall be trained initially before beginning work that exposes them to mobile earth-moving equipment. The employer shall retain employee training records for the duration of the project.
- Maintain visual contact with operator.
- Maintain a defensive stance at all times and assume that the operator cannot see you.
- **Never turn or work with your back to the equipment.**

Safe Operating Procedures (SOP)

Safe Operating Procedures of equipment, including traveling, backing, parking, maintenance, and operation:

- When entering earthmoving equipment, a “three-point-contact” method of entering vehicle must be utilized.
- All earthmoving equipment mentioned above shall have a service-braking system capable of stopping and holding the equipment fully loaded.
- All bi-directional machines, such as rollers, compactors, front-end loaders, bulldozers, and similar equipment, shall be equipped with a horn that is distinguishable from the surrounding noise level and operated as needed when the machine is moving in either direction. The horn shall be maintained in an operative condition.
- No employer shall permit earthmoving or compacting equipment (which has an obstructed view to the rear) to be used in reverse gear unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or an employee signals that it is safe to do so or is guided by a spotter (see also end of section).
- Operators must use safety belt at all times to ensure control over rough terrain.
- Provided personal protective equipment (PPE) must be worn at all times. This may include but not be limited to: hard hat, gloves, safety boots, and eye and ear protection.
- Never allow riders on equipment.
- Rules for traveling on roadways:
  - Ensure slow moving vehicle triangle is visible.
  - If equipment is equipped with bucket, ensure it is in the curled or closed position.
  - Be cautious of other drivers.
  - Follow all traffic laws and signs.
  - If equipped, ensure boom and swing locks are in position.
  - Maintain your “cushion of safety.”
  - Be aware of side and overhead clearances.
- Scissor points on all front-end loaders, which constitute a hazard to the operator during normal operation, shall be guarded.

- All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. These systems may use common components and shall be maintained in operable condition.
- Whenever visibility conditions warrant additional light, all vehicles or combinations of vehicles in use shall be equipped with at least two headlights and two taillights in operable condition.
- All vehicles, or combination of vehicles, shall have brake lights in operable condition regardless of light conditions.
- When mobile earthmoving equipment is operated during times of darkness or low light conditions, the equipment, if designed to function equally in both forward and reverse directions, such as compaction equipment, bulldozers, motor graders, loaders, and skid-steer loaders, shall be equipped with at least two headlights for forward travel and provided with adequate lighting.
- Maintain a cushion of safety around, behind, and underneath equipment.
- Ensure ground stability prior to operating in an area.
- Equipment with swing arms, such as a backhoe, must maintain a secure swing radius.
- When leaving equipment, turn off and take keys.

Working Around Utilities

- The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work shall be determined prior to opening an excavation. Utility companies or owners shall be contacted and advised of the proposed work and asked to establish the location of the utility underground installations prior to the start of actual excavation. When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by safe and acceptable means, e.g. hand dig.
- While the excavation is open, underground installations shall be protected, supported, or removed as necessary to safeguard employees.

Contractors

- If the mobile earthmoving equipment contractor exposes other contractor's employees to the hazard of mobile earthmoving equipment, the controlling employer, such as the general contractor or construction Supervisor, for the project shall coordinate a joint contractor-employee safety awareness meeting between contractors and employees onsite. The awareness meeting will consist of the following:
  - Communication Signals
  - Personal Protective Equipment
  - Personnel Responsibilities/Assignments
  - General Safety Rules
  - Significant Areas of Concern
- The employee safety awareness meeting shall be documented, identifying when the meeting was held and who attended, including a brief summary of what was reviewed. Documentation shall be retained for the duration of the project.

APPROACHING MOBILE EARTHMOVING EQUIPMENT

Visual, Voice, or Signal Communication

The safe work procedures on how to approach mobile earthmoving equipment, whether in use or idling, include:

- Vocal Communication
  A conversation yelled or otherwise, with the operator prior to approaching earthmoving equipment is required to ensure both operator and ground worker are aware of each other's movements at all time.
- Visual Communication
  Hand and arm signals must be reviewed before operations begin. These movements, along with vocal communication, are crucial when working in or around mobile earthmoving equipment.
- Operator Responsibilities
  The operator must adhere to the above. When approached by personnel from any angle, the operator must do the following.
  - Place the transmission in neutral.
  - Set the parking brake.
  - Indicate it is safe to approach the equipment by using assigned communication methods.

Blind spot identification

- It is the operator's responsibilities to know the locations of blind spots in their equipment. Ensure blind spots are checked before changing directions and when you may be unaware of workers movements on the ground.
- Operator must shift or lean as needed to check blind spots.
- Never assume that workers can see your equipment.
- When backing, use extreme caution and back *slowly*. Use a spotter if necessary. Spotter and operator must be familiar with mutually agreed-upon signals (see end of section).
- If the operator is ever in doubt, *stop!*
- Always be aware of side and overhead clearances; when in doubt, choose a different path of approach.

DAILY EQUIPMENT INSTRUCTION

Safe operating procedures and instruction for mobile earthmoving equipment is done on a continuous basis. Policies and procedures shall be reviewed periodically. Communication methods shall be reviewed prior to starting work.

EQUIPMENT INSPECTION

Vehicles shall be maintained in operable condition according to vehicle maintenance manuals and OSHA and DOT regulations. All earthmoving equipment in use shall be checked at the beginning of each job to assure that following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use (see form at end of section**):**

- Service brakes, including trailer brake connections, parking system (hand brake), and emergency stopping system
- Tires
- Horn
- Steering mechanism/coupling devices
- Seat belts
- Operating controls
- Lights
- Reflectors
- Windshield wipers
- Fire extinguishers
- Defrosters
- Misc. equipment/safety features

Note: All defects shall be corrected before the vehicle is placed in service.

LOADING AND UNLOADING

- Be familiar with equipment.
- Ensure permits are adequate and up to date (may require escort).
- Ensure ramps are secured and rated for equipment.
- Ensure ramps and trailer surfaces are clean.
- Load slowly.
- Use a spotter to assist in guiding when required.
- Ensure all hand signals are understood.
- If you cannot see spotter, *stop*, continue when spotter is back in view.
- After equipment is loaded, always put in park and apply brake.
- Always remove key.
- Secure equipment with chains or tie down cables. Use the four point system-tie down in four locations.
- Secure ramps.
- Remove slow-moving vehicle triangle when transporting.

TRAINING/TESTING

Operator must be confident in skills of operation:

- Visual, voice, and/or signal communication
- Control identification
- Securing vehicle when approached
- Identification of blind spots on equipment
- Conducting daily equipment inspections according to the manufacturer
- Safe and smooth operation when:
  - Travelling
  - Backing
  - Parking
  - Loading for transport
  - General operation

Training

- Training is required for all employees prior to beginning of scheduled project and is accomplished by the employee's Direct Supervisor or responsible party.

Testing

- After the classroom training requirements have been met, the Supervisor or responsible party may identify and train (hands-on operational test) those employees who lack the experience or ability required by Management.
- The road test (**see forms at end of section**) verifies the proficiency of the operator in the following:
  - Understands and performs equipment inspection prior to starting project.
  - Utilizes Personal Protective Equipment (PPE) as required.
  - Uses "three-point-contact" to enter equipment safely.
  - Checks for cleanliness (controls, inside cab, no loose tools).
  - Wears safety belt.
  - Checks blind spots by shifting or leaning in seat.
  - Shows proficiency and knowledge of all controls.
  - Maintains a "cushion of safety" when driving on public roads.
  - Follows recommended procedures for loading and unloading equipment.
  - Checks work site for ground stability prior to operation.
  - Checks overhead and side clearances at work site prior to operation.
  - Knows procedure when approached by a worker while operating machinery.

Equipment Road Test

BACKHOE	SATISFACTORY	NEEDS IMPROVEMENT	RE-TEST
Performs equipment inspection properly			
Uses Personal Protective Equipment (PPE) when appropriate			
Uses "three-point-contact" when entering and exiting the cab			
Keeps inside cab and controls clean and free of loose tools			
Wears safety belt			
Checks blind spots by shifting or leaning in seat			
Shows proficiency and knowledge of all controls pertaining to equipment			
Maintains an adequate "cushion of safety" when driving on a public road			
Follows recommended procedures while loading and unloading equipment			
Checks worksite for ground stability prior to operation			
Checks worksite for overhead and side clearances			
Familiar with boom swing radius			
Knows procedure when approached by a worker while operating machinery			

Date: _____ Operator: _____

Observer: _____

Comments:

_____

_____

Equipment Road Test

Skid Steer	SATISFACTORY	NEEDS IMPROVEMENT	RE-TEST
Performs Equipment Inspection Properly			
Uses Personal Protective Equipment (PPE) when appropriate			
Uses "three-point-contact" when entering and exiting the cab			
Keeps inside cab and controls clean and free of loose tools			
Wears safety belt			
Checks blind spots by shifting or leaning in seat			
Shows proficiency and knowledge of all controls pertaining to equipment			
Maintains an adequate "cushion of safety" when driving on a public road			
Follows recommended procedures while loading and unloading equipment			
Checks worksite for ground stability prior to operation			
Checks worksite for overhead and side clearances			
Knows procedure when approached by a worker while operating machinery			

Date: _____ Operator: _____

Observer: _____

Comments:

_____

_____

_____

Equipment Road Test

Dump Truck	SATISFACTORY	NEEDS IMPROVEMENT	RE-TEST
Performs Equipment Inspection Properly			
Uses Personal Protective Equipment (PPE) when appropriate			
Uses "three-point-contact" when entering and exiting the cab			
Keeps inside cab and controls clean and free of loose tools			
Wears safety belt			
Checks blind spots by shifting or leaning in seat			
Shows proficiency and knowledge of all controls pertaining to equipment			
Maintains an adequate "cushion of safety" when driving on a public road			
Checks worksite for overhead and side clearances			
Knows procedure when approached by a worker while operating machinery			

Date: _____ Operator: _____

Observer: _____

Comments:

_____

_____

_____

Equipment Road Test

Front End Loader	**SATISFACTORY**	**NEEDS IMPROVEMENT**	**RE-TEST**
Performs Equipment Inspection Properly			
Uses Personal Protective Equipment (PPE) when appropriate			
Uses "three-point-contact" when entering and exiting the cab			
Keeps inside cab and controls clean and free of loose tools			
Wears safety belt			
Checks blind spots by shifting or leaning in seat			
Shows proficiency and knowledge of all controls pertaining to equipment			
Maintains an adequate "cushion of safety" when driving on a public road			
Follows recommended procedures while loading and unloading equipment			
Checks worksite for ground stability prior to operation			
Checks worksite for overhead and side clearances			
Knows procedure when approached by a worker while operating machinery			

Date:_____Operator:_____

Observer:_____

Comments: _____

_____

_____

Equipment Road Test

Grader	SATISFACTORY	NEEDS IMPROVEMENT	RE-TEST
Performs Equipment Inspection Properly			
Uses personal protective equipment when appropriate			
Uses "three-point-contact" when entering and exiting the cab			
Keeps inside cab and controls clean and free of loose tools			
Wears safety belt			
Checks blind spots by shifting or leaning in seat			
Shows proficiency and knowledge of all controls pertaining to equipment			
Maintains an adequate "cushion of safety" when driving on a public road			
Follows recommended procedures while loading and unloading equipment			
Checks worksite for ground stability prior to operation			
Checks worksite for overhead and side clearances			
Knows procedure when approached by a worker while operating machinery			

Date: _____ **Operator:** _____

Observer: _____

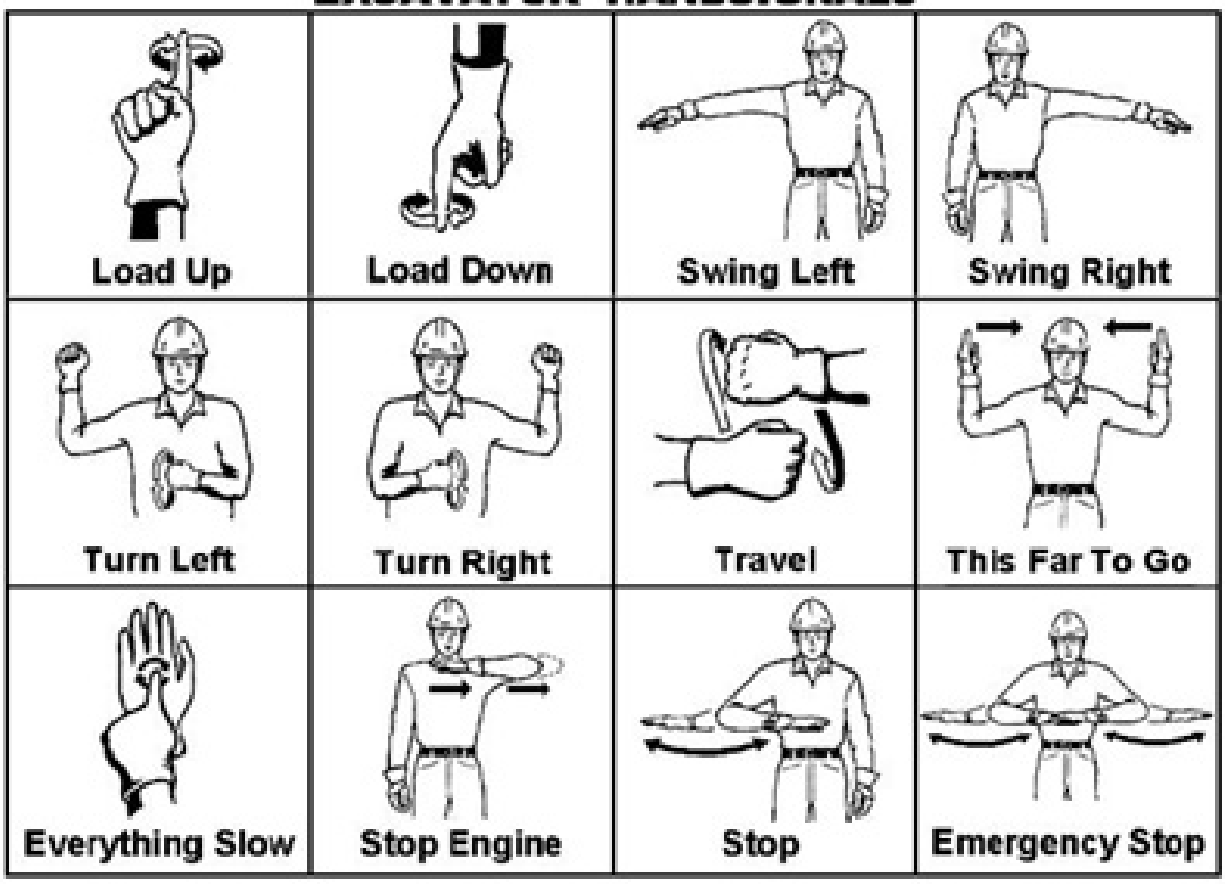
Comments:

_____

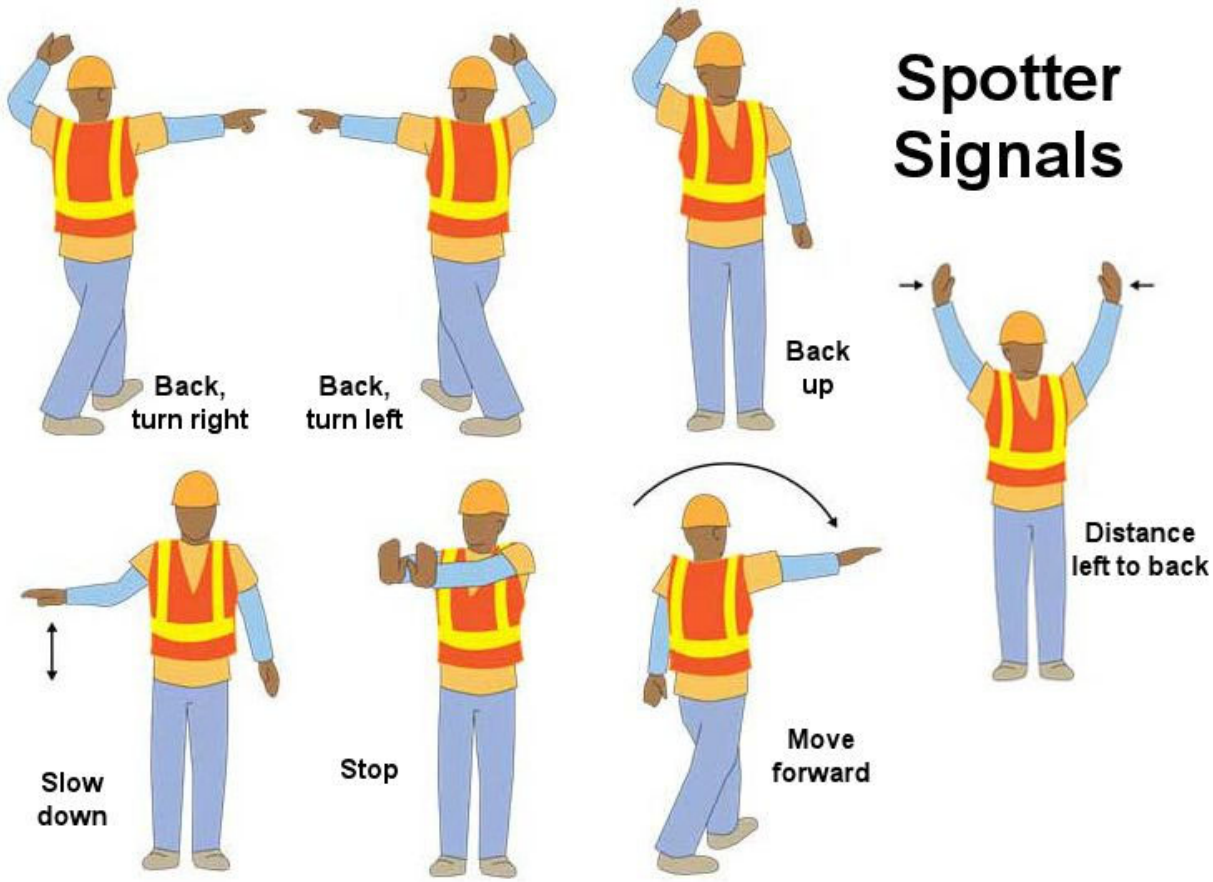
_____

_____

EXCAVATOR HANDSIGNALS



Spotter Signals



EQUIPMENT CHECKLIST

Equipment Type/ID _____ Date _____

Item	Condition	Specific Comments Regarding Defect
Previous Defects		
Brakes (parking, service & emergency)		
Steering		
Clutch		
Hydraulic System		
Electrical System		
Safety Equipment		
Fire Extinguisher		
Booms		
Stabilizers		
Windows		
Lights		
Fluid Levels		
Attachments		
Overall Condition		

Last Serviced	Date	Next Scheduled Service
Last Greased	Date	Next Scheduled Grease

Comments:

_____

_____

_____

_____

Defects Reported To: _____

Inspected By: _____

Section 13

Hearing Conservation

The City of Shakopee

HEARING CONSERVATION/NOISE EXPOSURE POLICY

The City of Shakopee is committed to complying with both the intent and spirit of the Occupational Noise Exposure standard outlined in 29 CFR 1910.95.

It is our intent to reduce the occupational noise that employees are exposed to below an 8-hour Time Weighted Average **(TWA)** of 85 decibels within our facilities (see below computations). When feasible, this will be done through engineering or administrative controls. Until these controls are in place and have proven to be effective, hearing protection will be required in specific areas for specific duties in the Maintenance and Public Works departments both on and off site while these duties are being performed.
The Safety Coordinator will monitor changes/additions to decibels above 85 in all areas to ensure current and future processes requiring hearing protection are identified and adequate protection is provided.

This policy is applicable to all employees exposed to decibels over 85 based on a time weighted average (TWA) as described in the OSHA Standard and within this policy.

The procedures outlined in this section of the manual are designed to protect the hearing of our employees and ensure that employees are and will remain in compliance with the above-mentioned standards. It is imperative that employees follow these procedures.

Computation of Employee Noise Exposure

Decibels	Hours
90	8
91	7.0
92	6.1
93	5.3
94	4.6
95	4
96	3.5
97	3.0
98	2.6
99	2.3
100	2
101	1.7
102	1.5
103	1.3
104	1.1
105	1
106	0.87
107	0.76
108	0.66
109	0.57

Decibels	Hours
110	0.5
111	0.44
112	0.38
113	0.33
114	0.29
115	0.25
116	0.22
117	0.19
118	0.16
119	0.14
120	0.125
121	0.11
122	0.095
123	0.082
124	0.072
125	0.063
126	0.054
127	0.047
128	0.041
129	0.036
130	0.031

Based on an eight-hour time-weighted average sound level (TWA)

HEARING CONSERVATION PROCEDURES

MONITORING NOISE

- The Coordinator or a Supervisor will ensure sound level readings in all areas are taken whenever:
  - a process changes
  - machines or equipment are added, deleted, or modified
  - jobs are added or changed
  - decibels are unclear entering a work site
- Employees will be notified whenever sound level readings will be conducted as well as the results of these readings. Readings taken or given from off-site jobs will be distributed to all affected employees. Results will be posted and available through the Safety Coordinator.

- Sound level readings will include, in addition to the decibel levels:
  - name of individual taking readings
  - time and dates of the readings
  - name, model, and serial number of instrument used
  - date and time of last instrument calibration

  Note: The Safety Coordinator will retain sound level readings indefinitely.

CONTROLS

Controls of noise reduction will be in the form of:

- Engineering controls
- Administrative controls
- Hearing protection

Engineering Controls

Periodically, the Safety Coordinator, Supervisor, or Department Head will conduct a Noise Hazard Survey of our facilities to determine what, if any, engineering controls could be instituted to reduce or confine noise.

The survey will determine if:

- walls/partial barriers are feasible and would be effective
- machines are in good repair (bearings, pumps, and equipment mufflers are in place, etc.)
- the use of technology advances is feasible
- relocation of machines would be effective

Administrative Controls

The Coordinator, a Supervisor, or Department Head will periodically review the requirements to:

- limit the number of employees exposed to intermittent noisy operations through scheduling
- eliminate unnecessary "spike" noise
- limit the duration and determine the timing of noisy operations

Hearing Protection

The Coordinator, a Supervisor, or Department Head will be held responsible to ensure all employees are provided with and wear the appropriate hearing protection ***when and where required.*** The proper use, care, fitting, and cleaning requirements should be reviewed with all employees.

- Current Hearing Protection Available:
  - Foam Plugs
  - Muffs
- Employees that fail to wear hearing protection or wear it improperly will be subject to disciplinary action.
- Hearing protectors will be provided, at no cost, to all employees working in areas above 85db TWA. The below describes in detail the use, care, fitting, cleaning, and how to determine attenuation of each protector available. If hearing protection becomes worn or damaged, it must be replaced.

We are always working on reducing workplace decibels by:

- Monitoring the nature of required tasks in all areas/locations.
- Administrating controls limiting duration and frequency of machine/equipment usage.
- Engineering controls including walls, barriers, etc.

In areas where the levels in ***both*** time and decibels are exceeded, those affected employees must also be eudiometrically tested in accordance with this section (see **first page of this section** for computations).

Hearing protection must also be worn when the decibels are above 85 or when noise hazards are unclear. All hearing protection issued is adequate in protecting employees during all jobs requiring protection.

The proper use, care, fitting, and cleaning of hearing protectors

USE

All hearing protectors are designed to reduce (not eliminate) the amount of harmful, continuous noise that reaches the inner ear. This is called "attenuation" and is indicated by a Noise Reduction Rating (NRR) number found on the package or box that contains the hearing protectors (the greater the number, the more effective the protection). In order to select the best protection for you, refer to the sound level readings in your area.

Example: If your work area has a reading of 100db, your will need hearing protection with a N.R.R. of 15 (or more) to reduce the noise level to the minimum acceptable level of 85db. Published NRR's should be 5db to 7db to account for hearing protection "leaks" from talking, facial shifts, etc. Using our example of a work area with 100db sound readings and a selection of ear plugs with a NRR of 30 the math would look like this:
100db + (5-7db) - (a NRR of 30) = 75-77db

Most areas in our facilities are well below 100db sound levels. Consequently, the selection of hearing protection based on the above math example should be sufficient.
All hearing protection available offers adequate protection in all areas. Choice need only be based on comfort.

CARE

Ear Muffs:

Although this type of protector can be used over and over again, care should be taken to keep the device clean as well as to protect the soft, pliable "muff" area that rests against the head. When this shows signs of deterioration such as cracking, peeling, or becoming brittle, discard and replace cushions.

Plugs-foam:

Since the earplugs are of the compressible foam variety, care should be taken to have clean hands when inserting this type of earplug to prevent/minimize contaminants from entering the ear canal. When compressibility is diminished or the plugs are dirty, discard and get a new pair.

FITTING

Ear Muff:

- Place both ear pieces over the ear so that both ears are encased within the ear piece.
- Adjust the headband so it is snug against the skull.

Plugs-foam:

- Compress the earplug by firmly rolling the plug between the thumb and forefinger.
- Insert the plug into the ear canal while pulling the top of the ear upward and outward.
- Release the top of the ear after plug insertion and allow the plug to expand filling the ear canal.

CLEANING

Ear Muffs:

Earmuffs can and should be cleaned with a solution of warm water, a mild detergent and a damp cloth. Do not immerse in water. Gently wipe the pads and dry.

Plugs-foam:

DO NOT CLEAN**.** When plugs are dirty, discard and replace with new ones.

AUDIOMETRIC TESTING

If at some point employees may be exposed to noise levels of 90 decibels or greater over a **TWA** of 8 hours, they must have an audiometric test:

- Annually, and/or
- Within 6 months of exposure

Baseline Audiograms

Baseline audiograms are generally the results of the first audiometric tests obtained on an employee. To ensure accuracy, we must ensure the employee has not been exposed to workplace sound for at least 14 hours before testing unless hearing protection can be worn consistently. An annual audiogram may be substituted for a baseline audiogram (provided a baseline has been established) when in the judgment of the audiologist, otolaryngologist, or physician who is evaluating the audiogram:

- The standard threshold shift revealed by the audiogram is persistent; or
- The hearing threshold shown in the annual audiogram indicates significant improvement over the baseline audiograms.

Standard Threshold Shifts

A Standard Threshold Shift (STS) is a change in hearing threshold relative to the baseline audiogram of an average of 10 decibels or more at 2000, 3000, and 4000 Hz in either ear.

Annual Audiogram
Each at risk employee will have an audiogram performed every 12 months. This audiogram will be compared to the employee's baseline to determine its validity and to define whether a STS has occurred.
Note: If an employee suffers a STS, we may require a retest within 30 days and consider the results of the retest as the annual audiogram.

Evaluation
An audiologist, otolaryngologist, or physician who will determine whether there is a need of further evaluation will review problem audiograms. If a comparison of the annual audiogram to the baseline audiogram indicates a STS has occurred, the Safety Coordinator will notify the employee, in writing, within 21 days of the determination. Employees not using hearing protection will be fitted with protectors, trained in their use and care, and required to use them. Employees already required to use hearing protection will be refitted and retrained in their use, and if necessary, provided with protectors offering greater attenuation. If additional testing is deemed appropriate by our physician or medical pathology of the ear caused or aggravated by wearing of hearing protectors is suspected, the employee will be referred for an annual audiological evaluation or otological examination. If the suspected medical pathology of the ear is unrelated to the use of hearing protection, the employee will be informed of the need for an otological examination.

