

Safety Handbook

City of Alva, Oklahoma

Management Statement of Safety Policy	1
Section I. Accident Prevention Plan Components	2
Safety Responsibilities	2
Management Safety Responsibilities	2
Supervisor Safety Responsibilities	2
Employee Safety Responsibilities	3
Safety Education and Training Policy	4
Safety Meetings/Training	4
Documentation of Safety Meeting/Training	5
Ongoing Training	5
New Employee Safety Orientation	6
Reporting Unsafe Acts and Unsafe Conditions	6
Recordkeeping Policy	6
Injury Loss Records	6
Accident Investigation Reports	7
Inspection Reports	7
Safety Meetings/Training Records	7
Annual Accident/Incident Analysis	8
Annual Reviews of the Safety Program	8
Safety Audit/Inspection Policy	8
Accident/Incident Investigation Policy	8
Responsibilities	9
Procedures	9
Annual Accident/Incident Analysis Policy	12
Safety Program Review/Revision Policy	13
Safety Slogan Contest	13
Health/Safety Committee	14
Health/Safety Committee Organization	14
Responsibilities	15
Meetings	16
Vehicle Operator Standards	16
Policy	16
Purpose	16
Scope	16
Definitions	16
Responsibilities	17
Procedures	18
Section II. General Safety Rules, Practices, and Procedures	19
General Safety Rules	19
Personal Protective Clothing and Equipment — General Requirements	20
Personal Protective Equipment — Fire Department	22
Personal Protective Equipment — Police Department	23

Hazard Communication Program	24
Regulatory Requirement	24
Scope	24
Policy and Objectives	24
Distribution of Written Program	24
Employee Comments	24
Responsibilities	24
Employee Information and Training	26
Definitions	26
Reporting Fatalities and Injuries	27
Informing Contractors	28
General Safety Rules for Motor Vehicle and Equipment Operation	28
Stopping on Roadways	30
Inspection of Vehicles and Equipment	31
Electrical Safety	31
Lockout/Tagout Procedures	33
Definitions	33
Employee Responsibilities	34
Preparations for Lockout/Tagout	34
Sequence of Events to Implement Lockout/Tagout	34
Sequence of Events to Restore Machine or Equipment to Normal Operations	35
Employee Training Requirements	35
Blood borne Pathogen Safety	36
First Aid Kits	37
Confined Space Safety	37
Trenching and Excavation Safety	39
Work Zone Traffic Control	41
General Law Enforcement Personnel Safety	43
Police Officer Safety	43
Firearm Safety	44
Firing Range Safety	45
Vehicle Inspection	46
Emergency Vehicle Operation	46
General Fire Personnel Safety	47
Personnel Safety on Vehicles	47
Fire Station Safety	47
Search and Rescue	48
Fire Ground Safety Rules	49
Vehicle Fires	50
Emergency Vehicle Operation	51
Material Handling Safety	52
Fire Extinguisher Awareness	53
General Tool Safety	54
General Ladder Safety	55
Straight Ladders	56
Step Ladders	56
Material Storage Safety	57
Bins and Shelves	57
Stacking Material	57
Flammable Material	57

Housekeeping	58
Smoking	59
General Shop Safety	59
General Storage Yard Safety	62
Compressed Gas Cylinder Safety	62
General Welding and Cutting Safety	64
Gas Welding	66
Electric Welding	66
Temperature-Related Illness Awareness	67
Cold-Related Illnesses	67
Heat-Related Illnesses	67
Pesticide/Herbicide Safety	68
Chain Saw Safety	69
Forklift Safety	70
Backhoe/Loader Safety	72
Dump Truck Safety	73
Tractor/Shredder Safety	74
Grounds Maintenance Safety	75
Power Lawn Mowers and Edgers	75
Chippers	76
Poison Ivy/Oak/Sumac Awareness	77
General Painting Safety Rules	78
General Office Safety	79
Ergonomics Awareness	81
Work Stations	81
Lighting, Noise, and Heat	81
Aggressive Animal Awareness	82
Section III. Disciplinary Process	83
Disciplinary Policy	83
Safety Reprimands	83
Verbal Warnings	83
Written Warnings	83
Disciplinary Leave	84
Termination	84
Documentation	84
Exhibit 1: Safety Meeting Attendance Form	85
Exhibit 2: New Employee Safety Orientation Record	86
Exhibit 3: Employee Report of Unsafe Act/Unsafe Condition	87
Exhibit 4: General Safety Inspection Form (required monthly)	89
Exhibit 5: Accident/Incident Investigation Report Employee's Statement	91
Exhibit 6: Employee's Vehicle Accident Report	93
Exhibit 7: Supervisor's Vehicle Accident Report	95
Exhibit 8: Property Damage Investigation Report Supervisor/Division Head's Statements	97
Exhibit 9: Accident/Incident Investigation Report Supervisor/Division Head's Statement	99
Exhibit 10: Annual Accident/Incident Analysis	101
Exhibit 11: Annual Review of Safety Program	102
Exhibit 12: Safety Committee Minutes	103
Exhibit 13: Employee Reprimand Form	104

Management Statement of Safety Policy City of Alva, Oklahoma

To All Employees:

The success of the City of Alva depends upon our efficient use of resources to produce a high quality product for the citizens of our community. Our most important asset is our employees. To protect you, we are committed to providing a safe and healthful workplace for all employees by establishing and maintaining an effective health and safety program. Consequently, we consider health and safety to be a fundamental part of our organization's operations. This commitment is consistent with our values statement:

United in our commitment to ensure a safe work environment, fair wages and benefits, and opportunities for advancement

The responsibility for safety resides in each of us. We are each challenged to stay informed and to take responsibility for our own safety and the safety of our co-workers. To ensure the success of our health and safety process, we must all give our full participation and support to the safety policies and procedures that have been developed to protect us. Working safely and in accordance with established safety policies is an absolute requirement for all employees, supervisors, and managers.

STEVEN BROWN, CITY BUSINESS MANAGER

SECTION I. ACCIDENT PREVENTION PLAN COMPONENTS

Safety Responsibilities

Management Safety Responsibilities

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

- Provide leadership and direction concerning safety activities.
- Participate actively in the continuous evaluation of the safety program.
- Set goals concerning safety performance within your department.
- Review losses for potential trends on a regular basis.
- Enforce all safety rules.
- Participate in facility and work site audits.
- Participate in and support all accident investigation activities.
- Review accident reports and recommend corrective actions.

Supervisor Safety Responsibilities

Safety is as much a part of the supervisor's responsibility as is getting the job done efficiently. The important safety responsibilities of each and every supervisor include:

- Familiarize yourself with and enforce the safety rules and regulations that have been established by applicable local, state, and federal organizations. These regulations are intended to set minimum standards for safety, and the contents of the regulations should be enforced as minimum safety requirements for all activities on our work sites or in our facilities.
- Correct or have corrected all reported hazards. Violating proper safety procedures under

known hazardous conditions will not be tolerated.

- Do not permit new or inexperienced employees under your supervision to work with power tools, machinery, or complex equipment without proper instruction.
- Give adequate instructions. Do not assume that an employee knows how to do a job unless you personally have knowledge that the person can perform the task correctly.
- Ensure that tools, equipment, and machinery being used in the workplace are in proper working condition.
- Ensure that proper personal protective equipment is available and employees use it when necessary or required.
- Always set a good example in safety, such as wearing the proper safety equipment (e.g., safety glasses, hard hats) following policies/procedures, using seat belts, etc.
- Do not allow the use of unsafe tools or equipment.
- Consistently enforce the requirements of the organization's safety program and any associated rules or policies.
- Ensure that all employees have access to a copy of the organization's safety program.
- Encourage safety suggestions from employees under your supervision.
- Obtain prompt first aid for injured employees.
- Participate in accident or incident investigations involving your employees.
- Conduct audits of all work areas and facilities on a regular basis in an effort to improve housekeeping, eliminate unsafe conditions, and encourage safe work practices.

Employee Safety Responsibilities

All employees bear a certain amount of responsibility in any safety program. You must be aware that your actions, mental state, physical condition, and attitude directly affect the safety of yourself and your fellow employees. All employees will:

- Know your job, follow instructions, and think before you act.
- Use your protective equipment (e.g., eye protection, hard hats, and gloves) as the job requires.

- Work according to good safety practices as posted, instructed, or discussed.
- Refrain from any unsafe act that might endanger yourself or your fellow workers.
- Use all safety devices provided for your protection.
- Report any unsafe situation or act to your supervisor immediately.
- Assume responsibility for thoughtless or deliberate acts that may cause injury to yourself or your fellow workers.
- Abide by all policies, procedures, rules, etc. associated with the City's Safety Manual. A copy of this manual is available at any time upon request.
- Never operate equipment that you are unfamiliar with or not trained to use. Equipment that is defective or in need of repair shall not be used and must be reported to your supervisor.
- Report all accidents and incidents to your supervisor as soon as they occur.

Safety Education and Training Policy

Safety Meetings/Training

Safety meetings are an effective way to encourage, educate and train employees on following safe work practices and will be held on a monthly basis. The safety officer will provide information to be used in the meetings and will attend and participate in the meetings when possible. Monthly safety meetings will normally be conducted by the safety officer or designee. Discussions of new safety rules, possible hazards to be encountered in future job duties, and changes in procedures or equipment are some topics that should be covered on a regular basis. All safety meetings will be documented as to the date, attendance (signature in each employee's own handwriting), and topic discussed. The safety meeting attendance form (Exhibit 1) will be used to document the safety meetings.

Subjects to be addressed during the safety meetings will include, but not be limited to, the following:

- Hazards associated with the workplace
- Hazards of particular jobs or tasks
- Emergency procedures

- Hazard communication
- Specific equipment operation training
- Employee reporting requirements
- Office safety
- Driving safety
- Machinery safety
- Subcontractor safety requirements
- Back injury prevention
- Housekeeping
- Defensive driving

Documentation of Safety Meeting/Training

Documentation from any safety meeting or training course attended by employees, supervisors, or managers will also be kept for recordkeeping purposes. Documentation associated with safety meetings and training will be kept by the safety officer.

Ongoing Training

The division superintendent will provide ongoing safety training in the following areas as the need arises:

- New equipment purchases
- New/changes in operations
- Identified areas of increased accidents
- Newly identified areas of exposure

New Employee Safety Orientation

The division superintendent will provide an orientation to all new employees to address the

hazards of their positions. This will include a review of all safety rules, policies, procedures, equipment, etc., that are applicable to each new employee's area of assignment. New employees will be given an opportunity to ask any relevant questions that may pertain to their assigned duties. Documentation on the new employee safety orientation form (Exhibit 2) will be maintained by the safety officer.

New employees will be required to complete the orientation form prior to being assigned any job responsibilities.

Reporting Unsafe Acts and Unsafe Conditions

Leadership through communication in a responsive manner, while maintaining a high degree of professionalism, empowers all employees to report any unsafe acts or unsafe conditions. This report will be made on the employee report of unsafe act/unsafe condition (Exhibit 3).

Recordkeeping Policy

It is the policy of the City of Alva to maintain records of all health and safety documents for a minimum of three years (longer if required by law), not including the current year. The safety officer will ensure that records maintained by the City of Alva will include, but are not limited to the following.

Injury Loss Records

A copy of each (state) workers' compensation form (employer's first report of injury) will be kept on file by the safety officer.

A copy of each (state) workers' compensation form (supplemental report of occupational injury or illness) shall also be kept in the above-mentioned location.

Claim/loss information from insurance carriers (all lines of coverage) shall be maintained in the files of the safety officer. This information can be used for various means of trend analysis.

Accident Investigation Reports

The safety officer will ensure that an accident investigation report is completed for each reported accident or incident. A copy of all completed accident investigation reports will be maintained by the safety officer. Only the accident investigation report forms approved by the City of Alva will be used to document accident investigation data. (See Accident Investigation Policy for more specific information.)

Inspection Reports

A file will be maintained by the safety officer for all inspection reports required in the safety manual (e.g., worksite inspection reports, vehicle inspection reports, etc.). The superintendent will ensure that all required inspection reports are completed in a timely manner. The work site inspection reports will be completed by the superintendent and the vehicle inspection reports will be completed by the vehicle operator. Only inspection forms approved by the City of Alva will be used. Corrective action will be documented for any deficiencies noted on the inspection reports.

(Include any other inspection/audit reports that will be used as part of the safety manual.)

Safety Meetings/Training Records

Documentation of monthly safety meetings and other training records will be maintained by the safety officer. Only safety-meeting forms approved by the City of Alva will be used to document the activities. When safety meetings are used as training activities, it should be duly noted on the form. The individual conducting the safety/training meeting is responsible for turning in a copy of the safety meeting form to the safety officer. The safety officer will ensure that the meetings are held on at least a monthly basis.

Annual Accident/Incident Analysis

A file of annual accident/incident analysis reports, using the City of Alva form, will be maintained by the safety officer.

Annual Reviews of the Safety Program

A file of annual reviews of the safety program reports, using the City of Alva form, will be maintained by the safety officer.

The safety officer will perform annual checks of the records for inclusion of all required safety documentation as described in this manual.

Safety Audit/Inspection Policy

A documented, monthly self inspection of all work sites will be conducted by the superintendent in an effort to detect unsafe acts or unsafe conditions and initiate corrective action as soon as possible. Employees may be asked to assist the superintendent in conducting the inspections. A copy of the attached general safety inspection form (Exhibit 4) will be completed for each work

site and the completed forms will be maintained by the safety officer.

Individual employees are responsible for inspecting their work areas for possible hazards on a continual basis. Any potential hazards will be reported to supervisory personnel immediately and may also be reported using the employee report of unsafe act/unsafe condition form (Exhibit 3).

The employees who are assigned to drive City of Alva vehicles will complete vehicle inspections on a daily basis.

Inspection records should be maintained for at least one year. In addition, all maintenance records should be kept for the life of the vehicle.

Accident/Incident Investigation Policy

It is the policy of the City of Alva to investigate all work-related accidents or incidents that result in or could potentially have resulted in injury or property damage. As nearly all accidents and incidents have their own unique characteristics, only general rules and procedures can be outlined here.

The standard accident/incident investigation report (Exhibit 5) will be used for both initial and final investigations. (The bottom of the report will be marked to indicate whether it is an initial or final report.)

Responsibilities

- Employees must immediately report to their supervisor any on-the-job injury or illness they sustain, or suspect they have sustained, no matter how minor. They must also report any incidents that had the potential for injury to employees or third parties and any instances where property damage occurred.
- Supervisors will first respond to the immediate medical needs of any injured persons. Then they should begin reporting and investigating activities as described in this policy.
- Witnesses to the event that resulted in the accident or incident will provide statements about what they observed. The witnesses may also be asked to participate in the initial and final investigations.
- The superintendent is responsible for receiving the initial reports of injury and forwarding them to the safety officer in a timely manner.

- The superintendent is responsible for receiving initial reports of vehicle accidents (Exhibit 6), completing the supervisor's vehicle accident report (Exhibit 7), and forwarding them to the fleet maintenance superintendent and safety officer in a timely manner.
- The superintendent is responsible for receiving the initial reports of property damage more than \$50 (Exhibit 8) and forwarding them to the city secretary and safety officer.
- The safety officer is responsible for reviewing the initial accident/incident report, property damage reports, and the supervisor's or division head's statement (Exhibit 9) then setting the time and place for the final investigation.

Procedures

- *Initial notification.* Employees are responsible for reporting all injuries, illnesses, or incidents as described earlier in this policy. Failure to report any injury or incident may be cause for disciplinary action. (In the event of a serious or disabling injury, fellow employees must assume this reporting responsibility.)
- *Initial treatment.* Any injury will be treated by the supervisor or other available personnel in accordance with their individual abilities and the severity of the injury. During normal working hours, the preferred occupational medical provider will be Dr. _____; after normal working hours _____Hospital will be the preferred occupational medical provider. For eye injuries, call Dr. _____ at phone _____. 24 hour service. 7 days a week.

Injured employees are to be transported for medical treatment either by ambulance or another person, depending on the severity of the injury. Injured employees should never be allowed to transport themselves for initial medical treatment, but they may transport themselves for follow-up visits if the injury does not impair their driving abilities.

Medical treatment is mandatory for any of the following:

- Severe chest pains
- Traumatic injuries
- Loss of consciousness or severe dizziness

The first responders to any incident scene will be responsible for securing the area to prevent further damage or injury and also to protect the integrity of the incident scene until an investigation can be initiated.

Any incident involving possible exposures to blood borne pathogens, communicable

diseases, or any other contagious substance shall be handled in accordance with those specific policies or procedures regarding that particular incident.

If an employee refuses medical treatment for an on-the-job injury, the investigation report should be completed reflecting this fact, and the employee's signature should be used to document the event. However, if the supervisor is of the opinion that the employee should obtain medical care, then the supervisor should direct that the employee seek medical care, and it will be grounds for disciplinary action if the employee refuses medical treatment after being directed to receive it.

- *Further notification.* The supervisor must be contacted following the occurrence of an accident or incident to assure an initial report is completed and forwarded to the safety officer.
- *Initial investigation.* The supervisor will immediately inform the injured employee that he or she has the right to choose a physician, but to avoid any conflicts and to be within the guidelines of filing a workers' compensation claim, the injured employee must see our designated workers' compensation physician, Dr. _____. Please contact the safety officer to schedule an appointment. If this is an eye injury, Dr. _____, call safety officer to schedule an appointment.

The following information will be required:

- Statement from the injured employee
 - Statement from the supervisor
 - Physician's designation of duty status report (must be taken to physician and returned to supervisor)
- *Initial report.* An initial report will be completed for all accidents and incidents within 24 hours of occurrence. The immediate supervisor of the employee will complete the initial investigation and report as soon as possible after the occurrence. The initial report will be turned in to the safety officer or the assigned/designated person during all other times.
 - *Final investigation.* If recommended by the safety officer, a final investigation will take place within 72 hours of the original accident or incident. Attendance at the investigation meeting will, at a minimum, include the injured employee, injured employee's supervisor, witnesses, and the safety officer.

The final investigation will include:

- Description of the event by the involved people

- Accounts of witnesses
- Input from supervision
- Listing of causes
- Development of corrective actions

Basically, the investigation must answer the following questions:

- Who was injured or what was damaged?
 - What part of body was injured or exposed?
 - When did the accident/incident occur?
 - Where did the accident/incident occur?
 - Why did the accident/incident occur?
 - What caused the accident/incident to occur?
 - How can it be prevented from occurring again?
- *Final report.* The safety officer will take responsibility for issuing the final report. The final investigation report will reflect all changes from the initial report and also must include:
 - Finalized corrective actions.
 - Assigned completion dates for all corrective actions.
 - Assigned people to complete the corrective actions. The people assigned the corrective actions shall also be required to sign off on the final report when the corrective actions have been completed.

Copies of the final report should be supplied to:

- Safety officer
- Superintendent
- Assist director of public works
- Division head
- Employee
- Personnel file

Annual Accident/Incident Analysis Policy

The City of Alva will review annually all reports of injuries, mishaps, near misses, property damage, accident investigations, unsafe conditions, and work site inspections that have occurred or been completed over the past year to determine if injury or hazard trends are

developing. Where potential trends are identified, the causes will be determined to assist in the implementation of corrective actions for the trends. The safety officer will recommend and initiate prompt corrective actions as needed to eliminate or reduce hazardous exposures to employees. The safety officer will follow up on the effectiveness of the corrective actions to assure the situations have been abated or are in the process of being corrected.

The use of a safety committee or a group of employees to perform this analysis is one option that will take the responsibility off of a single individual.

The annual accident/incident analysis form (Exhibit 10) will be used to document this accident/incident analysis. This documentation will be kept on file by the safety officer for a period of at least five years.

A copy of the analysis will be sent to superintendents.

Safety Program Review/Revision Policy

The safety committee will review the entire safety program annually for revisions to meet exposures within the current operations. Areas that will be carefully evaluated include operations added; equipment added or changed changes in environmental conditions, and adequacy of personal protective equipment. In addition, procedures should be reviewed to make sure they are still applicable.

All employees will be informed of any changes in the safety program and provided proper training as needed. The safety officer will ensure that changes or revisions are added to the written safety program in a timely manner.

This annual review will be documented on the review form (Exhibit 11) and maintained by the safety officer. A five-year history of completed forms should be maintained.

Safety Slogan Contest

As part of the safety policy, the City of Alva will conduct an annual safety slogan contest, open to all employees, except management. Each employee may submit safety slogans to be used throughout the year to promote safety.