TRAINING

All employees, regardless of their exposure to noise levels at or above an 8 hour TWA of 85 decibels including all shop and off site personnel will annually attend a training session on our hearing conservation practices and procedures. This training will consist of the following:

- How we hear
- How sound is measured (db and Hz)
- Effects of noise and early warning signs
- Purpose of hearing protectors
- Various types and respective advantages and disadvantages
- Attenuation of each type
- Selection, how to fit, use, and clean
- Purpose of baseline and annual audiometric tests
- How test is conducted
- Disposition of test results

In addition to the training listed above, any employee that experiences a STS, will receive *retraining* in the following:

- Purpose and selection of hearing protectors
- Various types and attenuation of types
- Matching sound level reading at employee's work area with attenuation of type selected
- How to fit, use, and clean type selected

RECORD RETENTION

All employees and/or their designated representatives will have access to copies of 29 CFR 1910.95 and records required by this standard as outlined in this standard.
All audiometric test records will be kept in each employee's medical file for the duration of the employee's employment. Re-training records required when a STS occurs will also be kept in the employee's medical file.
Annual training records will be kept in the Training Manual.
The employee's exposure measurement (sound level readings) is kept indefinitely by the Safety Coordinator. A copy of the current readings is located at the end of this section.

Section 14

Respiratory Protection

The City of Shakopee
RESPIRATORY PROTECTION POLICY

The City of Shakopee is committed to complying with both the intent and spirit of the Respiratory Protection Standard as outlined in 29 CFR 1910.134. This policy is applicable to all employees within the maintenance and Public Works departments as described in the OSHA Standard and within this policy. This program is not applicable to the Police and Fire Departments who have separate programs to ensure their specific compliance requirements.

It is our intent to eliminate atmospheric contaminants whenever possible. Every effort will be made to reduce the amount of contaminants to well below the permissible exposure levels (PEL) or below the published PEL for an 8- hour time weighted average. When this is not possible, contract labor will be utilized on a per job basis.
Since the City of Shakopee is committed to eliminating the possibility of overexposure to known contaminants, respirators currently are not required during any of our operations. However, we may allow the use of respirators on a voluntary basis (with permission).

One strap dust masks are not respirators and are recommended and available for use by employees during certain jobs. Two strap respirators can also be used after distribution and clear understanding of APPENDIX D (**see form at end of section**).

Any jobs where the use of respirators may be required must be evaluated, discussed, and resolved according to the following:
1. Reviewing the Material Safety Data Sheets
2. Reviewing possible engineering solutions
3. Reviewing possible administrative solutions
4. Outsourcing the job

APPENDIX D from 29 CFR 1910.134 has been provided to employees wearing respirators on a voluntary basis.

Employees are encouraged to discuss any exposure concerns with their Direct Supervisor and Safety Coordinator before starting any job where irritant chemicals are utilized.

NOTE: A minimum of the above and APPENDIX D (see end of this section) must be reviewed with employees whom may use a dust mask as part of their duties.

RESPIRATORY REQUIREMENTS

(Those using negative pressure respirators for voluntary purposes)

- Written standard operating procedures governing the selection and use of respirators.
- Respirators shall be selected on the basis of irritants to which the worker is exposed.
- The user shall be instructed and trained in the proper use of respirators and their limitations.
- Respirators shall be regularly cleaned and disinfected. Those used by more than one worker shall be thoroughly cleaned and disinfected after each use.
- Respirators shall be stored in a convenient, clean, and sanitary location.
- Respirators used routinely shall be inspected during cleaning. Worn or deteriorated parts shall be replaced.
- Surveillance of work area conditions and degree of employee exposure or stress shall be maintained.
- Regular inspection and evaluation to determine the continued effectiveness of the program shall be performed by the Safety Coordinator.
- Persons assigned to tasks recommending use of respirators shall be evaluated to determine if they are physically able to perform the work and use the equipment. The local physician shall determine what health and physical conditions are pertinent. The respirator user's medical status should be reviewed periodically (for instance, annually).
- Respirators shall be selected from among those jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health under the provision of 42 CFR Part 84.

Selection of Respirators:
The selection of effective respirators cannot be made without identifying the irritants and the duties in our facilities where these irritants occur. These are listed below:

Duties	Irritants
Touchup Painting	Paint Fumes/Particulates
Grinding	Dust/Particulates
Welding	Fumes/Particulates
Sanding	Dust/Particulates
Cutting	Fumes/Dust/Particulates

The types of respirators we use for these duties are dust masks and possibly Negative pressure masks (although not currently in use).

Respirator Instructions provided by the manufacturer and shipped with each respirator must be reviewed before use.

The specific irritants known to be present while working in individual areas was the criteria used in the selection of respirators.

TRAINING

All employees assigned to a work area requiring use of a respirator must be trained in the following prior to their actually assuming their duties:

- Instruction on the possible respiratory irritants on their job and in their assigned area.
- Training on the selected respirators capabilities and limitations.
- Instruction and training in actual use situations, so that the employee has the opportunity to handle the respirator, fit it properly, test its seal, wear it in normal atmospheres for a familiarity period, and to wear it in a test atmosphere.
- Training will be conducted initially, reviewed annually, and any time the respirator policy or program is updated or changed.
- Half mask respirators may have to be selected due to the requirements for wearing safety glasses. Full face-piece respirators cannot be properly sealed to the face if the bows of glasses extend through the sealing edge of the respirator. OSHA states: "If corrective spectacles or goggles are required, they shall be worn so as not to affect the fit of the face-piece. Proper selection of equipment will minimize or avoid this problem." 29 CFR 1910.134 also states: "Wearing of contact lenses in contaminated atmospheres with a respirator shall not be allowed."
- Fit Test
  - Annually, or whenever an employee selects another type of respirator, a fit test in a test atmosphere must be performed. This ensures that employee establishes a good seal with the particular respirator being used. This test will be accomplished by using bitrix, saccharin, or irritating smoke. Instructions for accomplishing either test and fit testing document are located at the end of this section.
  - Each time a respirator is used, a negative and positive pressure test must be undertaken. Instructions for performing these tests are contained in the manufacturer's instructions issued to each respirator user. In general, these procedures are listed below.

Positive Pressure Test:
Cover the exhalation valve with the palm of the hand and exhale gently. If a slight positive pressure can be built up inside the mask without evidence of outward air leakage, there is a good seal.

Negative Pressure Test:
Cover the inlet(s) with the palm of the hand(s) and inhale. If the mask collapses slightly and remains so for approximately 5 to 10 seconds, a good seal is achieved. On twin cartridge respirators this is usually performed with the cartridges removed, re-installing the cartridges after a seal has been established, without removing the mask. Beards and thick sideburns can cause fit problems.

Cleaning, Inspection and Care of Respirators:
Respirators are to be cleaned by the user regularly. Manufacturer's instructions should be followed; however, the following procedures are generally acceptable:

- Remove filters and retainers.
- Wash face-piece and retainers with a mild detergent.
- 2 tablespoons of household bleach per gallon of water may be used as a sanitizer.
- Allow mask and retainers to dry before storage.

Inspection of respirators should be performed before and after use. The condition of face-pieces, headbands, valves, connecting tubes and canisters should be checked for wear and condition.
Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable.
Note: Any respirator showing signs of excessive wear, broken, torn, or missing components or any other condition that might compromise the effectiveness of the respirator must be exchanged for a good respirator with the Program Monitor immediately.
Filters must be changed when:

- The End of Life Indicator (ELI) indicates that it should be changed
- After every use, if wet or clogged
- Breathing becomes difficult
- The wearer smells, tastes, or otherwise senses contaminants (provided a good face-to-mask seal is preserved)
- The filters appear excessively dirty or discolored
- Dizziness or other distress occurs
- Respirator becomes damaged
- Face-mask seal becomes broken and cannot be re-established and maintained.
- During the established annual change-out schedule

Only experienced persons shall do replacement/repairs with parts designed for the respirator. No attempt shall be made to replace components or to make adjustment or repairs beyond the manufacturer's recommendations.

Modification of any respirator is strictly forbidden. No attempt shall be made to replace components or to make adjustment or repairs beyond the manufacturer's recommendations and then only with parts designated for the respirator.
Respirators should be stored in the plastic bag supplied by the Program Monitor. In turn, the respirator in this container will be stored in a clean, dry place, protected from heat, cold, dust etc. Respirators should be placed in storage so that face-piece and exhalation valve will rest in a normal position so the function will not be impaired by the elastomer setting in an abnormal position. Care should be taken so that nothing is placed on top of a stored respirator.

Medical Surveillance:
29 CFR 1910.134 (b)(10) requires that persons should not be assigned to tasks requiring use of respirators unless it has been determined they are physically able to perform the work and use the equipment. A medical professional shall determine what health and physical conditions are pertinent. The respirator user's medical status should be reviewed periodically.
Each employee required to wear a respirator or any employee that incidentally wears a respirator must fill out an on-line or paper "Respirator Medical Questionnaire". If recommended, a physical exam will be required of all respirator wearers to be paid for and scheduled by the City of Shakopee. An additional questionnaire and physical is required at the discretion of City Management or the employee. All contents of the medical questionnaire and physical are confidential with access to these records governed by 29 CFR 1910.1020.

Respirator Program Monitor:

The Safety Coordinator has been designated as the respiratory Program Monitor. The duties are:

- Periodically and randomly test and document the atmospheric conditions in targeted areas for contaminants and match this value with the PEL.
- Review and assess the respirator selection procedure.
- Conduct and document initial employee respirator training with new employees to include irritant identification, respirator selection, respirator capabilities and limitations, fit testing (both positive and negative pressure as well as irritating smoke/banana oil tests), and a demonstration of cleaning, inspection and storage of respirators.
- Randomly inspect work areas to ensure compliance with the respiratory program. Inspection must be documented.
- Randomly inspect respirators in use for integrity, wear and tear, cleanliness, and proper storage techniques. This includes airlines, air quality, and date of filter changes on air supplied respirators. Inspection must be documented.
- Monitor medical surveillance program to ensure that employee's assigned respirators have current medical questionnaires and physical in their medical files.
- Ensure that an adequate amount of respirators and proper filters are always on hand.
- Semi-annually review the entire respirator program and procedures for accuracy, updating, and revising as necessary. Reviews must be documented.

Appendix D to Sec. 1910.134 (Mandatory)
Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, of if you provide your own respirator, you need to take certain precautions to be sure that respirator itself does not present a hazard.

You should do the following:

1. Read and adhere to all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998]

RESPIRATOR FIT TEST RECORD

EMPLOYEE _____ DATE:_____

EMPLOYEE #: _____

EMPLOYEE JOB TITLE: _____

EMPLOYER: _____

LOCATION / DEPARTMENT: _____

RESPIRATOR SELECTED: _____
(Make, Model, Style and Size)

CONDITIONS WHICH COULD AFFECT RESPIRATOR FIT:

- ☐ CLEAN SHAVEN
- ☐ 1-2 DAY BEARD GROWTH
- ☐ 2+ DAY BEARD GROWTH
- ☐ MOUSTACHE/FACIAL SCAR
- ☐ DENTURES ABSENT
- ☐ GLASSES
- ☐ NONE

COMMENTS:_____

_____

FIT CHECKS:

NEGATIVE PRESSURE	☐ PASS	☐ FAIL	☐ NOT DONE
POSITIVE PRESSURE	☐ PASS	☐ FAIL	☐ NOT DONE

FIT TESTING: QUALITATIVE – SMOKE / BITREX/SACCARIN PASS FAIL

QUANTITATIVE-_____ PASS FAIL

OTHER DOCUMENTATION YES____ NO____

RETEST DATE_____

EMPLOYEE ACKNOWLEDGEMENT OF TEST RULES/RESULTS:

EMPLOYEE SIGNATURE:_____ DATE:_____

TEST CONDUCTED BY: _____ DATE:_____

FIT TESTING PROCEDURES

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

(3) Turning head side to side. Standing in place, the subject shall slowly turn their head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

(4) Moving head up and down. Standing in place, the subject shall slowly move their head up and down. The subject shall be instructed to inhale when looking toward the ceiling.

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

“When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.”

(6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT)

(7) Bending over. The test subject shall bend at the waist as if they were to touch their toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.

(8) Normal breathing. Same as exercise (1).

Section 15

Trenching

The City of Shakopee
TRENCHING/EXCAVATING POLICY

The City of Shakopee is committed to complying with both the spirit and intent of the Trenching/Excavation Standard as outlined in 29 CFR 1926.650-.652

Although the city has committed to have our trenching work is contracted out, it is imperative employees are aware of the proper soil analysis, protective system implementation, and work procedures as outlined in this Section. This policy and procedures are applicable to those Public Works employees who may work around trenches/excavations

The requirements/procedures contained in this document will address the following:

- Definitions
- Soil Typing
- Protective Systems
- Hazards
- Inspections
- Rescue Operations
- Contractors
- Competent Person
    - Soil Analysis Procedures
    - Protective Systems Design/Diagrams
    - Inspections

SOIL TYPING

This section describes a method of classifying soil and rock deposits based on site and environmental condition as well as the structure and composition of the earth deposits. The section contains definitions, sets forth requirements, and describes acceptable visual and manual tests for use in classifying soils.

"Type A" means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kpa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

- The soil is fissured; or
- The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
- The soil has been previously disturbed; or
- The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V or greater) or
- The material is subject to other factors that would require it to be classified as a less stable material.

"Type B" means:

- Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kpa) but less than 1.5 tsf (144 kpa); or
- Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam; or
- Previously disturbed soils except those which would otherwise be classed as Type C soil; or
- Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
- Dry rock that is not stable; or
- Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

"Type C" means:

- Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kpa) or less; or
- Granular soils including gravel, sand, and loamy sand; or
- Submerged soil or soil from which water is freely seeping; or
- Submerged rock that is not stable, or
- Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper; or
- Soil that has been previously disturbed.

Note: Because our work is done within City limits, most soil has been pre-disturbed and should be considered a type C soil.