As some time during the year, the City of Alva will solicit safety slogan recommendations from each employee to be used each quarter to promote safety throughout the City of Alva.

Each employee may submit up to 10 safety slogans for review and consideration. Along with each submitted slogan, the employee must attach a paragraph explaining what the safety

slogan means and how it will promote safety throughout the city. Slogans submitted without explanatory paragraphs will not be judged.

The recommendations will be compiled without names and sent to the Safety Committee, which will review all slogans and paragraphs submitted and make the final determination of the winning slogans. Four slogans will be chosen as winners, one for each quarter. The employee or employees submitting winning slogans will receive one day (8 hours) off with pay. All days off won by employees must be taken by the end of the calendar year in which the safety slogan was used.

The winning slogans will be used quarterly for promoting safety by the use of various promotional ideas (e.g., posters, stickers, caps, cups, pens, pencils). The Safety Committee will recognize the winning slogan along with the employees who submitted them at the monthly meeting immediately following selection.

Health/Safety Committee

Health/Safety Committee Organization

A safety committee has been established for the City of Alva to recommend improvements to our workplace safety program and also to help in the identification of corrective measures needed to eliminate or control recognized safety and health hazards. The safety committee will consist of the following supervisory and nonsupervisory members of our organization:

Health/safety officer:

Health/safety chairman:

Health/safety committee members:

The 12 members of the safety committee should be enlisted through a volunteer process or through election by co-workers. This process will help ensure that members are interested in

achieving results and are dedicated to creating and maintaining a safe workplace.

Responsibilities

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

The safety committee will be responsible for assisting management in reviewing and updating workplace safety rules based on accident investigation findings, inspection findings, employee reports of unsafe acts or unsafe conditions, and employee suggestions and complaints. These reviews will be conducted on an ongoing basis during monthly meetings and will focus on hazard/injury analysis and possible developing trends. Resources used during these analyses will include state workers' compensation forms, accident investigation reports, first aid logs, loss runs, other insurance carrier loss runs, etc. The chairperson of the safety committee will maintain a copy of these records for reference as needed. The committee will provide a written notification of any identified trends to the safety officer.

The safety committee will assist management in continually evaluating employee accident prevention programs in an effort to promote safety awareness and employee participation in the safety program. This evaluation will involve conducting periodic safety inspections, observing work practices, reviewing accident causes, and suggesting recommendations for corrective measures. Responsibilities may also include updating or rewriting of policies or procedures as evaluations identify possible deficiencies.

Safety committee members will regularly participate in safety training activities and will also be responsible for assisting management in monitoring the effectiveness of workplace safety education and training sessions. Members of the committee will participate in the development of improvements for identified deficiencies in the education and training programs.

Meetings

Safety committee meetings will be held at least monthly and more often as needed. The safety officer will be responsible for recording the minutes of each meeting (Exhibit 12). A copy of the finalized minutes will be forwarded to each member of the committee and may also be posted in the workplace for other employees to review.

Vehicle Operator Standards

Policy

All employees authorized to operate the City of Alva vehicles and motorized equipment, or who operate personal vehicles on the City of Alva related business, shall be subject to the standards established in this policy.

Purpose

This policy establishes minimum standards for the qualification of employees and applicants to operate the City of Alva vehicles and motorized equipment.

Scope

This policy shall apply to:

- Employees driving city-owned, leased, or rented vehicle or motorized equipment
- Employees receiving a monthly car allowance, or who use personal vehicles for city-related business
- Applicants for positions which require the operation of city vehicles or equipment

Definitions

- *City vehicles.* Any passenger car, pickup, truck, or other similar vehicle that is owned, leased, rented, or otherwise under the care, custody, or control of the city. A city vehicle shall also include vehicles driven by employees receiving a car allowance and personal vehicles.
- *Motorized equipment.* This category includes, but is not limited to, backhoes, dozers, mower-tractors, loaders, graders, and other similar equipment.
- *Preventable accident.* Any accident involving a city vehicle or piece of motorized equipment which results in property damage and/or personal injury in which the driver in question failed to exercise every reasonable precaution to prevent the accident. The preventability of an accident shall be determined from the investigative results of the appropriate law enforcement agency.
- *Personal vehicles.* Privately owned vehicles used in the conduct of city business, and for

the use of which the driver is eligible to claim mileage reimbursement.

- *Driving privileges.* Means meeting the requirements and being authorized to operate a city vehicle, motorized equipment, or personal vehicle in the course of employment with the city.
- *Driving records.* The complete driving history of an employee as can be discerned from any official records.

Responsibilities

Employees who drive city vehicles or operate motorized equipment in the course of their employment shall be required to meet the following minimum conditions of eligibility for driving/operating privileges:

- Have reached the age of eighteen (18) years to operate city vehicles or motorized equipment.
- Be physically qualified to hold a driver's license and to safely operate a city vehicle or motorized equipment.
- Have current valid driver's license in the appropriate class as established on the official description for the position.
- Wear seat belts and other relevant safety equipment when operating city vehicles or motorized equipment when appropriate.
- Observe all city vehicle and traffic related policies.
- Observe all laws and ordinances relating to the operation of city vehicles or motorized equipment.
- Be responsible for the proper care and use of vehicles or motorized equipment. This includes maintaining city vehicle/motorized equipment interiors and exteriors, regularly servicing these items and reporting maintenance needs to the supervisor, and operating all city vehicles/motorized equipment in a manner that conserves fuel and reduces depreciation.

Employees receiving car allowance or using personal vehicles shall fulfill all current legal regulations such as insurance, inspection, and registration.

Procedures

The following procedures shall be observed under this policy:

- Employees operating city vehicles, motorized equipment, or personal vehicles must report to their supervisors any accident involving said vehicles immediately or as soon as possible and no later than 24 hours of the accident.
- Employees who are in jobs that require the driving/operating of city vehicles, motorized equipment, or personal vehicles shall report any driver's license suspensions to their immediate supervisor within 24 hours of the suspension.
- Failure to report license suspensions, failure to maintain the required driver's license, or failure to meet minimum driving record criteria will be sufficient grounds for removal of driving privileges and may subject the employee to disciplinary action.
- An employee who has been ruled ineligible for driving privileges may use the defensive driving course option only once every three years in order to have his or her eligibility status reinstated, unless the ineligibility is due to driver's license suspension.
- Employees who have been ruled ineligible to drive city vehicles or equipment due to their driving record may, at the city's sole discretion be:
 - Assigned non-driving responsibilities within their current department, if available
 - Transferred to another department and assigned non-driving responsibilities, if available
 - Dismissed, if neither of the above alternatives can be achieved within 20 working days. All non-driving responsibilities must have prior approval of the department head.
- Employees who receive a car allowance and become ineligible for driving privileges shall have their car allowance revoked and shall not be permitted to drive on city related business. Employees who use their personal vehicles and become ineligible for driving privileges shall not drive a vehicle, whether personal or not, on city related business.

SECTION II. GENERAL SAFETY RULES, PRACTICES, AND PROCEDURES

General Safety Rules

- Each employee is required to comprehend and abide by the contents of this safety program.

- All accidents, no matter how minor, must be reported immediately to your supervisor.
- All hazardous conditions, actions, and practices must be reported to your supervisor.
- Work areas, including inside and outside of vehicles and buildings, must be kept clean and orderly at all times.
- Employees can only operate equipment and tools that they are trained and authorized to operate.
- Smoking is prohibited in areas where there is a danger to equipment, materials, coworkers or buildings, or where “No Smoking” signs are posted. City ordinance prohibits smoking in any city building.
- Employees must use all safety devices and personal protective equipment provided for their protection.
- Employees must wear clothing and shoes suitable for the particular work they are doing.
- Employees must use assisted lifting devices or obtain assistance from a co-worker when lifting heavy objects.
- Safety guards must never be removed except when authorized to make repairs or adjustments. Replace guard immediately upon completion of work.
- Before performing work on any machine or equipment that is out of service, employees must render the equipment or machine inoperative and attach a lockout device to the equipment control.
- The use of drugs and alcohol during working hours is prohibited. Any employee reporting for work under the influence of alcohol or controlled substances will be subject to disciplinary action.
- Any employee taking prescription drugs or over-the-counter drugs that could impair assigned work must report this fact to the supervisor as required by the Alcohol and Controlled Substances Policy.
- Employees must not engage in practical jokes or horseplay.

Personal Protective Clothing and Equipment — General Requirements

- All employees must wear clothing suitable for their particular type of work. Loose clothing

must not be worn while working around or near moving machinery or equipment.

- All departmental approved special protective clothing or protective devices must be used by employees when departmental supervisors require their use.
- Clothing that is soiled by oil or chemicals should be avoided to prevent skin irritations.
- When work is performed in the vicinity of exposed energized parts of equipment, employees should remove all exposed conductive articles, such as key or watch chains, rings, wrist watches or bands, if such articles increase the hazards associated with inadvertent contact with the energized parts.
- Rings or jewelry should not be worn while climbing on or off structures or vehicles while performing any task where the ring might get caught under or snagged by a projecting item. In addition, rings and wristwatches with metal case and watchbands should not be worn while working on or near energized equipment or lines.
- Department approved gloves will be provided to and worn by all employees when work site operations could cause injury to the hands.
- Gloves and long sleeves should be worn to protect hands and arms when handling cement, brush, sharp objects, hot materials, acids, and other chemicals, or when there is a possible exposure to poison ivy.
- Department approved head protection will be provided to and worn by employees when working in areas where possible danger or head injury exists from impact, falling or flying objects, or from electrical shock and burns.
- Employees must wear department approved eye and face protection where injury exists from flying objects, glare, liquid splashes, weed-eaters, edgers, chemicals, grinding, sandblasting, and welding. Eye protection should be kept in a sanitary and usable condition and replaced when it becomes warped, scratched, or pitted.
- Department approved hearing conservation devices will be provided to and worn by all employees working in areas where a danger of noise exposure exceeds acceptable levels.
- Employees must wear footwear suitable to the type of work being performed. Safety boots or shoes will be worn when required.
- Department approved life jackets or buoyant work vests will be worn by all employees when working over or near water where the danger of drowning exists.

- Department approved respiratory protection will be worn in areas where dangerous air contamination, chlorine, gasses, vapors, fumes, dust, or other hazardous contaminants exist.
- Employees required to work in or near the roadway must wear high visibility clothing, garments, or reflective vests.
- Department approved fall protection devices, such as harnesses, lanyards, etc., must be used by all employees when working in an overhead position which may require use of both hands and when there is a danger of falling.
- Protective clothing and equipment should be used and maintained in accordance with manufacturers' recommendations.

Personal Protective Equipment — Fire Department

- Full protective clothing must meet NFPA standards and include the following: approved helmets, pants, coats, gloves, hoods, boots, and a personal account safety system.
- Full protective clothing must be worn at all times while engaged in any fire fighting activities or other emergencies unless a specific exception is made by departmental policy or the officer in charge deems safety and efficiency are not jeopardized.
- An approved self-contained breathing apparatus will be provided for and used by all personnel when working in areas where the atmosphere is hazardous, suspected of becoming hazardous, or may rapidly become hazardous.
- Approved gloves must be worn when engaged in fire fighting, overhaul, training with the hose and ladders, using hand or power tools, and any other situation where injuries to the hand are likely to occur.
- Eye and face protection appropriate for the given hazard will be provided for and used by all personnel exposed to that hazard.
- Hearing protection will be provided for and used when exposed to noise levels that exceed acceptable levels, except in situations where the use of such protective equipment would create an additional hazard to the user.
- Personnel who perform emergency medical care or otherwise likely to be exposed to blood or other body fluids will be provided with and use emergency medical garments, emergency medical face protection devices, and emergency medical gloves. (For

additional information, please refer to the blood borne pathogen section of this manual.)

- Personnel who engage in operations during hazardous material emergencies that may expose them to known chemicals in vapor form or unknown chemicals will be provided with and must use vapor-protective suits.
- Personnel who engage in operations during hazardous material emergencies that may expose them to known chemicals in liquid-splash form will be provided with and must use liquid-splash suits.

For additional guidance in the use of personal protective equipment, please refer to the Personal Protective Clothing and Equipment — General Requirements.

Personal Protective Equipment — Police Department

- Suitable eye and hearing protection should be worn when personnel are firing weapons during training or other special operations.
- When provided by the city, body armor must be worn by all police officers when on duty or during special operations.
- Reflective vests must be worn by officers when directing traffic. A lighted baton is recommended when directing traffic any time between one hour before sunset and one hour after sunrise, or during inclement weather.
- Leather gloves or their protective equivalent should be worn when searching people or places where sharp objects may reasonably be encountered.
- Disposable gloves should be worn when handling any people, clothing, or equipment with bodily fluids on them. Masks in combination with eye protection devices should be worn whenever splashes, spray, spatter, or droplets of potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. (For additional information, please refer to the blood borne pathogen section of this manual.)
- Plastic mouthpieces or other authorized barrier/resuscitation devices should be used whenever an officer performs CPR or mouth-to-mouth resuscitation.
- Personal protective equipment such as neoprene gloves, rubber boots, shoe covers, rubber aprons, and protective eyewear should be used as necessary when handling flammable, corrosive, caustic, or poisonous chemicals.
- Protective gear including vests, hoods, goggles, gloves, elbow/knee pads should be

utilized during tactical operations and by special units as needed.

For additional guidance in the use of personal protective equipment, please refer to Personal Protective Clothing and Equipment — General Requirements.

Hazard Communication Program

Regulatory Requirement

The City must comply with the Hazard Communication Act and Occupational Safety and Health Standard 1910.1200. This standard requires employers to train and educate employees on the safe use and handling of hazardous materials that employees may be exposed to in the workplace and to ensure accessibility to information regarding hazardous chemicals.

Scope

This policy applies to all City employees.

Policy and Objectives

The objective of the program is to provide training and appropriate personal protective equipment so employees may work safely with hazardous chemicals found in the workplace. Employees have an obligation to adhere to instructions on safe use, handling, and disposal of hazardous materials.

Distribution of Written Program

An original copy of this program is available for review at City Hall and a copy will be maintained in each workplace.

Employee Comments

If employees have any questions or concerns about the program, they are encouraged to submit their comments to their supervisor or the safety officer. Comments will be evaluated and appropriate action taken.

Responsibilities

- Safety officer:

- Develop and implement the city's hazard communication program, including the development of policies and procedures and conducting initial training.
 - Act as a resource to assist supervisors in developing training plans on specific chemical hazards their employees may encounter in their work environment.
 - Coordinate with department supervisors to develop a workplace chemical list as required. The safety officer will send complete records to the director of the appropriate state agency on demand.
 - Maintain records of initial employee training.
- Division directors:
 - Support the city's hazard communication programs including ensuring employees attend required training.
- Supervisors:
 - Maintain a list of hazardous chemicals kept in the work center or which the employee is required to handle on the job. Update the list as chemicals are added or deleted. Current copies of legible material safety data sheets (MSDSs) serve as the department's list of hazardous chemicals. (See definitions for a list of common chemicals that are not included as hazardous chemicals.)
 - Ensure that all chemicals have an MSDS as required and that all chemical labels are legible and properly attached.
 - Ensure MSDSs are readily available where required and that employees understand how to read them.
 - Provide training on an as-needed basis for employees, with training before employees are exposed to or handle any hazardous chemicals.
 - Ensure that appropriate protective equipment is readily available to the employees.
 - Post the required poster, "NOTICE TO EMPLOYEES," on each workplace bulletin board.
 - Compile and maintain a tier-two form that contains information on hazardous chemicals normally present in the workplace or temporary workplace in excess of 500 pounds.
 - Furnish a copy of each tier-two report, on an annual basis, to the city fire department and the appropriate state agency.
- Employees:
 - Practice safe work habits. Follow safety instructions and cautions provided in

training or as stated on the containers or warning labels of any chemical they handle and work with, including chemicals that may not be included on the department's hazard chemical list.

- Learn to use chemicals properly and understand what they do. Do not begin working with any chemicals until the precautions to take are understood and all required safety equipment is procured.
- Use protective clothing and equipment. Make sure it fits properly, follow instructions for cleaning and storing, and replace damaged articles promptly.
- Know emergency procedures for chemicals in the workplace. Know where first aid supplies are kept and learn emergency eyewash and shower procedures, if applicable.
- Know the location of required MSDSs and how to read them.
- Report to the supervisor any incidents, misuse, or defects of any hazardous chemicals encountered in the workplace. This includes damaged or missing labels.

Employee Information and Training

Each state legislature has adopted some form of a hazard communications act. Such acts require employers to provide their employees with information and training on hazardous chemicals to which they may be exposed at work.

All employees must receive initial training on the hazard communication program and given a copy of the city's hazard communication policy. In addition, employees who work with or who are exposed to hazardous chemicals in the course of their normal duties must be given specific training on those particular chemicals.

Definitions

- *Hazardous chemical.* An element, compound, or mixture of elements or compounds that is a physical hazard or health hazard as defined by the OSHA STANDARD IN 29 CFR Section 1910.1200(c) (3) or by OSHA'S written interpretations.
- *OSHA 1910.1200(c) (3).* The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

- *Article.* A manufactured item other than a fluid or particle, which does not pose a physical hazard or health risk to employees.

The following are not included in the definition of hazardous chemicals; therefore, they do not require an MSDS and need not be included on the department's list of hazardous chemicals.

- Any substance that is used for personal, family, or household purposes, or is present in the same form and concentrations as a product packaged for distribution and use by the public
- Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration
- Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use
- Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual
- Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate consumer
- Hazardous chemicals in a sealed package that is received and subsequently sold or transferred in that package (i.e., warehouse operation) if:
 - The seal remains intact while the chemical is in the facility.
 - The chemical does not remain in the facility longer than five working days.
 - The chemical is not an extremely hazardous substance at or above the threshold planning quantity of two pounds, whichever is less.

Reporting Fatalities and Injuries

Within 48 hours after the occurrence of an employee accident that directly or indirectly involves chemical exposure, or that involves asphyxiation, and that is fatal to one or more employees, or results in the hospitalization of five or more employees, the city shall report the accident orally or in writing to the appropriate state department for health hazard communication.

The report to the appropriate state department shall relate the circumstances of the accident, the number of fatalities, and the extent of any injuries.

Informing Contractors

Before a contract commences work in a city workplace, the supervisor who controls the work area will be responsible for:

- a. Informing the contractor of its rights under the act
- b. Providing a copy of the workplace chemical list

General Safety Rules for Motor Vehicle and Equipment Operation

- Employees, who are authorized to operate city vehicles or personally owned vehicles on city business, must have a valid state driver's license for the class vehicle they operate and must notify their supervisor immediately should the license be suspended or revoked.
- The certificate of insurance coverage and other required documents, along with accident forms, should be carried in all city owned vehicles.
- All drivers of city vehicles must be familiar with and abide by all applicable state, federal and local traffic regulations.
- All drivers/operators shall be responsible for the proper care and use of city vehicles and motorized equipment. This includes maintaining city vehicle/motorized equipment interiors and exteriors, regularly servicing these items, and reporting maintenance needs to the supervisor. A driver/operator should not permit any unauthorized persons to drive, operate or ride in or on a city vehicle.
- Riders will not be allowed on running boards, tailgates, fenders, bumpers, atop cabs, on tow bars, or on towed equipment. (Exceptions may include operator trainees and mechanics sharing operator positions.)
- Every accident involving personal injury or property damage must be reported to your supervisor immediately.
- Seat belts must be worn by all occupants. The size of the vehicle or equipment does not excuse the operator from the seat belt requirement.
- Equipment on all city motor vehicles must conform to state, federal, and Department of Transportation (DOT) regulations.
- When possible, park so that backing is not required.