PROTECTIVE SYSTEMS

SHORING

Shoring is the provision of a support system for trench faces used to prevent movement of soil, underground utilities, roadways, and foundations. Shoring or shielding is used when the location or depth of the cut makes sloping back to the maximum allowable slope impractical. Shoring systems consist of posts, wales, struts, and sheeting. There are two basic types of shoring: timber and aluminum hydraulic.

HYDRAULIC SHORING

The trend today is toward the use of hydraulic shoring, a prefabricated strut and/or wale system manufactured of aluminum or steel. Hydraulic shoring provides a critical safety advantage over timber shoring because workers do not have to enter the trench to install or remove hydraulic shoring. Most hydraulic systems:

- Are light enough to be installed by one worker.
- Are gauge-regulated to ensure even distribution of pressure along the trench line.
- Can have their trench faces "preloaded" to use the soil's natural cohesion to prevent movement.
- Can be adapted easily to various trench depths and widths.
- All shoring should be installed from the top down and removed from the bottom up. Hydraulic shoring should be checked at least once per shift for leaking hoses and/or cylinders, broken connections, cracked nipples, bent bases, and any other damaged or defective parts.

PNEUMATIC SHORING works in a manner similar to hydraulic shoring. The primary difference is that pneumatic shoring uses air pressure in place of hydraulic pressure. A disadvantage to the use of pneumatic shoring is that an air compressor must be on-site.

- **Screw Jacks**: Screw jack systems differ from hydraulic and pneumatic systems in that struts of a screw jack system must be adjusted manually. This creates a hazard because the worker is required to be in the trench in order to adjust the strut. In addition, uniform "preloading" cannot be achieved with screw jacks and their weight creates handling difficulties.
- **Single-Cylinder Hydraulic Shores**: Shores of this type are generally used in a water system, as an assist to timber shoring systems, and in shallow trenches where face stability is required.
- **Underpinning:** This process involves stabilizing adjacent structures, foundations, and other intrusions that may have an impact on the excavation. As the term indicates, underpinning is a procedure in which the foundation is physically reinforced. Underpinning should be conducted only under the direction and with the approval of a registered professional engineer.

TRENCH BOXES (most effective)

Trench boxes are different from shoring because, instead of shoring up or otherwise supporting the trench face, they are intended primarily to protect workers from cave-ins and similar incidents. The excavated area between the outside of the trench box and the face of the trench should be as small as possible. The space between the trench boxes and the excavation side are backfilled to prevent lateral movement of the box. Shields may not be subjected to loads exceeding what the system was designed to withstand.

SLOPING AND BENCHING.

SLOPING. Maximum allowable slopes for excavations less than 20 feet (6.09 m) based on soil type and angle to the horizontal are as follows:

Soil type	***Height/Depth ratio***	***Slope angle***
Stable Rock	Vertical	90°
Type A	3:4	53°
Type B	1:1	45°
Type C	3:2	34°
Type A (short-term)	1:2	63°
(For a maximum excavation depth of 12 feet)		

BENCHING. There are two basic types of benching: simple and multiple. The type of soil determines the horizontal to vertical ratio of the benched side.
As a general rule, the bottom vertical height of the trench must not exceed 4 ft (1.2 m) for the first bench. Subsequent benches may be up to a maximum of 5 ft (1.5 m) vertical in Type A soil and 4 ft (1.2 m) in Type B soil to a total trench depth of 20 ft (6.0 m). All subsequent benches must be below the maximum allowable slope for that soil type. For Type B soil the trench excavation is permitted in cohesive soil only.

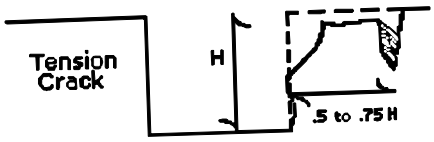
COMBINED USE. Trench boxes are generally used in open areas, but they also may be used in combination with sloping and benching. The box should extend at least 18 in (0.45 m) above the surrounding area if there is sloping toward excavation. This can be accomplished by providing a benched area adjacent to the box. Earth excavation to a depth of 2 ft (0.61 m) below the shield is permitted, but only if the shield is designed to resist the forces calculated for the full depth of the trench and there are no indications while the trench is open of possible loss of soil from behind or below the bottom of the support system. Conditions of this type require observation on the effects of bulging, heaving, and boiling as well as surcharging, vibration, adjacent structures, etc., on excavating below the bottom of a shield. Careful visual inspection of the conditions mentioned above is the primary and most prudent approach to hazard identification and control.

Remember, protective systems are required in a trench deeper than 5 feet.

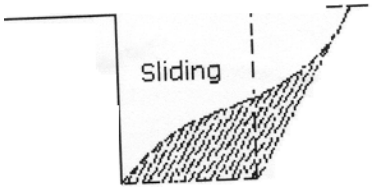
HAZARDS OF COLLAPSE

TRENCH FAILURE A number of stresses and deformations can occur in an open cut or trench. For example, increases or decreases in moisture content can adversely affect the stability of a trench or excavation. The following describes some of the more frequently identified causes of trench failure.

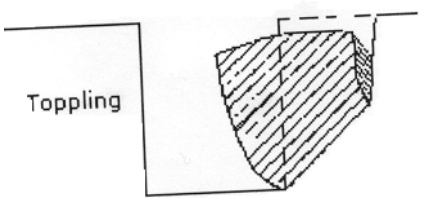
TENSION CRACKS usually form at a horizontal distance of 0.5 to 0.75 times the depth of the trench, measured from the top of the vertical face of the trench. See the accompanying drawing for additional details.



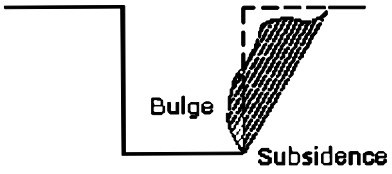
SLIDING (or sloughing) may occur as a result of tension cracks, as illustrated below.



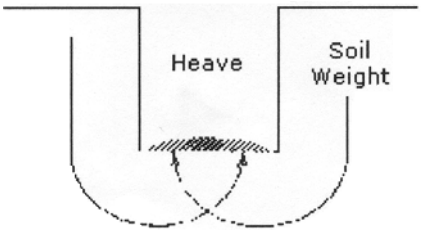
TOPPLING in addition to sliding, tension cracks can cause toppling. Toppling occurs when the trench's vertical face shears along the tension crack line and topples into the excavation.



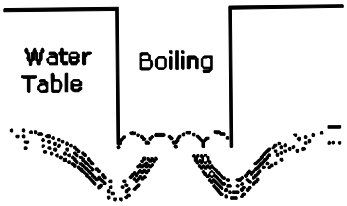
SUBSIDENCE AND BULGING. An unsupported excavation can create an unbalanced stress in the soil, which, in turn, causes subsidence at the surface and bulging of the vertical face of the trench. If uncorrected, this condition can cause face failure and entrapment of workers in the trench.



HEAVING OR SQUEEZING. The downward pressure created by the weight of adjoining soil causes bottom heaving or squeezing. This pressure causes a bulge in the bottom of the cut, as illustrated in the drawing above. Heaving and squeezing can occur even when shoring or shielding has been properly installed.



BOILING is evidenced by an upward water flow into the bottom of the cut. A high water table is one of the causes of boiling. Boiling produces a "quick" condition in the bottom of the cut, and can occur even when shoring or trench boxes are used.



UTILITIES. Utility companies must be contacted to determine the location of all lines, pipes, cables, etc. The number to call in the state of Minnesota is **811.** When all utilities are marked, excavation can begin.

TEMPORARY SPOIL. Temporary spoil must be placed no closer than 2 ft (0.61 m) from the surface edge of the excavation, measured from the nearest base of the spoil to the cut. This distance should not be measured from the crown of the spoil deposit. This distance requirement ensures that loose rock or soil from the temporary spoil will not fall on employees in the trench. Spoil should be placed so that it channels rainwater and other run-off water away from the excavation. Spoil should be placed so that it cannot accidentally run, slide, or fall back into the excavation.

PERMANENT SPOIL. Permanent spoil should be placed at some distance from the excavation. Permanent spoil is often created where underpasses are built or utilities are buried. The improper placement of permanent spoil, e.g. insufficient distance from the working excavation, can cause an excavation to be out of compliance with the horizontal-to-vertical ratio requirement for a particular excavation. This can usually be determined through visual observation. Permanent spoil can change undisturbed soil to disturbed soil and dramatically alter slope requirements.

SURFACE CROSSING OF TRENCHES. Surface crossing of trenches should be discouraged; however, if trenches must be crossed, such crossings are permitted only under the following conditions:

- Vehicle crossings must be designed by and installed under the supervision of a registered professional engineer.
- Walkways or bridges must be provided for foot traffic. These structures shall:
  - have a safety factor of 4
  - have a minimum clear width of 20 in (0.51 m)
  - be fitted with standard rails and
  - extend a minimum of 24 in (.61 m) past the surface edge of the trench.

INGRESS AND EGRESS. Access to and exit from the trench require the following conditions:

- Trenches 4 ft or more in depth should be provided with a fixed means of egress.
- Spacing between ladders or other means of egress must be such that a worker will not have to travel more than 25 ft laterally to the nearest means of egress.
- Ladders must be secured and extend a minimum of 36 in (0.9 m) above the landing.
- Metal ladders should be used with caution, particularly when electric utilities are present.

EXPOSURE TO VEHICLES. Procedures to protect employees from being injured or killed by vehicle traffic include:

- Providing employees with and requiring them to wear warning vests or other suitable garments marked with or made of reflectorized or high-visibility materials.
- Requiring a designated, trained flag person along with signs, signals, and barricades when necessary.

EXPOSURE TO FALLING LOADS. Employees must be protected from loads or objects falling from lifting or digging equipment. Procedures designed to ensure their protection include:

- Employees are not permitted to work under raised loads.
- Employees are required to stand away from equipment that is being loaded or unloaded.
- Equipment operators or truck drivers may stay in their equipment during loading and unloading if the equipment is properly equipped with a cab shield or adequate canopy.

WARNING SYSTEMS FOR MOBILE EQUIPMENT. The following steps should be taken to prevent vehicles from accidentally falling into the trench:

- Barricades must be installed where necessary.
- Hand or mechanical signals must be used as required.
- Stop logs must be installed if there is a danger of vehicles falling into the trench.
- Soil should be graded away from the excavation; this will assist in vehicle control and channeling of run-off water.

HAZARDOUS ATMOSPHERES AND CONFINED SPACES. Employees shall not be permitted to work in hazardous and/or toxic atmospheres. Such atmospheres include those with:

- Less than 19.5% or more than 23.5% oxygen
- A combustible gas concentration greater than 20% of the lower flammable limit

When testing for atmospheric contaminants, the following should be considered:

- Testing should be conducted before employees enter the trench and should be done regularly to ensure that trench remains safe.
- The frequency of testing should be increased if equipment is operating in the trench.
- Testing frequency should also be increased if welding, cutting, or burning is done in the trench.

EMERGENCY RESCUE EQUIPMENT. Emergency rescue equipment is required when a hazardous atmosphere exists or can reasonably be expected to exist. Requirements are as follows:

- Respirators must be of the type suitable for the exposure. Employees must be trained in their use and a respirator program must be instituted.
- Attended (at all times) lifelines must be provided when employees enter bell-bottom pier holes, deep confined spaces, or other similar hazards.
- Employees who enter confined spaces must be trained.

STANDING WATER AND WATER ACCUMULATION. Methods for controlling standing water and water accumulation must be provided and should consist of the following if employees are permitted to work in the excavation:

- Use of special support or shield systems approved by a registered professional engineer.
- Water removal equipment such as well pointing used and monitored by a competent person.
- Safety harnesses and lifelines used in conformance with 29 CFR 1926.104.
- Surface water diverted away from the trench.
- Employees removed from the trench during rainstorms.
- Trenches carefully inspected by a competent person after each rain and before employees are permitted to re-enter the trench.

INSPECTIONS

Inspections shall be made by a competent person and should be documented. The following guide specifies the frequency and conditions requiring inspections:

- Daily and before the start of each shift,
- As dictated by the work being done in the trench,
- After every rainstorm
- After other events that could increase hazards, such as snowstorms, windstorms, thaws, earthquakes, etc.,
- When fissures, tension cracks, sloughing, undercutting, water seepage, bulging at the bottom, or other similar conditions occur,
- When there is a change in the size, location, or placement of the spoil pile, and
- When there is any indication of change or movement in adjacent structures.

Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard-increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated.
NOTE: SEE INSPECTION DOCUMENT IN COMPETENT PERSON PACKET AND AT THE END OF THIS SECTION.

Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.
Walkways shall be provided where employees or equipment are required or permitted to cross over excavations. Guardrails which comply with 1926.502 shall be provided where walkways are 6 ft (1.8 m) or more above lower levels.

RESCUE OPERATIONS

Emergency rescue equipment, such as a breathing apparatus, a safety harness and line, or a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment shall be attended when in use. Employees entering bell-bottom pier holes, or other similar deep and confined footing excavations, shall wear a harness with a lifeline securely attached to it. The lifeline shall be separate from any line used to handle materials, and shall be individually attended at all times while the employee wearing the lifeline is in the excavation.

In the event of a collapse or cave-in in which a person is trapped or buried, no attempt should be made at rescue. Call 911 immediately and wait for trained rescue personnel to arrive. Entry into a collapsed trench may result in further collapse and additional injuries/fatalities may occur.

TRAINING

Training will be conducted initially and then at Management discretion.

CONTRACTORS

All contractors working on site who may expose City employees to the hazards associated with trenching shall comply with the rules set forth in this document. In addition, a contractor's meeting (see format in Earthmoving Equipment program) must be held to determine safe operating procedures.