- Extreme caution should be exercised when backing any vehicle. If another employee is present, he or she will act as a spotter to assist the driver in backing safely. Drivers should stop immediately if they lose sight of the spotter.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict your view to the rear of the vehicle. If an alarm is not present, the operator should honk the horn to warn others of the moving vehicle.
- Unsafe and discourteous driving practices, such as road hogging, disregarding the rights of pedestrians, violating traffic regulations, and deliberate recklessness of any kind, are prohibited.
- Getting in or out of a vehicle/mobile equipment while it is in motion is prohibited, as is riding anywhere on the vehicle/mobile equipment not designed for passengers. Do not get out of vehicle/mobile equipment and leave the motor running, or drive/operate with a door ajar.
- Personnel should maintain three points of contact with mobile equipment when entering and exiting to help in maintaining balance if a slip occurs. Many injuries occur as a result of slips and this should help control that exposure. In addition, the condition of handrails, steps, etc., should be inspected regularly.
- Smoking is prohibited in any areas where fueling is being performed.
- Except in emergencies, gasoline must not be carried inside passenger cars or the cabs of trucks. Gasoline must be transported in approved safety containers and sealed tight to prevent the leakage of gasoline or gasoline vapors.
- Garage doors must be opened for ventilation whenever a motor vehicle engine is running to help prevent the accumulation of carbon monoxide gas.
- Keys should be removed from unattended vehicles and equipment. Doors should be locked for security purposes when applicable.
- Driving a vehicle under the influence of alcohol or any controlled substance will not be tolerated. Never attempt to perform work or drive a vehicle when you are impaired by alcohol, medication, or drugs.
- Picking up hitchhikers is dangerous and prohibited.
- Before starting out in your vehicle in the morning, clear all windows of any frost, ice, or

dew. Cleaning only a small place on a windshield does not allow for proper visibility.

- Driving is a full-time job. Drivers should not engage in other activities, such as dialing a telephone, updating records, etc., while operating a vehicle. The vehicle should be pulled off the road and stopped before performing these activities.
- Driving at the maximum posted speed limit can be too fast for safety in some situations. The drivers of all vehicles must use good judgment and proceed at a pace suitable to conditions of the vehicle, road, traffic, and weather.
- All vehicle cabs should be kept clean to reduce distractions to drivers and interference with the operation of the vehicle or equipment.

Stopping on Roadways

- When it is necessary to stop on the roadway, extreme caution should be used.
- A rotating beacon should be used if so equipped.
- Tail lights/emergency flashers should be used.
- If work is in progress, traffic control devices should be used in accordance with the state's manual on uniform traffic control devices.

Inspection of Vehicles and Equipment

- Drivers/operators should use equipment checklists to inspect vehicles and equipment before operation. Drivers should check windshield wipers, signals, horn, lights, reflectors, tires, fluid levels, etc. to determine if they are in good operating condition prior to operating the vehicle.
- The driver/operator should determine that brakes are in good operating condition before using the vehicle or equipment. If brakes are not working properly, they must be corrected before use.
- The driver/operator should report all defects promptly. Items that affect safety must be repaired prior to continued use.

For additional information, please refer to City Vehicle Operator Standards.

Electrical Safety

- Before work begins at a job site, the location of electrical lines (underground and above) must be determined and precautions taken to prevent accidental contact.
- Consider all wires as dangerous and do not permit any object being handled to come in contact with electrical lines. The insulation on the wire is no guarantee that it will not cause instant death. Employees other than electricians must never attempt to determine if a wire is energized.
- All electrical tools, equipment, extension cords, etc. will be inspected on a regular basis. All faulty equipment must be reported immediately to your supervisor. Lockout or tag the equipment so that others are aware the equipment is damaged. The tool, equipment, or cord must not be used if it has any defects, such as bad insulation, missing grounds, or loose prongs.
- All electrical equipment must be properly grounded.
- Extension cords should not be used in wet or damp areas. For adequate protection, a ground fault circuit interrupter (GFCI) should be used to protect employees in wet or damp locations.
- All circuit breakers should be identified as to use. Maintain clear access to electrical panels and main power sources at all times. Electrical panels and boxes should be securely fastened.
- All electrical panel boards, boxes, disconnects, switch gears, etc. should be covered or isolated to prevent accidental contact with energized parts and to protect equipment and wiring from potential contamination.
- Electrical lockout/tagout procedures must be used when circuits or electrical equipment are being worked on.
- Electrical cables passing through work areas must be covered or elevated to protect them from damage, which could create a shock hazard.
- Metal ladders should not be used when working near electrical circuits.
- Exposed light bulbs or fluorescent tubes should be guarded or recessed in reflectors to prevent accidental breakage.
- To aid in the prevention of electrical shock, 120-volt, single-phase, temporary receptacles

used at work sites should be used with a GFCI. If a GFCI is not available, an assured equipment grounding conductor program may be used for added protection. Another option in protection from electrical shock involves the use of double-insulated equipment.

- Because electrical shock can stop the heart and lungs from operating efficiently, be sure that workers involved in activities around hazardous energy levels know cardiopulmonary resuscitation (CPR) and rescue procedures. Any victim of electrical shock should be administered CPR immediately after the electrical shock if heart or lung failure is suspected. The CPR should be continued until the person is revived or medical personnel arrive at the site.
- Only qualified personnel should do electrical work.

Lockout/Tagout Procedures

Definitions

- *Lockout and tagout* are methods of preventing equipment from being set in motion unexpectedly, which in turn may endanger workers.
- *Lockout* is the placement of a lockout device on an energy-isolating device to ensure that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.
- *Lockout device* is a device that utilizes a positive means such as a lock, either key or combination type, to hold an energy-isolating device in the safe position, thus preventing the energizing of a machine or equipment.
- *Tagout* is the placement of a prominent warning device, such as a tag, on an energy isolating device to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed. Does not offer the physical protection of lockout.
- *Energy-isolating device* is a mechanical device that physically prevents the transmission or release of energy. These devices can include, but are not limited to, electrical circuit breakers, disconnect switches, block valves, slip blinds, and slide gates.
- *Energy source* refers to any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or any other energy.
- *Affected employee* is an employee whose job requires him or her to operate or use a

machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him or her to work in an area in which such servicing or maintenance is being performed.

- *Authorized employee* is a person who uses locks or tags on machines or equipment while performing service or maintenance activities. An authorized employee and an affected employee may be the same person when the affected employee's duties also include performing maintenance or service on a machine or equipment, which must be locked and/or tagged.

Employee Responsibilities

All equipment should be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Employees should never attempt to operate any switch, valve, or other energy isolating device that is locked or tagged out. Employees should be trained on the importance of lockout/tagout procedures. Only authorized employees who have been trained in the procedures should be allowed to apply lockout or tagout.

Preparations for Lockout/Tagout

- Obtain the lockout/tagout procedures for the equipment. After a review of the procedure, determine if changes may be necessary in the procedure.
- Identify all employees who may be affected by the impending lockout/tagout.
- Obtain necessary supplies, such as locks, tags, etc., that may be needed during the lockout or tagout.

Sequence of Events to Implement Lockout/Tagout

- Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
- The authorized employee should refer to the organization's written procedures to identify the type and magnitude of the energy that the machine or equipment utilizes. After identifying the type of energy source, the authorized employee should assure that he or she understands the hazards of the energy source and knows the methods to control the energy source.

- If the machine or equipment is operating, shut it down by the normal stopping procedure (e.g., depress stop button, open switch, close valve).
- Deactivate the energy isolating devices so that the machine or equipment is isolated from the energy sources.
- Use locks and tags as necessary to prevent the accidental or inadvertent operation of the energy isolating devices.
- Any stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, air pressure, steam pressure, gas pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
- To ensure that the equipment is disconnected from the energy sources, the authorized employee should follow these listed steps:
 - Check to make sure that no personnel are exposed to possible hazards.
 - Verify the isolation of the equipment by operating the push button or other normal operating controls or by testing to make certain the equipment will not operate.
 - Return the operating controls to the neutral or off position after verifying the isolation of the equipment.
- The equipment or machine should now be locked out.

Sequence of Events to Restore Machine or Equipment to Normal Operations

- Check the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
- Check the work area to ensure that all employees have been safely positioned or removed from the area.
- Verify that the controls are in the neutral position.
- Remove the lockout and tagout devices and reenergize the machine or equipment.
- Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.
- Return or file used lockout and tagout devices.

Employee Training Requirements

- The employer should provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, use, and removal of the energy controls are acquired by the employees.
- Each authorized employee should receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy sources, and the methods and means necessary energy isolation and control.
- Each affected employee should be instructed in the purpose and use of the energy control procedure.
- All other employees, whose work areas may or may not be in an area where energy control procedures may be utilized, should be instructed about the procedure and about the prohibition relating to attempts to restart or reenergize machines or equipment which is locked out or tagged out.

Blood borne Pathogen Safety

- Due to potential hazards associated with blood borne pathogens that cause diseases such as hepatitis and AIDS, care must be taken to eliminate contact with blood and body fluids. Universal precautions (treating all body fluids as potentially infectious) must be observed at all times.
- Preventative immunizations and vaccinations will be offered to affected employees as required by state civil statutes.
- Use of appropriate gloves, gowns, face shields, masks, and eye protection may be necessary to prevent potentially infectious materials from passing through or reaching an employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes. A specialized mask for administering CPR should be used.
- Employees must wash hands and other contaminated body areas and remove all contaminated clothing immediately after administering first aid.
- Employees must immediately report all exposures to blood and body fluids to their supervisor so post-exposure care can be initiated.
- Contaminated work surfaces must be decontaminated with an appropriate disinfectant after completion of procedures or contact with blood or potentially infectious materials.

- Infectious waste must be placed in closable, leak-proof containers with proper labels and must be disposed of in a proper manner. Any used needles, syringes, etc. should be placed in an approved “sharps” container that will prevent accidental contact with the sharp edge.

First Aid Kits

- All injuries, regardless of how minor, must be reported to your supervisor.
- Preplanning for a potential emergency situation is most valuable. All employees should be aware of the medical services available and how to obtain them. Emergency phone numbers will be posted in all work areas.
- Where first aid kits are supplied, employees should be familiar with the location, contents, and the instructions given with the first aid kit. All employees should learn how to use this equipment so they can render treatment when needed.
- The contents of the first aid kits should be inspected each month and expended items replaced. Personal medication should not be kept in first aid kits.
- Where the eyes or body may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body will be provided for emergency use.

Confined Space Safety

- All potential hazards should be evaluated prior to entry into a confined space.
- Only employees who have been properly trained on the hazards associated with confined space work will be allowed to enter a confined space.
- If work is to be performed in a confined space, a written permit system must be followed. The entry supervisor should complete the written permit prior to entry to ensure that all safety equipment is in place and acceptable entry conditions are present.
- Before any entrance cover to a confined or enclosed space is removed, it must be determined that there are no temperature or pressure differences or other hazardous conditions that may injure the employees removing the cover.
- No smoking is permitted in a confined space or near the entrance/exit area.
- When covers are removed from confined or enclosed spaces, the opening must be

guarded by a railing, temporary cover, or other temporary barrier.

- Before an employee enters a confined space, the internal atmosphere must be tested for oxygen content, flammable gases and vapors, and potential toxic air contaminants. Approved and calibrated testing equipment should be used to measure the concentration of the various gases.
- If an oxygen deficiency is found, or if flammable or toxic gases or vapors are detected, the space must be continuously tested and forced ventilation must be used to maintain oxygen at a safe level and to prevent a hazardous concentration of flammable or toxic gases and vapors.
- Electric welding, gas welding, cutting, or any other hot work should not be performed on the interior, exterior, or near the openings of any confined or enclosed space that may contain flammable or explosive gases or vapors until the space has been properly cleared. Monitoring should be continuous during any hot work activities.
- If a hazard-increasing work activity is to take place in a confined or enclosed space (e.g., welding, painting, working with solvents and coating), the air in the space must be continuously tested for the presence of flammable or toxic gases and vapors or insufficient oxygen. Forced ventilation should be used as required.
- Before employees are allowed to enter a confined space, all electrical and mechanical energy sources that could affect the employees working in the space must be physically rendered inoperative, locked out, and tagged. If required, the space should be drained, vented, and cleaned.
- A properly trained attendant should be stationed outside the confined space. The attendant will maintain continuous communication with the employees authorized to be in the confined space. The attendant should be able to recognize confined-space hazards and changing conditions in the confined space that could affect employees in the space. In the event of an emergency, the attendant should not enter the confined space but should be able to summon emergency and rescue services.
- All employees required to enter a confined or enclosed space must be equipped with a body harness and lifeline monitored by a properly trained attendant. Other personal protective equipment and rescue devices may also be required depending on the situation.
- Compressed gas cylinders, other than breathing air, should not be taken into a confined space.

- While work is being performed in an enclosed space, a person with CPR and basic first aid training should be immediately available to render emergency assistance if there is reason to believe that a hazard may exist in the space or if a hazard exists because of traffic patterns in the area of the opening used for entry.
- Necessary rescue personnel and equipment should be available in the event of an emergency.
- Safe access to the confined space must be maintained at all times. If possible, all cords, hoses, leads, etc., should be routed through an entrance other than the employee access into the confined space.

For additional information concerning confined-space requirements, refer to OSHA standard 29 CFR 1910.146.

Trenching and Excavation Safety

- Before opening an excavation, all interference such as trees, sidewalks, and foundations should be removed or supported as necessary to protect employees and the public.
- The estimated location of utility and other underground installations that may be encountered during excavation work must be determined before opening the excavation.
- When excavation operations approach the estimated location of underground installations, the exact location of the installation must be determined by safe and acceptable means.
- While the excavation is open, underground installations should be protected, supported, or removed to safeguard employees.
- Employees exposed to vehicular traffic must wear high-visibility vests or clothing.
- A stairway, ladder, ramp, or other safe means of egress must be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees. Ladders must extend 3 feet above the surface and be tied off if necessary.
- No employee should be permitted underneath loads handled by lifting or digging equipment. Employees should be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.
- All mobile equipment (e.g., front-end loaders, bulldozers, and dump trucks) should be equipped with a warning device such as a back-up alarm. When mobile equipment is

operated adjacent to an excavation, a warning system should be used such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be sloped away from the excavation.

- In excavations deeper than four feet with the potential for a hazardous atmosphere or oxygen deficiency, air testing should be conducted before employees can enter an excavation and as often as necessary to ensure the atmosphere remains safe. Ventilation or respiratory protection may be needed to protect employees from harmful atmospheres.
- Daily inspections of the excavations and adjacent areas and protective systems should be made by a competent person for evidence of situations that could result in a possible cave-in, failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection should be conducted prior to the start of work, when there are changes in weather conditions, if the excavation has been left unattended for a period of time (such as lunch), and as needed.
- Employees should not work in excavations in which there is accumulated water or in which water is accumulating unless adequate precautions have been taken to protect employees. The precautions necessary to protect employees adequately can include special support or shield systems, water removal, or the use of a body harness and lifeline.
- Surface water should be prevented from entering an excavation by utilizing diversion ditches, dikes, or other suitable means.
- Excavations subject to run-off from heavy rains will require an inspection by a competent person.
- Excavated earth (spoil), materials, tools, and equipment should be placed no closer than two feet from the edge of the excavation.
- Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard guardrails will be provided.
- When excavations are left open, warning devices, barricades, or guardrails must be placed to adequately protect employees and the public.
- At the end of the workday, as much of the excavation as practical must be closed.
- Mechanical excavating equipment that is parked or operating on streets or highways should be protected by proper warning devices.

- Each employee in an excavation must be protected from cave-ins by an adequate protective system (sloping, benching, shoring, or shielding), unless excavations are made entirely in stable rock, or are less than five feet deep and examination of the ground by a competent person provides no indication of a potential cave-in.
- When choosing a protective system, a competent person should take into consideration soil type, vibration sources, previously disturbed soil, layered soil, presence of water, heavy equipment work adjacent to the excavation, limited work area, and other hazard-increasing conditions.
- Sloping, benching, shoring, or shielding for excavations greater than 20 feet deep must be designed by a registered professional engineer.
- A “competent person” as used in this section means one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

For additional information on excavation requirements, refer to OSHA standard 29 CFR 1926, Subpart P, Excavations.

Work Zone Traffic Control

Work zone safety is the adequate safeguarding or protecting of pedestrians, motorists, utility workers and equipment by the use of adequate barriers, warning signs, lights, flags, traffic cones, high level standards, barricade rope, and flaggers on approaches to work areas, excavations, open manholes, and parked equipment.

Work zone traffic control is accomplished by the use of informative and protective devices, keeping in mind that a safe installation requires the use of these devices in relation to the location of the workers and equipment involved. The use of these devices must be coupled with proper planning, design, installation, inspection, maintenance, and the use of good common sense. It is of utmost importance that the work area be properly identified and that warning devices clearly convey the message to the traveling public well in advance of arrival at the work area.

The public must be warned in advance, then regulated and guided through or around the work area. Proper work area protection should be planned to ensure the safety and protection of the public, the worker, and the equipment.

- If street construction or repair work is to be done, preparations must be made to ensure

vehicle and pedestrian safety before work is allowed to begin.

- If traffic is affected by the operation, proper signs must be used in advance of the work area, and the traffic control signs in and around the affected area are to be correctly placed and maintained for the duration of the period when work is being performed and traffic obstructions exist.
- When barricades and signs are used overnight, supervisors should examine the work area for proper placement at the end of the workday.
- All employees working in or near the roadway should wear reflective vests or suitable garments marked with or made of reflectorized or high visibility material while at the worksite. Garments worn at night must be made of reflectorized material.
- Reflective or lighted barricades will be used whenever possible for overnight protection.
- Where traffic must be periodically stopped or obstructed by workers or equipment in a traveled portion of a roadway, a flagger wearing a reflective vest may be stationed. If lack of manpower exists, the roadway must be closed and the traffic detoured.
- Flaggers must be used to slow or direct traffic where the approach to the work area does not provide adequate visibility to drivers. The use of sign paddles (Stop/Slow) is preferred and should be used if available.
- All plates used to cover holes in the street on a temporary basis are to be spiked in place.
- In any case where streets are significantly obstructed or closed for any period of time, the police, fire, and other relevant departments must be notified of the situation and told approximately how long the closure will be in effect.
- When pedestrian traffic is impeded, barricades, restrictive tape, rope, or other restraint must be used to keep the public from the work site.
- Holes in the sidewalk or parkway that must be left open must have perimeter protection. Protection of these areas will be in the form of physical barriers and warnings signs.

For additional information, please refer to the most current publication of the state manual on uniform traffic control devices.

General Law Enforcement Personnel Safety

Police Officer Safety

- Officers on patrol should:
 - Wear department-issued body armor.
 - Have an assist officer present when making arrests.
 - Follow department policy and procedure on use of force.
 - Wait for backup to arrive when possible.
 - Always be alert and prepared during an incident.
 - Approach all incident scenes anticipating any possible dangers.
 - Handcuff all subjects before proceeding with a search, when applicable.
- Officers performing traffic control should:
 - Be aware of the terrain and associated exposures in the area.
 - Never turn their backs on approaching traffic, if possible.
 - Wear reflective vests at all times.
 - When directing traffic, position themselves to limit exposure and in a way that makes them as visible as possible.
 - Use clear easily understood signals with the drivers.
 - Maintain communication with other officers assisting in the traffic control.
 - Establish a safety zone at accident scenes by posting cones and/or parking the vehicle to divert traffic.
- During vehicle stops, officers should:
 - Position the patrol car behind the vehicle being pulled over to provide a barrier between the officer and oncoming traffic.
 - Exit the vehicle in a safe manner.
 - As they approach the vehicle, observe the driver and passengers by looking in the suspect's side or rear window.
 - Minimize their exposure to the driver and passengers by standing just to the rear of the suspect's driver's door.
 - Keep their attention on the subjects during the length of the vehicle stop; stay alert.

- During searches and seizures, officers should:
 - Follow established stance methods and search patterns.
 - When there is indication that the suspect may be concealing a sharp or pointed object, remove the object or the suspect's article of clothing that contains it.
 - During vehicle searches, be cognizant of reaching into areas that have not already been viewed.
- When transporting suspects, officers should:
 - Handcuff all suspects before transporting.
 - Place prisoners in the back seat with the seat belt fastened.
 - Not leave prisoners unattended in a patrol car when at all possible.
 - Pat down all suspects for weapons before putting them into the patrol car.

Firearm Safety

Officers who carry firearms should:

- Not modify weapons in any way that violates departmental policy.
- Lock and unload firearms before handing them to another person. Do not point the muzzle of the firearm toward anyone when handing it to another person. Do not throw a firearm.
- Keep their fingers out of the trigger guard until ready to fire, when applicable.
- Not handle a firearm if they are taking medication from a container whose label indicates that the medication "may cause drowsiness or dizziness" or other adverse side effects.
- Not point a firearm at anyone unless the officer intends to use deadly force in the line of duty.
- Leave the firearm in its holster or rack until it is needed.
- Keep the muzzle pointed toward the target when loading and unloading the firearm.
- Return the weapon to its holster or rack when finished firing and close the holster strap over the firearm.

Anytime a firearm is discharged in the line of duty, it must be reported to your supervisor immediately. (This is department policy.)