COMPETENT PERSON REQUIREMENTS

The designated competent person should have and be able to demonstrate the following:

- Training, experience, and knowledge of:
  - soil analysis
  - use of protective systems
  - requirements of 29 CFR Part 1926 Subpart P.
- Ability to detect:
  - conditions that could result in cave-ins
  - failures in protective systems
  - hazardous atmospheres
  - other hazards including those associated with confined spaces
- Authority to take prompt corrective measures to eliminate existing and predictable hazards and to stop work when required.

The Inspection form (see form at end of section) must be completed daily, after rain, and after any other circumstance where the trench has been adversely disturbed.

SOIL ANALYSIS AND TYPING

This section describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits. The section contains definitions, sets forth requirements, and describes acceptable visual and manual tests for use in classifying soils.

DEFINITIONS

"Cemented soil" means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

"Cohesive soil" means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical side slopes, and is plastic when moist. Cohesive soil is hard to break up when dry and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, and organic clay.

"Dry soil" means soil that does not exhibit visible signs of moisture content.

"Fissured" means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

"Granular soil" means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

"Layered system" means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.

"Moist soil" means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.

"Plastic" means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.

"Saturated soil" means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or sheer vane.

"Soil classification system" means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.

"Stable rock" means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

"Submerged soil" means soil which is underwater or is free seeping.

"Type A" means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kpa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

- The soil is fissured; or
- The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
- The soil has been previously disturbed; or
- The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or
- The material is subject to other factors that would require it to be classified as a less stable material.

"Type B" means:

- Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kpa) but less than 1.5 tsf (144 kpa); or
- Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
- Previously disturbed soils except those which would otherwise be classed as Type C soil.
- Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
- Dry rock that is not stable; or
- Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

"Type C" means:

- Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kpa) or less; or
- Granular soils including gravel, sand, and loamy sand; or
- Submerged soil or soil from which water is freely seeping; or
- Submerged rock that is not stable, or

- Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.

"Unconfined compressive strength" means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.

"Wet soil" means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

See Appendix A in Competent Person Tools Packet (Section 19) for further requirements of soil classification by a competent person.

PROTECTIVE SYSTEMS

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed using the guidelines from Appendices B, C, and D except when:

- Excavations are made entirely in stable rock; or
- Excavations are less than 5 ft (1.52 m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.
- Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

SLOPING AND BENCHING

Design of sloping and benching systems: The slopes and configurations of sloping and benching systems shall be selected and constructed by the employer or his designee and shall be in accordance with the guidelines shown in Appendix B.

TIMBER SHORING

Designs for timber shoring in trenches shall be determined in accordance with the conditions and requirements described in Appendix C.

ALUMINUM HYDRAULIC SHORING

Designs for aluminum hydraulic shoring in trenches shall be determined in accordance with the conditions and requirements described in Appendix D.

MATERIALS AND EQUIPMENT

- Materials and equipment used for protective systems shall be free from damage or defects that might impair their proper function.
- Manufactured materials and equipment used for protective systems shall be used and maintained in a manner that is consistent with the recommendations of the manufacturer, and in a manner that will prevent employee exposure to hazards.
- When material or equipment that is used for protective systems is damaged, a competent person shall examine the material or equipment and evaluate its suitability for continued use. If the competent person cannot assure the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service, and shall be evaluated and approved by a registered professional engineer before being returned to service.

INSTALLATION AND REMOVAL OF SUPPORT

- Members of support systems shall be securely connected together to prevent sliding, falling, kickouts, or other predictable failures.
- Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.
- Individual members of support systems shall not be subjected to loads exceeding those which those members were designed to withstand.
- Before temporary removal of individual members begins, additional precautions shall be taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system.
- Removal shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation.

- Backfilling shall progress together with the removal of support systems from excavations.
- Excavation of material to a level no greater than 2 ft (.61 m) below the bottom of the members of a support system shall be permitted, but only if the system is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the support system.
- Installation of a support system shall be closely coordinated with the excavation of trenches.

Sloping and benching systems. Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.

Shield systems

- Shield systems shall not be subjected to loads exceeding those which the system was designed to withstand.
- Shields shall be installed in a manner to restrict lateral or other hazardous movement of the shield in the event of the application of sudden lateral loads.
- Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.
- Employees shall not be allowed in shields when shields are being installed, removed, or moved vertically.
- Additional requirement for shield systems used in trench excavations. Excavations of earth material to a level less than 2 ft (.61 m) below the bottom of a shield shall be permitted, but only if the shield is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the shield.

INSPECTIONS

Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard-increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated.

Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

TRENCH INSPECTION

Inspection Type:	Daily	After Rain	During Shift		
	Date:	Time:	Location:		
Name (Competent Person):					
If additional inspection during shift, Why?					
Soil Type:	Stable Rock	Type A	Type B	Type C	Layered	(Circle One)
Protective System Used:	(circle one)	Shoring	Shielding	Sloping/benching	Combination

	Yes	No	N/A	Comments
Box/Slope Specs Inspected				
Water Accumulation				
Hazardous Atmosphere				
Ventilation				
Ingress/Egress Accommodated				
Machinery Utilized				
Trenchwall Cracks				
Other Hazardous Conditions:				

Engineer Involved:	Yes	No	Name:
Water Accumulation	Yes	No	Procedure:
Utilities Marked (811):	Yes	No	Ticket #

Utilities must be marked before operations begin.

Traffic barriers, if applicable, must be in place before operations begin.

If a hazardous atmosphere potentially exists, testing must be accomplished before entry is permitted. (see confined space policy)

Spoil must be placed at least 2 feet from opening.

Trenches over 20 feet in depth, must be approved by a licensed engineer.

If soil typing is not done, soil must be considered TYPE C.

Ladder must be placed and left in trench immediately and always.

All personnel must evacuate if instructed to do so by competent person. NO EXCEPTIONS!

Sloping/Benching Angles Depending on soil Type listed below

Type A	Type B	Type C or pre-disturbed
3:4 ratio	1:1 ratio	3:2 ratio

This document must remain on site until work is complete or new inspection is done.

TRENCH EMERGENCY

TIME OF INCIDENT: _____ # OF EMPLOYEES ON SITE_____

GAS LINE HIT (CIRCLE)

PROCEDURES:

1. *DON'T PANIC! TAKE CONTROL!*
2. *IF IN IMMEDIATE AREA (OPERATOR POSITION), AND SAFE TO DO SO, SHUT DOWN BACKHOE/EQUIPMENT*
3. *EVACUATE TRENCH AREA (NEVER RE-ENTER FOR ANY REASON UNTIL CLEARED BY FIRE DEPARTMENT/GAS COMPANY)*
4. ***CALL 911***
5. *DO NOT START UP ANY ADDITIONAL EQUIPMENT/VEHICLES IN AREA*
6. *ACCOUNT FOR ALL EMPLOYEES*
7. *DO NOT LET ANYONE RE-ENTER THE TRENCH AREA!*
8. *LOCATION OF HIT_____*
9. *CALL YOUR DIRECT SUPERVISOR*
10. *CALL GOPHER ONE (1-800-252-1166 or 811)*

ELECTRICAL UTILITY HIT (CIRCLE)

PROCEDURES:

1. *DON'T PANIC! TAKE CONTROL!*
2. *ENSURE WORKERS DO NOT WALK AROUND OR NEAR THE DAMAGED UTILITY*
3. *INSTRUCT WORKERS TO NOT TOUCH ANY OTHER UTILITIES*
4. *EVACUATE WORKERS WITHOUT TOUCHING UTILITIES*
5. *MOVE BACKHOE/EQUIPMENT AWAY FROM THE TRENCH (UNLESS HUNG-UP). OPERATOR MUST STAY IN CAB UNTIL HAZARD IS ELIMINATED.*
6. *CALL YOUR DIRECT SUPERVISOR*
7. *DO NOT LET ANYONE RE-ENTER THE TRENCH!*
8. *NOTIFY COMPETENT PERSON*
9. *STOP/DIVERT TRAFFIC IF NECESSARY*
10. *CALL GOPHER ONE (1-800-252-1166 or 811)*

CAVE IN (CIRCLE)

PROCEDURES:

1. DON'T PANIC! TAKE CONTROL!
2. LEAVE ALL TOOLS (SHOVELS, ETC.) IN TRENCH
3. INSTRUCT TRAPPED WORKER TO "REMAIN STILL"
4. EVACUATE ALL OTHER EMPLOYEES (AT LEAST 50 FT FROM TRENCH)
5. SHUT DOWN BACKHOE/*EQUIPMENT (NOT PUMPS). DO NOT USE BACKHOE TO DIG OUT VICTIM(S) OR SHORE TRENCH WALL*
6. *CALL 911*
7. *CALL YOUR DIRECT SUPERVISOR*
8. *DO NOT LET ANYONE RE-ENTER THE TRENCH!*
9. *NOTIFY COMPETENT PERSON (IF CP NEEDS TO LEAVE THE SITE, A NEW CP MUST BE ASSIGNED)*
10. *STOP/DIVERT TRAFFIC*
11. *GET INFO:*
    a. *HOW MANY EMPLOYEES BURIED IN TRENCH _____*
    b. *NOTE LOCATION OF WORKERS BURIED IN TRENCH (IF NECESSARY, APPROACH THE TRENCH FROM THE NARROW END AND LAY DOWN PLANKS TO DISTRIBUTE YOUR WEIGHT*
    _____
    _____
    c. *HOW MUCH SOIL COVERING EMPLOYEE(S) _____*
    d. *ARE THERE DAMAGED UTILITIES? _____*
    e. *IS WATER AN ISSUE? _____*
    f. *WHAT IS THE CONDITION OF SURROUNDING SOIL (WET/CRACKING/FALLING?_____*

NOTE: THIS DOCUMENT MUST BE FILLED OUT BEFORE THE RESCUE TEAM ARRIVES. FAILURE TO DO SO MAY INCREASE RESCUE TIME AND DECREASE OUR CHANCES OF A SUCCESSFUL RESCUE.

Section 16

Tree Trimming

The City of Shakopee

TREE TRIMMING OPERATIONS POLICY

(CHAINSAW/POLESAW/AERIAL LIFT/CHIPPER)

The City of Shakopee is intent on protecting all employees from the hazards associated with the use of chainsaw/polesaws, aerials, and chippers within the community. To this extent general rules and requirements have been outlined in this section so designed to minimize the risk.
This policy is applicable to all Public Works employees operating tree trimming equipment as described in the OSHA Standard and within this policy.

The following sections will outline our established policies and procedures according to 29 CFR, 1910.266, 1926.453, and the *GENERAL DUTY CLAUSE*.

The following aspects of chainsaw/polesaw operations will be covered:

- RESPONSIBILITIES
- PERSONAL PROTECTIVE EQUIPMENT
  - First-Aid Kits/Training
- GENERAL OPERATIONAL SAFETY
  - Chainsaw/Polesaw
  - Aerial Lifts
  - Chippers
- TRAINING

RESPONSIBILITIES

Management and employees must be committed to the implementation of this program.

- **Management**
  - Ensure all employees are trained in accordance with section V.
  - Ensure applicable PPE is provided in accordance with section II.
  - Enforce policy.
- **Employees**
  - Commit to using required PPE.
  - Attend required training.

PERSONAL PROTECTIVE EQUIPMENT

The Personal Protective Equipment (PPE) below is provided for all personnel involved in chainsaw/polesaw, chipping, and trimming operations. It is important we assure that all PPE is maintained, inspected and remain in serviceable condition.

Chaps
Each employee who operates a chainsaw must wear the leg protection provided. Choose the size of leg protection that covers the full length of the thigh to the top of the boot on each leg to protect against contact with a moving chainsaw.
Exception: This requirement does not apply when an employee is working as a climber, or if Management demonstrates that a greater hazard is posed by wearing leg protection in the particular situation.

Foot Protection
Each employee who operates a chainsaw must wear logging boots or steel toe work boots that are waterproof or water repellent, cover and provide support to the ankle, and cut-resistant (metatarsal) such that it will protect the employee against contact with a running chainsaw.

Head
Each employee who operates a chainsaw/polesaw, aerial lift, loading a chipper, and/or works in an area where there is potential for head injury from falling or flying objects must wear an approved hardhat.

Face/Eye Protection
Each employee operating a chainsaw/polesaw, aerial lift, loading a chipper, or works in an area where there is potential for facial injury must wear face and eye protection. Employees may wear logger-type mesh screens and safety glasses when performing chainsaw/polesaw operations.

Hearing Protection
Each employee who operates or works near a chainsaw/polesaw, aerial lift, chipper, or works in an area where there is a potential for decibels to exceed 85db must wear hearing protection with a noise reduction rating (NRR) adequate enough to reduce levels to below the 85db threshold. See also *Hearing Conservation Program.*

First-Aid Kits/Training

We must have first-aid kits at each work site where trees are being cut/trimmed (e.g., felling, buckling, limbing), at each active landing, and on each employee transport vehicle. At a minimum, each first-aid kit must contain the items listed below.

1. Gauze pads (at least 4 x 4 inches). 2. Two large gauze pads (at least 8 x 10 inches). 3. Box adhesive bandages (Band-Aids). 4. One package gauze roller bandage at least 2 in wide. 5. Two triangular bandages. 6. Wound cleaning agent such as sealed moistened towelettes. 7. Scissors. 8. At least one blanket. 9. Tweezers. 10. Adhesive tape. 11. Latex gloves. 12. Resuscitation equipment such as resuscitation bag, airway, or pocket mask. 13. Two elastic wraps. 14. Splint.

Note: Employees must be trained in the proper use and maintenance of these kits as well as First Aid/CPR and Bloodborne Pathogens to ensure quick response if another employee becomes injured. This also means no employee can operate a chainsaw/polesaw or assist without First Aid personnel present. An inventory of these kits will be conducted annually.