Firing Range Safety

On the firing range, officers should:

- Not anticipate a command.
- Follow the instructions of the firearm instructor.
- Not turn around while holding a firearm in the firing line.
- Wear eye and hearing protection when firing on the range site.
- In case of a misfire, raise the non-shooting hand to signal the firearm instructor and keep the firearm pointed down range until the firearm instructor has inspected the weapon. Do not attempt to “re-shoot” the shell that misfired.
- Not go in front of the firing line until it has been cleared and the command is given to go forward.

Vehicle Inspection

- At the beginning of each shift, all officers should inspect their assigned patrol vehicles.
- Any deficiencies that prevent the vehicle from being operated safely should be noted on work inspection report at garage.
- Vehicles that have been deemed inoperable will not be driven for patrol duties until the deficiency is corrected.
- Officers should understand the basic operation requirements of their assigned vehicle and monitor those that can be viewed when refueling. Items that should be checked include tires, oil, transmission fluid, windshield washer fluid, and coolant.

Emergency Vehicle Operation

Operators of emergency vehicles should:

- Warn other vehicular traffic by using sirens, horns, and warning lights when enroute to an emergency.
- Cover the brake with the foot, while driving, if there is possible danger.

- Slow down and be prepared to stop when approaching any intersection.
- Proceed past a stop signal or a stop sign only after clearing the intersection.
- Operate with due regard for the safety of others.
- Do not push vehicles through intersections into traffic.
- Low-beam headlights may be on during emergency response.
- Slow down when followed by a tailgater.
- Do not pass other emergency vehicles during an emergency response. When passing is necessary, the passing arrangement must be made through radio communications.
- Follow local policy on emergency driving and the traffic laws related to emergency vehicle operations.
- Avoid backing of vehicles, when possible, without checking behind the vehicle with mirrors.

General Fire Personnel Safety

Personnel Safety on Vehicles

- All personnel riding on the apparatus must be seated with seat belts fastened, while the apparatus is moving.
- No one should ride outside the cab or canopy of any department vehicle while in motion.
- The operator should not open or attempt to exit through the doors of the apparatus while it is in motion.
- Where backing-up is necessary, a spotter should be used to guide. When a spotter is unavailable, dismount and walk around the vehicle to ensure that there is an unobstructed path before backing. Back-up alarms should be in place and operational at all times. If the back-up alarm is not functioning, the operator must honk the horn while backing.

Fire Station Safety

- Any oil, hydraulic fluid, water, grease, or other fluids must be mopped or cleaned up from floors, bays, or walkways in the apparatus storage area immediately upon detection.

- Extension cords or other electrical power cords should not run across doorways or aisles, between desks, or under vehicles.
- All spills should be cleaned up immediately, especially wet spots around drink and coffee machines, in bathrooms, kitchen, and hallways.
- Charged compressed air hoses should not be pointed at anyone or used to clean clothing or the work area.
- Oxygen should not be used as a substitute for compressed air.
- Ladders that wobble or lean to the left or right of center should not be used. A ladder or a step stool should be used when retrieving items above head level. Chairs, buckets, boxes, etc. should not be used in place of ladders.
- All wet or slick floors should be marked with a yellow “Wet Surface” or “Freshly Mopped” sign. Employees should avoid such areas until the signs are removed.
- Running on stairs or steps is not allowed. Steps should be taken one at a time.
- Handrails should be used on stairs or ramps.
- Use a dolly or a hand truck to carry large or bulky items, or get assistance from a fellow firefighter.
- Ladders should not be placed at blind corners or doorways without diverting foot traffic by blocking or roping off the area.
- Jumping from trucks, platforms, ladders, roofs, or other elevated places is prohibited.
- Horseplay will not be tolerated from any employees.
- All tools should be inspected prior to use, and the proper tool should be used for the job.
- Only activities authorized by the department will be allowed for the purpose of physical fitness.
- Proper housekeeping must be maintained throughout all facilities all the time.

Search and Rescue

- Firefighters must operate in teams consisting of a minimum of two firefighters.

- Firefighters must not enter a burning structure without prior approval from their supervisor, incident commander, or division leader. Personal accountability tags from pass devices must be put on the accountability board.
- Firefighters should assume that all downwind or confined atmospheres encountered at a search and rescue scene are contaminated unless the supervisor or incident commander has said otherwise.
- Firefighters should use self-contained breathing apparatus (SCBA) or supplied air respirators during extraction unless the supervisor, incident commander, or division leader has said that the atmosphere is safe.

Fire Ground Safety Rules

- When arriving at the fire scene, firefighters must not remove their seatbelts until the apparatus has come to a complete stop.
- Firefighters should not get off the apparatus unless specifically told to do so by the apparatus officer.
- Firefighters should not run when working at fire scenes.
- Firefighters should not freelance; always work in teams of two, and do not separate for any reason.
- Firefighters should not enter a structure fire alone for any reason.
- Firefighters should never enter a burning structure if self-contained breathing apparatus is not worn.
- Firefighters should not enter a structure that is displaying the signs of breathing (i.e., back draft).
- Prior to entering a burning structure, the incident commander or division leader should be told of the firefighter's intentions over the radio or face to face.
- Before firefighters can enter a burning structure, the hose line must be opened and operationally tested outside the structure in order to ensure it is fully functional (charged); pull back on the nozzle valve handle to the open position and allow air to escape to the point at which a solid stream of water is flowing from the nozzle. Do not enter a burning structure without the protection of a charged hose line.

- Firefighters must use full protective clothing, including hood, gloves, SCBA, and pass device for interior firefighting.
- Firefighting teams in a burning structure must have constant radio communication with the incident commander or division leader.
- Interior crews must stay together and must maintain constant communication between each other and the incident commander or division leader outside the structure.
- If, for any reason, one member of a team must leave the interior of a structure, both firefighters must leave the structure.
- It is not a good practice to straddle charged hose lines.
- Valves to charged hose lines must be opened slowly to prevent injuring the firefighters at the end of the hose.
- Before shutting down any charged lines, or when a low water situation exists, the pump operator must notify the firefighters at the working end.
- Firefighters operating in or near streets or roads must wear their helmets and reflective traffic vests, or full protective clothing, for visibility to oncoming traffic.
- When using pike poles to clean out hot spots or while conducting salvage and overhaul operations, debris should not be pulled down toward the body; push it down and away from the body.
- Self-contained breathing apparatus must be worn during all phases of firefighting, salvage and overhaul, unless the incident commander says otherwise.
- Firefighters must report to the accountability board before leaving the fire scene and when finishing a task to remove their accountability tag.

Vehicle Fires

- Vehicle fires should never be approached without full protective equipment clothing, including hoods, gloves, and SCBA.
- Prior to attacking a vehicle fire, the hose line must be opened and checked from a safe distance to be sure it is fully functional; the nozzle valve handle should be pulled back to the open position to allow air to escape to the point at which a solid stream of water is flowing from the nozzle.

- Wheel blocks must be used to chock the wheels of the burning vehicle, when possible, to prevent it from rolling.
- When possible, vehicle fires should be approached upwind, downhill, and in a low crouch, with the hose nozzle opened to the full fog position.
- Hoods should only be opened when there is another firefighter present with a charged and tested hose line, standing by to attack the potential flare-up of fire once the hood is opened.

Emergency Vehicle Operation

Operators of emergency vehicles should:

- Warn other vehicular traffic by using sirens, horns, and warning lights when enroute to an emergency.
- Cover the brake with the foot, while driving, if there is possible danger.
- Slow down and be prepared to stop when approaching any intersection.
- Proceed past a stop signal or a stop sign only after clearing the intersection.
- Operate with due regard for the safety of others.
- Do not push vehicles through intersections into traffic.
- Low-beam headlights may be on during emergency response.
- Slow down when followed by a tailgater.
- Do not pass other emergency vehicles during an emergency response. When passing is necessary, the passing arrangement must be made through radio communications.
- Follow local policy on emergency driving and the traffic laws related to emergency vehicle operations.
- Avoid backing of vehicles, when possible, without checking behind the vehicle with mirrors.

Material Handling Safety

- Before starting to lift or carry, firefighters should check to ensure that the walkway is clear of all obstacles and cautiously test the object to check its weight and center of gravity.
- It is important to face the object being lifted and get as close as possible with the feet slightly apart, bending at the knees not at the waist.
- To make the lift smooth and under control, use the legs to come to a standing position.
- An object being carried should be gripped firmly and held as close to the body as possible.
- Avoid twisting the body when lifting or setting an object down.
- It may be necessary to obtain assistance in lifting heavy objects by using additional personnel, power equipment, or other types of assisted lifting devices.
- When two or more people carry a heavy object that is to be lowered or dropped, there shall be a prearranged signal for releasing the load.
- When two or more people are carrying an object, each employee should face the direction in which the object is being carried, if possible. It is important to crouch or squat with the feet close to the object to be lifted, secure good footing, take a firm grip, bend the knees, keep the back vertical, and lift by bending at the knees and using the leg and thigh muscles. Employees should not attempt to lift beyond their capacity. Caution should be taken when lifting or pulling in an awkward position.
- Material should not be thrown from place to place or person to person.
- A safety line or tag line should be attached to help control loads as they are lifted to elevated work areas.

Fire Extinguisher Awareness

- Employees should be familiar with both the location and the operation of all fire protection equipment in the vicinity of their work areas.
- Fire extinguishers should be wall-mounted in an easily accessible location not more than five feet above floor level. If an extinguisher cannot be easily seen, a sign indicating the extinguisher location should also be posted. Except for actual use or inspection purposes, employees should not move or remove such equipment without proper authority.

- Fire extinguishers should not be blocked or hidden behind material or machines.
- Fire extinguishers shall be visually inspected at least once a month. The inspection should include inverting, shaking, and tapping to percent compaction of the fire suppressant material. The extinguisher should be service inspected annually by a licensed inspector.
- Employees should be trained on the primary fire exposures in their immediate work area. Employees should know the classes of fires and the proper extinguishing agent to be used:
 - Class A — for fires in paper, wood, or cloth
 - Class B — for flammable liquid fires
 - Class C — for electrical fires
 - Class D — for combustible metal fires

A multi-purpose “ABC” fire extinguisher will extinguish most types of fires.

- Remember how to operate most extinguishers:

Pull the pin.

Aim at the base of the fire.

Squeeze the handle.

Sweep from side to side.