GENERAL OPERATIONAL SAFETY

Chainsaw/polesaw

- Portable fire extinguishers are provided, maintained, and located in each vehicle.
- Ensure each tool (chainsaws/polesaws), including any tool provided by an employee, is inspected before initial use during each work shift. At a minimum, the inspection must include the following:
  - Handles and guards, to assure they are sound, tight fitting, properly shaped, free of splinters and sharp edges, and in place.
  - Controls, to assure proper function.
  - Chainsaw/polesaw chains, to assure proper adjustment.
  - Chainsaw/polesaw mufflers, to assure they are operational and in place.
  - Chain brakes and nose shielding devices, to assure they are in place and function properly.
  - Cutting edges, to assure they are sharp and properly shaped.
  - All other safety devices, to assure they are in place and function properly.
- The cutting edge of each tool must be sharpened in accordance with manufacturer's specifications whenever it becomes dull during the work shift.
- Only use tools for purposes for which they have been designed.
- Each tool must be stored in the provided location when not being used at a work site.
- Secure all equipment/tools in transport.
- The chainsaw must be operated and adjusted in accordance with the manufacturer's instructions.
- The chainsaw must be fueled at least 10 ft (3 m) from any open flame or other source of ignition.
- The chainsaw must be started at least 10 ft (3 m) from the fueling area.
- The chainsaw must be started on the ground or where otherwise firmly supported. Drop starting a chainsaw is prohibited.
- The chainsaw/polesaw throttle must be at full through cut.
- The chainsaw must be started with the chain brake engaged.
- The chainsaw must be held with the thumbs and fingers of both hands encircling the handles during operation.
- The chainsaw/polesaw operator must be certain of footing before starting to cut.
- The chainsaw must not be used in a position or at a distance that could cause the operator to become off-balance, to have insecure footing, or to relinquish a firm grip on the saw.
- Prior to felling any tree, the chainsaw/polesaw operator must clear away brush or other potential obstacles that might interfere with cutting the tree or using the retreat path.

- The chainsaw must not be used to cut directly overhead.
- The chainsaw must be carried in a manner that will prevent operator contact with the cutting chain and muffler.
- The chainsaw must be shut off or the throttle released before the feller starts his retreat.
- The chainsaw must be shut down or the chain brake must be engaged whenever a saw is carried further than 50 ft (15.2 m).
- The chainsaw must be shut down or the chain brake must be engaged when a saw is carried less than 50 ft if conditions such as, but not limited to, the terrain, underbrush, and slippery surfaces, may create a hazard for an employee.

Aerial Lifts

Before operating aerial lifts:

- Do not modify aerial lift without written permission.
- Check safety devices and operating controls before each use.
- Check area in which aerial lift will be used for:
  - Level surface (do not exceed manufacturer slope recommendations).
  - Holes, drop-offs, bumps, debris, etc.
  - Overhead obstructions and overhead power lines.
  - Stable surface.
  - Other hazards.

Set outriggers, brakes, and wheel chocks

- Preventing Electrocutions
  - Non-electrical workers must stay at least 10 ft away from overhead power lines.
  - Electrical workers must de-energize/insulate power lines (call utility beforehand).
  - Use only insulated buckets when working near overhead power lines.
  - Annually check insulation on buckets.
- Preventing Tip-Overs
  - Do not exceed manufacturer rated load capacity limits.
  - Do not travel to job location with lift in elevated position.
  - Set up proper work zone protection when working near traffic.
  - Positioning of lifts:
    - Do not drive near drop-offs or holes.
    - Do not raise platform on uneven or soft surfaces.
    - Do not drive onto uneven or soft surfaces when elevated.
    - Do not raise platform on slope or drive onto slope when elevated.
    - Do not raise platform in windy or gusty conditions.
- Fall Protection
  - Fall protection is required (full body harness with lanyard or body belt with 2-foot lanyard as restraint device).
  - Fall arrest systems (harness plus lanyard to stop a fall). Keep in mind that:
    - These systems can tip over some boom lifts and scissor lifts due to fall stopping force.
    - Fall restraint systems intended to prevent falls are preferred.
    - Full body harness plus lanyard must be designed for size of lift platform.
  - Always close entrance chains or doors.
  - Stand on floor of bucket or lift platform.
  - Do not climb on or lean over guardrails.

Chippers

- Never reach into a chipper while it is operating.
- Do not wear loose-fitting clothing around a chipper.
- Always follow the manufacturer's guidelines and safety instructions.
- Use earplugs, safety glasses, hard hats, and gloves.
- Workers should be trained on the safe operation of chipper machines. Always supervise new workers using a chipper to ensure they work safely and never endanger themselves or others.
- Protect yourself from contacting operating chipper components by guarding the in-feed and discharge ports, and preventing the opening of the access covers or doors until the drum or disc completely stops.
- Prevent detached trailer chippers from rolling or sliding on slopes by chocking the trailer wheels.
- Maintain a safe distance (i.e., two tree or log lengths) between chipper operations and other work/workers.
- When servicing and/or maintaining chipping equipment (i.e., "un-jamming"), use a lockout system to ensure that equipment is de-energized.

TRAINING

Training must be provided as follows:

- Prior to initial assignment for each new employee.
- Whenever the employee is assigned new work tasks, tools, equipment, machines or vehicles.
- Whenever an employee demonstrates unsafe job performance.

At a minimum, training must consist of the following elements:

- Safe performance of assigned work tasks.
- Safe use, inspection, operation and maintenance of tools, machines and vehicles the employee uses or operates, including emphasis on understanding and following the manufacturer's operating and maintenance instructions, warnings and precautions.
- Recognition of safety and health hazards associated with the employee's specific work tasks, including the use of measures and work practices to prevent or control those hazards.
- General procedures, practices, and requirements of the employer work site.

Note: Training of an employee due to unsafe job performance, or assignment of new work tasks, tools, equipment, machines, or vehicles may be limited to those elements which are relevant to the circumstances giving rise to the need for training.

Section 17

Hot Work

The City Of Shakopee
HOT WORK SAFETY POLICY

The City of Shakopee has committed to comply with the intent and spirit of OSHA 29 CFR 1910.251-254 and NFPA 51B.

In order to be in compliance, the City of Shakopee will identify locations/processes/jobs where the potential of a fire exists during heat/spark/flame producing equipment and the implementation of a "Hot Work Permit".

NOTE: A Hot Work Permit is not required in areas designed for hot work (ex: shop/maintenance)

This policy is applicable to all Public Works and maintenance employees performing "Hot Work" as described in the OSHA Standard/NFPA Standard and within this policy.

The components that constitute this section define procedures for:

- Definitions
- Scope and Responsibility
- Specific Responsibilities
- Hot Work Operator (HWO)
- Fire Watch
- Hot Work Operational Requirements
- Hot Work Permit
- Work Closeout

Definitions

Competent Hot Work Supervisor (CHWS) - For the City of Shakopee's employees the CHWS shall have successfully completed competent person training and examination to be considered competent. For outside contractors, the Hot Work Supervisor shall be identified and the name provided to the Project Manager. The CHWS cannot be the Hot Work Operator. Failure to properly adhere to the City of Shakopee Hot Work Procedures shall result in suspension of competent person authority and possible disciplinary action.
Designated Hot Work Area - Permanent location designed for or approved by a CHWS for hot work operations to be performed regularly.
Hot Work - Any work involving welding, brazing, soldering, heat treating, grinding, powder-actuated tools, hot riveting, and all other similar applications producing a spark, flame, or heat, or similar operations that are capable of initiating fires or explosions**.**
Hot Work Permit - A document issued by the CHWS for the purpose of authorizing a specified activity.
Hot Work Operator - An individual designated by the City of Shakopee to perform hot work under the authorization of a CHWS.
Welding and Allied Processes -Those processes such as arc welding, oxy-fuel gas welding, open-flame soldering, brazing, thermal spraying, oxygen cutting, and arc cutting.

Scope and Responsibility
This program is designed to prevent injury and loss of property from fire or explosion as a result of hot work in all the City of Shakopee's spaces and activities. It covers: welding, brazing, soldering, heat treating, grinding, powder-actuated tools, hot riveting, and all other similar applications producing a spark, flame, or heat.

This program does not cover use of: candles, laboratory activities, pyrotechnics or special effects, cooking equipment, electric soldering irons, or torch-applied roofing (See NFPA 241).

At a minimum, all hot work performed by outside contractors shall be in conformance with NFPA 51B.

Hot work operations in confined spaces require additional safeguards and are addressed in the City of Shakopee's Confined Space Policy.

Hot work on and near building systems and piping may require additional safeguards and are addressed in the City of Shakopee's Control of Hazardous Energy and Lockout/Tagout Policy.

Specific Responsibilities:

Competent Hot Work Supervisor (CHWS)

The CHWS is responsible for the safe operations of hot work activity under their supervision. These duties include:

- Establish permissible areas for hot work
- Ensure that only approved apparatus, such as torches, manifolds, regulators and pressure reducing valves, are used
- Ensure that individuals involved in the hot work operations are familiar with the City of Shakopee's Hot Work requirements.

- Ensure that individuals involved in the hot work operations are trained in the safe operation of their equipment and the safe use of the process. These individuals must have an awareness of the risks involved and understand the emergency procedures in the event of a fire.
- Determine site-specific flammable materials, hazardous processes, or other potential fire hazards present or likely to be present in the work location.
- Conduct effective gas monitoring in the work area using a properly calibrated combustible gas detector prior to and during hot work, even in areas where a flammable atmosphere is not anticipated.
- In work areas where flammable liquids and gases are stored and handled, drain and/or purge all piping and equipment before hot work is conducted.
- Provide safety supervision for outside contractors conducting hot work. Inform contractors about site specific hazards including the presence of flammable materials.
- Ensure combustibles are protected from ignition by the following means:
    - Move the work to a location free from combustibles.
    - If the work cannot be moved, ensure the combustibles are moved to a safe distance or have the combustibles properly shielded against ignition.
    - Ensure hot work is scheduled such that operations that could expose flammables or combustibles to ignition do not occur during hot work operations.

<u>If any of these conditions cannot be met, then hot work must not be performed</u>.

- Determine that fire protection and extinguishing equipment are properly located and readily available.
- Ensure sufficient local exhaust ventilation is provided to prevent accumulation of any smoke/fume.
- Ensure that a Fire Watch is posted at the site when Hot Work is performed in a location where other than a minor fire might develop, or where the following conditions exist:
    - Combustible materials in building construction or contents are closer than 35 ft to the point of hot work.
    - Combustible materials are more than 35 ft away but are easily ignited by sparks.
    - Wall or floor openings are within 35 ft and expose combustible materials in adjacent areas. This includes combustible materials concealed in walls or floors.
    - Combustible materials are adjacent to the opposite side of partitions, walls, ceilings, or roofs and are likely to be ignited.

Where a Fire Watch is not required, the CHWS shall make a final inspection 30 minutes after the completion of hot work operations to detect and extinguish possible smoldering fires.

Hot Work Operator (HWO)

The Hot Work Operator shall handle the equipment safely and perform work so as not to endanger lives and property. Specific duties include:

- No hot work shall be conducted without specific written authorization from the CHWS via completion of the Hot Work Permit.
- The operator must cease hot work operations if unsafe conditions develop.
- The operator must notify the CHWS for reassessment of the situation in the event of suspected unsafe conditions or concerns expressed by affected persons.

Fire Watch

The Fire Watch is an individual posted in specific circumstances, as described above. The function of the Fire Watch is to observe the hot work and monitor conditions to ensure that a fire or explosion does not occur as a result of the work performed. The Fire Watch is authorized to stop any unsafe operation or activity. Specific duties and responsibilities include:

- Watch for fires, smoldering material, or other signs of combustion.
- Be aware of the inherent hazards of the work site and of the hot work.
- Ensure that safe conditions are maintained during hot work operations and stop the hot work operations if unsafe conditions develop.
- Have fire-extinguishing equipment readily available and be trained in its use.
- Extinguish fires when the fires are obviously within the capacity of the equipment available. If the fire is beyond the capacity of the equipment, sound the alarm immediately.
- Be familiar with the facilities and procedures for sounding an alarm in the event of a fire.
- A Fire Watch shall be maintained for at least 30 minutes after completion of hot work operations in order to detect and extinguish smoldering fires.
- More than one Fire Watch shall be required if combustible materials that could be ignited by the hot work operation cannot be directly observed by a single Fire Watch (e.g. in adjacent rooms where hot work is done on a common wall).

Hot Work Operational Requirements:

- Hot work is allowed only in areas that are or have been made fire-safe. Hot work may only be performed in either designated areas or permit-required areas.
- A designated area is a specific area designed or approved for such work, such as a maintenance shop or a detached outside location that is of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably segregated from adjacent areas.
- A permit-required area is an area made fire-safe by removing or protecting combustibles from ignition sources.
- Hot work is not allowed:
    - In sprinklered buildings if the fire protection system is impaired
    - In the presence of explosive atmospheres or potentially explosive atmospheres (e.g. on drums previously containing solvents)
    - In explosive atmospheres that can develop in areas with an accumulation of combustible dusts (e.g. grain silos)

Hot Work Permit

Before hot work operations begin in a non-designated location, a completed Hot Work Permit prepared by the CHWS is required. Based on local conditions, the CHWS must determine the length of the period, not to exceed 24 hours, for which the Hot Work Permit is valid.

The following conditions must be confirmed by the CHWS before permitting the hot work to commence:

- Equipment to be used (e.g. welding equipment, shields, Personal Protective Equipment, fire extinguishers) must be in satisfactory operating condition and in good repair.
- The floor must be swept clean for a radius of 35 ft if combustible materials, such as paper or wood shavings are on the floor.
- Combustible floors (except wood on concrete) must be:
    - kept wet or be covered with damp sand (note: where floors have been wet down, personnel operating arc welding or cutting equipment shall be protected from possible shock) or
    - protected by noncombustible or fire-retardant shields.
- All combustible materials must be moved at least 35 ft away from the hot work operation. If relocation is impractical, combustibles must be protected with fire-retardant covers, shields, or curtains. Edges of covers at the floor must be tight to prevent sparks from going under them, including where several covers overlap when protecting a large pile.
- Openings or cracks in walls, floors, or ducts within 35 ft of the site must be tightly covered with fire-retardant or noncombustible material to prevent the passage of sparks to adjacent areas.
- If hot work is done near walls, partitions, ceilings, or roofs of combustible construction, fire-retardant shields or guards must be provided to prevent ignition.
- If hot work is to be done on a wall, partition, ceiling, or roof, precautions shall be taken to prevent ignition of combustibles on the other side by relocating combustibles. If it is impractical to relocate combustibles, a Fire Watch on the opposite side from the work must be posted.
- Hot work must not be attempted on a partition, wall, ceiling, or roof that has a combustible covering or insulation, or on walls or partitions of combustible sandwich-type panel construction.
- Hot work that is performed on pipes or other metal that is in contact with combustible walls, partitions, ceilings, roofs, or other combustibles must not be undertaken if the work is close enough to cause ignition by conduction.
- Fully charged and operable fire extinguishers that are appropriate for the type of possible fire shall be available immediately at the work area. These extinguishers should be supplied by the group performing the hot work. The fire extinguishers normally located in a building are not considered to fulfill this requirement.
- If hot work is done in proximity to a sprinkler head, a wet rag shall be laid over the head and then removed at the conclusion of the welding or cutting operation. During hot work, special precautions shall be taken to avoid accidental operation of automatic fire detection or suppression systems (for example, special extinguishing systems or sprinklers).
- Nearby personnel must be suitably protected against heat, sparks, and slag.

Work Closeout:

- A Fire Watch shall be maintained for at least 30 minutes after completion of hot work operations in order to detect and extinguish smoldering fires.
- The CHWS shall inspect the job site 30 minutes following completion of hot work and close out the permit with the time and date of the final check.
- The completed Hot Work Permit shall be retained for 6 months following completion of the project.

HOT WORK PERMIT

BEFORE INITIATING HOT WORK, CAN THIS JOB BE AVOIDED? IS THERE A SAFER WAY?	PERMIT #:

This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: Brazing, Cutting, Grinding, Soldering, Torch-Applied Roofing, and Welding.
Hot Work Permits are not required in designated hot work areas (shop or maintenance areas).

INSTRUCTIONS

1. Competent Hot Work Supervisor :

A. Verify precautions listed at right (or do not proceed with the work).

B. Complete and retain permit.

C. Issue copy of permit to person doing job.

HOT WORK BEING DONE BY:
☐ **EMPLOYEE**
☐ **CONTRACTOR** _____
_____

Date	**Job Number**

Nature of Job

Name of Person Doing Hot Work

I verify the above location has been examined, the precautions checked on the Required Precautions checklist have been taken to prevent fire, and permission is authorized for this work.

SIGNED (Competent Hot Work Supervisor)

PERMIT EXPIRES	**DATE**	**TIME** **AM PM**

NOTE:
EMERGENCY NOTIFICATION ON BACK OF FORM.
USE AS APPROPRIATE FOR YOUR FACILITY.

REQUIRED PRECAUTIONS CHECKLIST

☐ Available sprinklers, hose streams and extinguishers are in service/operable.

☐ Hot Work equipment in good repair.

Requirements within 35 ft (11 m) of work

☐ Flammable liquids, dust, lint and oily deposits removed.
☐ Explosive atmosphere in area eliminated.
☐ Floors swept clean.
☐ Combustible floors wet down covered with damp sand or fire-resistive sheets.
☐ All wall and floor openings covered.
☐ Fire-resistive tarpaulins suspended beneath work.
☐ Protect or shut down ducts and conveyors that might carry sparks to distant combustibles.

Work on walls, ceilings, or roofs

☐ Construction is noncombustible and without combustible covering or insulation.
☐ Combustibles on either side of walls, ceilings or roofs are moved away.

Work on enclosed equipment

☐ Enclosed equipment cleaned of all combustibles.
☐ Containers purged of flammable liquids/vapors.
☐ Pressurized vessels, piping, and equipment removed from service, isolated and vented.

IF THE ABOVE CAN NOT BE ACCOMPLISHED

Fire Watch/Hot Work area monitoring (within buildings)

☐ Fire watch will be provided during and for 30 minutes after work, including any coffee or lunch breaks.
☐ Fire watch is supplied with suitable extinguishers, and where practical, a charged small hose.
☐ Fire watch is trained in use of equipment and in sounding alarm.
☐ Fire watch may be required in adjoining areas, above and below.
☐ Monitor Hot Work area for 4 hours after job is completed.

Other Precautions Taken:

_____
_____

Section 18

Lifting Devices

The City of Shakopee
LIFTING DEVICES POLICY

The City of Shakopee is committed to preventing sprain/strain injuries to our employees through the use of various cranes, hoists, slings, jacks, and lifts. This policy is applicable to all employees in the Public Works and Maintenance Departments using this equipment.
It is essential the operator is properly educated of the safe and responsible use of the material handling equipment in accordance to 29 CFR 1910.179, 29 CFR 1910.244, ANSI/ASME PALD-10-1984, ANSI/ASME PALD-2b-1986, ANSI/ASME PALD-1-1983 & ANSI/ALI ALOIM-2000. In addition, the handling equipment must be properly inspected and maintained to ensure its safe and effective operation.

The following will be covered in this section to ensure safe material handling.

Cranes

- Operator
- Hazards
- Inspections
- Procedures

Automotive Lifts (Hoists)

- Operator Hazards & Training
- Inspections

Jacks

- Operator
- Hazards
- Inspections
- Procedures

Adjustments and Repairs

CRANES

(see also construction crane info at end of section)

The Operator

The operator is responsible for the safe operation of the material handling equipment and the safety of coworkers in the area. Therefore only trained personnel are allowed to operate material handling cranes. Material handling hazards can be eliminated in three ways:

- Design and plan the lift prior to beginning:
  - Is the load within rated capacities?
  - Use appropriately rated and length of slings.
  - Is the area clear of obstacles and people providing adequate clearance?
  - Will you require assistance to stabilize the load?
  - Ensure adequate view of lifting area.
  - Are stabilizers lowered and set on even/stable ground?
- Guard against hazards:
  - Ensure equipment and controls are properly guarded.
  - Are unnecessary personnel clear of the area?
  - Do hooks have safety latches?
  - Does cable have frays throughout or at the ring attach point that may cause cuts/slivers?
- Provide a warning to coworkers that materials will be moved near their area.

Crane Hazards

Overloading:

This occurs when the crane is loaded beyond its load capacity or a variety of other variables listed below:

- The hoist is extended to the outer boom limit or further than the load or rating allows. On the inside of cranes, the ratings are printed on the bridge/boom. On truck cranes, locate the ratings and calculate lift capacity according to the boom extension chart.
- The load is raised and rotated too quickly causing imbalance and/or damage to the crane.
- Operator not knowing the weight of the load, relying on perception and instinct.
- The operator is to be familiar with crane loads and the weight of the particular load to be lifted. A qualified engineer to determine their load capacity rating must rate all cranes (if not done by the manufacturer) and attached equipment including the framing, rails and support beams. In addition, the rating must be clearly marked on the hoist, crane and slings. Lifting materials will be limited to its weakest lifting component.
- Operator not maintaining proper clearances. Proper clearance for crane operation is vital and includes both overhead and lateral clearance exceeding a 3 in minimum. Cranes running parallel to each other shall provide adequate clearance between the two bridges.
- Operator using the crane for jobs in which it is not designed (ex: pulling vehicles/equipment, sign posts, etc.).

Pinch point:

This is the condition caused by an employee being pinned between the crane and object being moved and a permanent structure. (ex: wall, rack, truck, etc.) Typical causes for these hazards include:

- Unauthorized employees entering the crane hazard area when crane is in use, e.g. retrieving tools, guiding cable.
- Operator not in full view of their area.
- Ensuring tools and other routinely used equipment are out of the crane operating area can reduce this hazard.

Unguarded Moving Parts:
Be sure all moving shafts, linkage, and cables are properly guarded especially where they are easily accessible to co-workers. After adjustments and repairs have been made, the crane shall not be operated until all guards have been reinstalled, safety devices reactivated, and maintenance equipment removed.

Unsafe Hooks:
As part of the daily use and monthly inspection, the hook and its latching mechanism must be checked. Hooks are to be taken out of service if they have no safety latch, are bent to the side, have a stretched throat opening, or are otherwise damaged.

Obstruction of Vision:
This is caused in two general ways.

- Obstruction by the work environment (people, weather, etc.).
- Obstruction by the crane and or supports.
  - Examples of obstructed vision include: welders with their hoods up, a hard rain, others intently working, or a project unaware of crane activity within their vicinity.
  - When moving large or vision-obstructing material, all non-essential personnel must leave the area and a signaler must be used to ensure adequate observation.

Cable Damage:
Will occur in four ways:

- Sheaves are rough and jagged.
- Width or throat of sheave is too wide or narrow for the cable.
- Old or excessively used cable.
- Weathered/pitted/rusted cable.

For these reasons our cables are to be inspected monthly. If cable shows signs of wear as described below, it is to be taken out of service:

- Six or more randomly distributed broken wires in one lay (one rope lay = the length along the rope which one strand uses to make one complete spiral around the rope core).
- Three broken wires in one strand in one lay.
- Severely pitted or rusted.

Cable Kinking:
Improper handling or use of cable will cause it to develop a kink or bend. A kink starts when a loop is formed and pulled tight, and the natural lay of the rope is lost or the core may be separating from the rope. This will seriously weaken the cable making it unreliable and likely to pull apart. For this reason, cable inspections **must** be completed on a **monthly** basis.

Side Pull:
This occurs when the crane is used to pull an object laterally to the forward, right, or left side of the boom. This type of side pull can easily collapse an overhead crane or seriously compromise its supportive structure and possibly damage unseen crane components, endangering the safety of all employees. Because of this, all cranes are to be used for its intended lifting purpose only.

Boom Buckling:
This can occur in two ways:

- The object being lifted exceeds the cranes rated load capacity.
- The boom strikes a structure during its swing, sustaining a side force strain, particularly when supporting a suspended load.

Lockout System for Overhead Cranes:

Lockouts will be utilized during maintenance and repairs of all cranes. Using physical electrical lockout devices and/or using temporary bumpers or blocks to restrict crane movement will accomplish this. Follow lockout procedures outlined in the "LOCKOUT" section of this manual.

Inadvertent Loss of Load:

There are several circumstances where a load can be unstable causing the loss of the entire load:

- Imbalance caused by rough movements.
- Stretched hook throats.
- Lack of sturdy hook safety latches.
- Exceeding the rated load capacity.

Note: These risks can be eliminated by using proper planning techniques prior to moving material.

Inspections

Components:

The basic components of a crane and supports include:

- **The boom or bridge** - the overhead support structure the hoist is attached to.
- **The hoist** - manual or power driven device which raises and lowers the load.
- **Slings** - chain, wire rope, or synthetic straps which are used to attach the hoist to the load.
- **Stabilizers** - the supplementary/additional support for truck cranes.

Electrical:

Pendant hoist control box:

- Must be clearly marked and indicate the functions of each button.
- Must be suspended or supported so electrical components are protected from excessive strain.
- Shall be in good repair and properly sealed to protect against electrical shock and foreign material (such as dirt or grease) entering the control box.

All electrical equipment will be guarded or secured to ensure live parts will not be exposed to employees under normal operating conditions.

Inspections

- **Initial (Operational) Test:** An inspection will be conducted before initial use of a crane, and after the alteration or maintenance of an existing crane. The inspection will include the items listed for both the frequent and periodic sections as well as the operational test listed below.
  - Raise and lowering of the hoist mechanism.
  - Trolley travel.
  - Bridge travel (where applicable).
  - Limit switches, locking and safety devices. Raising an empty hook to the trip switch will test the limit switch.
- **Monthly/Frequent (Pre-Use) Inspections:**
  - All control mechanisms for maladjustment interfering with proper operation
  - All control mechanisms for excessive wear of components and contamination by lubricants or other foreign matter.
  - All safety devices for malfunction.
  - Deterioration or leakage in air or hydraulic systems.
  - Crane hooks with deformations or cracks. For hooks with cracks or having more than 15 percent in excess of normal throat opening or more than 10 deg. twist from the plane of the unbent hook.

- Ropes for noncompliance. Heavy wear and/or broken wires may occur in sections in contact with equalizer sheaves or other sheaves where rope travel is limited, or with saddles. Particular care shall be taken to inspect ropes at these locations (see also rope inspection).
- Electrical apparatus for malfunctioning, signs of excessive deterioration, dirt, and moisture accumulation.
- Stabilizers free from soil/debris.

Crane inspections will take place monthly using the "Monthly/Frequent Inspection Form" **(see form at end of section)**.

Periodic/Annual Inspections:

The following items will be checked during *periodic inspections* and the crane operator will make a determination if these defects constitute a safety hazard. If so, the crane operator has the authority to take the crane out of service until a qualified individual has made repairs/recommendations.

- Check all functional mechanisms for maladjustment and excessive wear interfering with proper operation.
- Check for deterioration in the hoisting/moving mechanisms, such as leaking lines, or worn sheaves or bearings.
- Check hooks for deformation, cracks, excessive throat opening, and lack of safety latch.
- Check hoist chains and slings for excessive wear, twists, and distorted/stretched links.
- A thorough inspection of all wire rope shall be conducted and discarded if it shows signs of excessive wear, corroded/broken wires, or kinking.
- Ensure Safety Latch is functional.
- Check control unit for cracked covers, exposed electrical, etc.
- Raise hook to top insuring limit switch activation.
- Inspect for loose bolts or rivets.
- Grease rope and drum to maintain proper operation.
- Inspect rope anchor and rope guide.
- Check oil level and maintain as necessary.
- Corroded, deformed, cracked bolts, or welds on or within the supporting structure (e.g. bridge, boom, rail, or beams).
- Cracked or worn sheaves and/or drums.
- Worn, cracked, or distorted parts including bearings, shafts, gears, and rollers.
- Braking system, check for excessive wear on linings and parts.
- Power supply operating within normal conditions (not showing signs of excessive strain or over heating).
- Excessive wear of chain drive sprockets or excessive chain stretch.
- Electrical apparatus must be checked for signs of pitting and deterioration of controls, limit switches, and pendant control box.
- Stabilizers for leaks, binding, and/or damage.
- Overall condition of hoist/crane system.

Ask the operator if there has been any problems with the crane.

An annual inspection will be conducted every year by a qualified inspector. These inspections will follow, at a minimum, our monthly (frequent) inspection format.

Proper Craning Procedures

Proper load size:

Loads cannot exceed rated load capacity. No cranes shall be re-rated in excess of the original load ratings unless such rating changes are approved by the crane manufacturer or final assembler.

Attaching the load:

Hoist chain or wire rope must be in good condition with approved (rated capacity) slings.

- Wire rope free from broken strands (see inspection).
- Chain free of kinks, stretched links.
- Hooks free of stress cracks, deformity, and open throat
- Sling must be in good condition.
- Be sure sling is clear of all obstacles and materials adjacent to the lift area.
- Sling should not have twists.

Moving the load:

- The hook must be brought directly over the load to prevent swing when the load is lifted.
- The load must be properly secured in the sling or lifting device.
- Hoist ropes and slings cannot be twisted around each other.
- Lift load slowly to ensure all the lifting devices operate effectively and are not slipping.
- Move the load smoothly to avoid jerky motion.
- Ensure the load does not contact obstructions.
- Never leave a raised load unattended.
- Cranes are not to be used for pulling loads. Pulling loads can endanger the stability of the crane, slings, and overhead mounting structure.
- Employees are not allowed to ride on a raised moving load.
- Raised loads must not be positioned over people at any time.
- Rising near rated loads just slightly to ensure adequate braking should test hoisting brakes. If test is satisfactory, the load can be moved.
- A load must never be lowered below the point where less than two full wraps of rope remain on the hoisting drum.
- A qualified responsible person shall be present and in charge of any lift requiring two or more cranes be used to lift a load. This person will evaluate and instruct all personnel in the proper rigging, positioning, and movements of the load.

TRAINING

Training will be completed for all new employees and repeated periodically at the employee's Direct Supervisors discretion.

CONSTRUCTION CRANES

We currently have municipal employees using truck cranes over 1 ton capacity to remove/install signs. Because of this crane activity we are required to comply with **29CFR 1926.1427** which includes **NCCCO** certification training for operators.

This activity is the only reason/task we have identified in which a municipal employee would need to be "certified" under the Construction Crane Standard 29CFR 1926.1427. However, if, at any point, there are "construction" activities applicable to these requirements, the department Supervisor and the Safety Coordinator will re-evaluate.

Employees will not be allowed to operate the truck crane for the purpose of removing and replacing signs unless **NCCCO** certified.

AUTOMOTIVE LIFTS (HOISTS)

Operator Hazards & Training

The operator is responsible for the safe operation of the hoist and the safety of coworkers in the area. Therefore, only trained personnel are allowed to operate vehicle hoists.

All operators must view the "LIFTING IT RIGHT" video and safety quiz (**see forms at end of section and video on disc or at** http://www.safeassureeducational.com/lifting.html).

Inspections

Components

The basic components of a hoist include:

- Adapters/Attachments
- Air/Oil Tank
- Arm/Swing Arm
- Cylinder Assembly, Casing, Plunger, Seals & Bearings
- Fastening Devices
- Lift Controls
- Runways & Stops
- Sheaves
- Frame
- Other Assisted Lifting Device(s)
- Chains and Cables

Frequency

Inspections will be conducted in accordance with three time periods as described below:

- Initial (Operational Test):
  An inspection will be conducted before initial use of a hoist, and after the alteration or maintenance of an existing hoist. The inspection will include the items listed on the frequent inspection form.
- Frequent Inspections (Monthly):
  Hoist inspections will take place monthly using the "Monthly" Inspection Checklist" (see form at end of section)**.**
  During *frequent inspections*, the hoist operator will make a determination if these defects constitute a safety hazard. If so, the hoist operator has the authority to take the hoist out of service until a qualified individual has made repairs/recommendations.
- Annual Inspections
  An annual inspection will be conducted every year by a qualified inspector. These inspections will follow, at a minimum, our monthly inspection format.

TRAINING

Training will be completed for all new employees and repeated periodically at the employee's Direct Supervisor's discretion.

JACKS

The Operator

The operator is responsible for the safe operation of the material/equipment-handling jacks and the safety of coworkers in the area. Therefore, only trained personnel are allowed to operate jacks. Lifting hazards can be eliminated in four ways.

- Design and plan the lift prior to beginning.
  - Is the load within rated capacity?
  - Are you using the appropriate jack for the job?
  - Is the load centered?
  - Did you read and understand all manufacturers' warnings and instructions?
- Guard against hazards.
  - Ensure jack is properly guarded from pinch points.
  - Are unnecessary personnel clear of the area?
- Provide a warning to coworkers when materials will be lifted and stabilized in their area.
- Ensure jack stands are used when possible. Never trust a jack for stability. Always set the load on a stand.

Jack Hazards

Overloading:

This occurs when the jack is loaded beyond its load capacity or a variety of other variables listed below:

- The load is raised too quickly causing imbalance.
- Operator not knowing the weight of the load or capacity of jack.

The operator is to be familiar with the jack ratings. All ratings must be marked legibly on each jack. All ratings are established from the manufacturer and cannot be increased by any means.

Unguarded Moving Parts:

Ensure all moving shafts, chains, and sprockets are properly guarded.

Lockout System for Overhead Jacks:

Lockouts will be utilized during maintenance and repairs. In most cases, a lockout or "OUT OF ORDER" tag will be sufficient. Additional means may include taking the jack apart by removing the handle or placing it in a maintenance area (e.g. on a work bench). Follow all lockout procedures outlined in the "LOCKOUT" section of this manual.

Inadvertent Loss of Load:

There are several circumstances where a load can be unstable causing the loss of the entire load.

- Imbalance caused by rough movements.
- Movement of the load. Ensure vehicle break is engaged and/or wheels are chocked.
- Jack wheel, lift arm, or saddle disengages from jack body. This is why jack inspections are crucial to operations safety.
- Exceeding the rated load capacity.

Note: These risks can be eliminated using proper planning techniques (the right jack for the job and proper inspection techniques).

Harmful Elements

Keep any blatantly harmful elements from coming in contact with jacks such as fire or heat (from welding), alcohol (brake fluid), paint thinners, or acids.

NOTE: NEVER LOAN A JACK OUT TO ANOTHER PERSON OR ORGANIZATION. THERE WILL BE NO WAY TO ENSURE PROPER USE, INSPECTION, AND RESPECT OF THE JACK.

Inspections

Components:

The basic components of a jack include:

- Service Jacks
  - Operating Controls
  - Lift Arm
  - Saddle
- Hydraulic Hand Jacks
  - Pump Handle
  - Release Valve
  - Filler Plug
  - Ram
  - Extender (on some models)
  - Saddle
- Transmission Jacks
  - Operating Controls
  - Tilt Controls
  - Lift Platform Assembly

Inspections

Inspections will be conducted in accordance with three time periods as described below.

1. Pre-Use Inspection:

An inspection will be conducted by the operator before each use of a jack and/or if overloading has taken place to include:

- Checking for leaks.
- Checking for damaged parts/components.
- Checking for missing parts/components.
- Checking for loose parts/components.
- Checking for any other operational deficiencies which could affect the stability or performance of the jack (**see form at end of section**).

2. Release/Return Inspections:

A documented inspection will be conducted before a jack leaves and immediately when it is returned to our facility. This inspection should include at a minimum:

- Checking for leaks
- Checking fluid levels (if below freezing different fluid may be necessary)
- Checking for damaged parts/components
- Checking for missing parts/components
- Checking for loose parts/components
- Checking for any other operational deficiency that could affect the stability or performance of the jack.

3. Periodic Inspections (Biannual):

Biannual inspections will also be conducted according to the above criteria (**see form at end of section**).

NOTE: Pay close attention to deteriorating components. Especially jacks periodically exposed to the elements.

Damaged Jacks:

Any jack which appears to be damaged in any way, is found to be badly worn, or operates abnormally shall be tagged appropriately, and removed from service until necessary repairs are made by authorized personnel.

Proper Lifting Procedures

Proper Load Size:

Loads cannot exceed rated load capacity.

Lifting The Load:

- The saddle must be set against a load-bearing component (e.g. frame, axle).
- The load must be properly secured to avoid shifting/moving (e.g. chocks, brakes).
- Lift load slowly to ensure all the lifting devices operate effectively and are not slipping.
- Never leave a raised load unattended.

Jacks are not designed for pulling loads. Pulling loads can endanger the stability of the jack and should never be done.

NOTE: NEVER LEAVE A VEHICLE UNSUPPORTED. JACK STANDS ARE REQUIRED!

Labeling

Service Jacks

- **Load Rating** - Each jack shall be rated (in tons) from manufacturer.
- **Date Code** - Each jack shall be marked with a serial number or date code of manufacturer.
- **Warning Label** - Should read: "WARNING: THIS IS A LIFTING DEVICE ONLY: DO NOT MOVE OR DOLLY THE VEHICLE WHILE ON THE JACK. LOAD SHALL BE SUPPORTED IMMEDIATELY BY OTHER APPROPRIATE MEANS. STUDY, UNDERSTAND, AND FOLLOW ALL INSTRUCTIONS."

Hydraulic Hand Jacks

- **Load Rating** - Each jack shall be rated in tons from the manufacturer.
- **Date Code** - Each jack shall be marked with a serial number or date code of manufacturer.
- **Warning Label** - Should read: "WARNING: THIS IS A LIFTING DEVICE ONLY: LOAD SHALL BE SUPPORTED IMMEDIATELY BY OTHER APPROPRIATE MEANS. FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE."

Transmission Jacks

- **Load Rating** - Each jack shall be rated in tons from manufacturer
- **Date Code** - Each jack shall be marked with a serial number or date code of manufacturer.
- **Warning Label** - Shall read: "WARNING: (a) THE USE OF THIS JACK IS LIMITED TO THE REMOVAL, INSTALLATION, AND TRANSPORTATION IN THE LOWERED POSITION, OF TRANSMISSIONS AND DIFFERENTIALS. IT MAY BE USED WITH APPROPRIATE ADAPTERS MANUFACTURED SPECIFICALLY FOR THE JACK TO HANDLE OTHER COMPONENTS, SUCH AS REAR AXLE UNITS AND TRANSFER CASES, WITHIN THE WEIGHT LIMITATIONS SPECIFIED. (b) BE SURE VEHICLE IS APPROPRIATELY SUPPORTING REPAIRS. (c) DO NOT OVERLOAD. OVERLOADING CAN CAUSE DAMAGE TO OR FAILURE OF THE JACK. (d) THIS JACK IS DESIGNED FOR USE ONLY ON HARD, LEVEL SURFACES CAPABLE OF SUSTAINING THE LOAD, USE ON OTHER THAN HARD, LEVEL SURFACES CAN RESULT IN JACK INSTABILITY AND POSSIBLE LOSS OF LOAD. (e) FAILURE TO HEED THESE WARNINGS MAY RESULT IN LOSS OF LOAD, DAMAGE TO JACK, AND/OR FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE.

TRAINING

Training will be completed for all new employees and repeated periodically at the employee's Direct Supervisors discretion.

ADJUSTMENTS AND REPAIRS

Any unsafe conditions disclosed by the inspection requires the lifting device be taken out of service and repaired prior to its resumed operation. Qualified personnel in accordance with the manufacturer's guidelines can make repairs.

All components and attachments showing defects are to be discarded. All critical parts of a lifting device (gears, drums, bearings etc.), which are cracked, broken, bent, or excessively worn are to be discarded.

The following steps will be taken prior to making repairs to any lifting device:

- When possible, the device should be moved to a location causing the least amount of interference with normal operations.
- All controls at off position and power supplies Locked Out.
- Warning "out of service" sign placed in the on controls where it is visible from the floor.
- Rail stops, blocks, stands, cones, etc placed to ensure the device is isolated and secure.
- Following all adjustments and repairs, all guards and safety devices must be reactivated.

All rope which has been idle for a period of a month or more due to shutdown or storage shall be given a thorough inspection before it is used. This inspection shall be for all types of deterioration and shall be performed by an appointed or authorized person whose approval shall be required for further use of the rope. In addition, devices not used for over a month will require a complete inspection prior to operation.

Monthly (Frequent)/Annual (Periodic) Crane/Hoist Inspection

Crane/Hoist Number (id):					Type:			
Monthly (Frequent) Inspection								
DATE	Hooks	Chains/Cable	Slings	Safety Latch	Limit Switch	Controls	General	Comments
			SEE SEPERATE FORM					

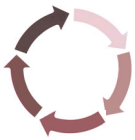
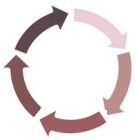
Annual (Periodic) Inspection-Done by outside organization-See separate documentation		
Date	Checked	Comments
Chains,Cable,Rope		OUTSIDE
Slings		
Loose Belts or Rivets		
Oil Level		
Control Unit		
Grease Cable/Chain and Drum		ORGANIZATION
Rope, Anchor and Guide		
Supporting Structure		
Overall Condition		

Additional Concerns or Observations:

Note: Annual Inspections are also required and will be performed by a certified/qualified outside organization.

The above inspection must be accomplished at a minimum of once per month.

Inspected By_____ **Monthly Sling Inspection Program** Date: _____

	ID #	Frays	Stitching	Hooks	Rings	Cable	Burns	Stretch	Links	Comments	Pass/Fail

Note:
Annual Inspections will be performed by a qualified outside company only.
The above documented inspection must be accomplished at a minimum of once per month.