General Tool Safety

- All tools should be of an approved type and maintained in good condition.
- All tools should be examined prior to use to ensure adequate working condition.
- Defective tools should be tagged to prevent their use and removed from the job site.
- Employees should always use the proper tools for the job.
- Employees must be trained on the correct use, hazards, and limitations of tools used in the workplace.
- Gloves should be worn when they provide protection to the employee without increasing the chances of the employee becoming entangled at the point of operation.

- Tools should not be left unsecured in elevated places. Tethering is recommended in areas where tools may fall to a lower level.
- Impact tools such as chisels, hammers, and punches that become mushroomed or cracked should be dressed or replaced.
- Chisels, drills, punches, etc. should not be held with hands while being struck by another employee.
- Wrenches with sprung or damaged jaws should not be used.
- Wooden handles that are loose, cracked, or splintered should be replaced, not taped or lashed.
- Power tools must be disconnected from any power source while repairs or adjustments are being made.
- Carrying and storing tools:
 - Sharp tools should never be carried in pockets unless the edges are protected.
 - Tools should not be carried in hands while climbing a ladder; they should be hoisted with a rope or carried on an approved utility belt.
 - Tools should be kept from falling when working from a scaffold, ladder, or other elevated work areas.
- Tools should never be left lying around where they might cause a trip/fall hazard. Tools no longer needed for the job must be returned to their proper location.

General Ladder Safety

- Wooden ladders must not be painted so as to obscure a defect in the wood; only a clear, nonconductive finish should be used.
- All ladders must be inspected regularly. Ladders with weakened, broken, or missing steps, broken side rails, or other defects should be tagged and removed from service.
- Ladders and scaffolds must be sufficiently strong for their intended use. All ladders must be capable of supporting at least 2.5 times the maximum intended load without failure.
- Ladders must not be placed in front of doors opening toward the ladder unless the door is open, locked, or guarded.

- When ascending or descending ladders, employees should have both hands free and face the ladder.
- Only one employee should work from a ladder at one time (except for hook-type ladders). If two employees are required, a second ladder should be used.
- Only city-supplied ladders may be used by employees.
- Ladders should not be used as scaffold platforms unless specifically designed for that purpose.
- Boxes, chairs, etc., should not be used as ladders.
- Portable metal ladders and other portable conductive ladders may not be used near exposed energized lines or equipment except in very specialized situations.
- The use of stepladders above 20 feet is prohibited and the use of extension ladders above 24 feet is strongly discouraged.

Note: All ladders used in fire service activities shall be NFPA approved.

Straight Ladders

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

designed to be used as a section ladder.

- A ladder should not be placed against an unsafe support.

Step Ladders

- The top step should not be used, except for platform ladders.
- Stepladder legs should be fully spread and the spreading bars locked in place.
- Stepladders should not be used as straight ladders.
- When an employee is working on a stepladder more than 10 feet high (except a platform ladder), the ladder must be held by another person.

Material Storage Safety

Bins and Shelves

- Material must be stored in such a manner that it will be safe from damage. Special care must be taken to assure that stored material poses no hazard to anyone working around it. Only light weight material should be stored on top shelves.
- Bins or shelves should never be used as ladders.
- Materials should not be stored on the floor in front of shelving.

Stacking Material

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

Flammable Material

- Under no circumstances should flammable materials be stored in an area where heat or

potential ignition sources may affect the stability of the material.

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

Housekeeping

- Work locations including vehicles, buildings, shops, yards, offices, cabs, etc. must be kept clean and orderly at all times.
- Combustible materials, such as oil-soaked rags, waste, and shavings must be kept in approved metal containers with metal lids. Containers should be emptied as soon as practical.
- Both clean rags and used rags should be kept in metal or metal lined bins having metal covers.
- Permanent floors and platforms must be kept free of dangerous projections or obstructions and maintained reasonably free from oil, grease, or water. Where the type of operation produces slippery conditions, mats, grates, cleats, or other methods should be

used to reduce the hazard from slipping.

- Stairways, aisles, permanent roadways, walkways and material storage areas in yards should be kept reasonably clear and free from obstructions, depressions, and debris.
- Materials and supplies should be stored in an orderly manner so as to prevent their falling or spreading and to eliminate tripping and stumbling hazards.
- Rubbish and unused clothing should not be allowed to accumulate in lockers.
- Paper and other combustible materials should not be allowed to accumulate, and weeds or other range vegetation should not be permitted to grow in or around storage areas, shops, substations, pole yards, buildings, fuel tanks, or other structures.
- Batteries should be stored in a well-ventilated area protected from sparks or open flames.
- All personnel must practice good housekeeping. Scrap material must be disposed of properly, and the work area should be free of any loose material.

Smoking

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

General Shop Safety

- All rotating pulleys, gears, shafts and belts on compressors, motors, etc. must be properly guarded. No equipment or machinery should be operated while required guards are not in place.
- Drain valves on air compressors should be opened frequently to prevent the accumulation of liquid.
- Safety-relief valves must be installed on all compression tanks. These valves must be tested periodically to ensure their proper operation.
- Compressed air should never be used to clean hands or to blow dirt from clothing or body.
- When using compressed air for cleaning purposes, it must be kept at a level below 30 pounds per square inch (PSI).

- If compressed gas cylinders are stored inside a building, the area must be kept dry and well ventilated. Oxygen and fuel gas cylinders must be stored separately.
- Cylinder carts, other than those designed to hold cylinders in an upright position, are prohibited. Upright cylinder carts must be equipped with a chain, bar, or some other device that will act to stabilize the cylinders. If gauges are not attached to the cylinders, valve caps must be in place.
- Signs similar to the following must be posted in any cylinder storage areas: "DANGER - NO SMOKING, MATCHES, and OR OPEN FLAMES."
- Radial bench saws should be equipped with a hood guard, forward travel stop, and a head that automatically returns to starting position when released.
- A face shield and safety glasses must be worn while grinding. Any grinding equipment without proper safety features is not allowed in the work place. Abrasive wheels will only be used on machines that have guards that cover the spindle end, nut and flange projections.
- Grinder work rests must be designed to be adjustable to compensate for wheel wear. Work rests should be adjusted with a maximum clearance of 1/8" to help prevent work from jamming. Tongue guards must also be adjusted to within 1/8".
- When replacing abrasive wheels, follow the manufacturer's directions for proper installation and inspection. All grinding wheels must be inspected prior to installation to insure that the RPM rating of the wheel is correct for the grinder's RPM.
- Identify and label all electrical control devices, such as circuit breakers, fuses, disconnects, etc.
- All electrical outlets, including wall receptacles, extension cords, etc., must have an independent, third-wire ground system.
- All electrical tools and equipment must be effectively grounded unless the tool is an approved double-insulated type.
- All electrical junction boxes must have protective covers. All such boxes must have sufficient access space.
- Stored materials should be stacked in such a manner as not to create a hazard. Stack containers, boxes, parts, etc. in an orderly fashion to ensure stable stacking heights.

- Heavy bulky materials should be stored on lower shelves to minimize chances of injury due to falling objects.
- Elevated storage platforms over four feet in height from floor level should have standard handrails (includes a mid-rail and a top handrail) and toe boards. The handrails should be constructed of metal or wood sufficient to withstand 200 pounds of top rail pressure.
- “NO SMOKING” signs should be installed in all areas where flammable or easily combustible materials are stored.
- Hooks used on hoisting equipment should be equipped with a safety latch to help prevent dropping of any lifted load.
- The hoisting capacity of any hoisting equipment should be printed clearly on the frame in lettering that is large enough to be read from ground level. All cranes must be inspected on at least a monthly basis to assure their proper operation and condition.
- All shops must have at least two accessible exits for emergency evacuations.
- Any doors not designated as exits, but may be mistaken for exits, should be clearly marked “NOT AN EXIT.”
- All exits should be identified by a clearly visible, illuminated, “EXIT” sign.
- Only approved containers are to be used for the storage of flammable and combustible materials. Approved containers can be identified by the presence of a label from a certifying organization such as Underwriters Laboratories.
- Safety cans will be painted red and clearly marked to identify the contents. Only approved pumps or self-closing faucets are to be used for dispensing flammable or combustible liquids.
- No guard can be removed from any machine or piece of equipment except to perform required maintenance. Guards removed to perform maintenance operations must be replaced immediately after the completion of the work.

General Storage Yard Safety

- All vehicles must have the emergency brake set when parked on a slope or down grade. Consideration should also be given to the use of chocks in these situations.
- All vehicles and equipment should be parked in a position that does not require backing

whenever possible. When backing a truck or machinery in the yard, a spotter should be used.

- Proper personal protective equipment should be evaluated before performing any work in the yard. It is not possible to identify all personal protective equipment that may be required due to the various types of assignments in that area.
- Miscellaneous tools, equipment, and material should be stored on pallets instead of being placed on the ground. Pallets should be stacked in a way that ensures their stability. Stability may be influenced by many things, such as the stability of the ground, the height of the stacked material, and the configuration of the stacking.
- Pipe should be rolled from the ends or from behind to avoid placing the worker's body in the pipe's path.
- All pipe racks must be fitted with pipe stops to prevent pipe roll-off. Stripping should also be used at the ends of the pipe to act as spacers.
- All above-ground fuel storage tanks should be protected on all four sides with heavy-duty guard posts and crash rails. Emergency cut-off switches should also be installed near the pumping equipment, and a fire extinguisher should be readily accessible.
- A diking system or approved alternate capable of holding the volume of the above-ground storage tank should be constructed to help control potential spills.

Compressed Gas Cylinder Safety

- Compressed gas cylinders should never be lifted with an electromagnet. Where cylinders must be handled by a crane or derrick, as on work sites, the cylinders must be lifted in a cradle or suitable platform, not by the valve protector cap. Do not lift with slings or chokers. Extreme care must be exercised to prevent dropping or bumping of the cylinders.
- Cylinders, whether full or empty, should be stored in a rack, chained, or otherwise secured to prevent them from falling.
- Cylinders should not be used as rollers, supports, or for any other use other than their designed purpose.
- Cylinders must have their contents properly identified. Empty cylinders should be plainly marked "EMPTY" or "MT," and the valves should be closed.
- Oxygen cylinders should not be stored near flammable or highly combustible materials,

such as oil, grease, fuel, or other fuel gas cylinders, etc. In addition, no cylinders should be stored in areas where there is an exposure to direct sunlight.

- Welding or cutting of any pipeline, tank, empty container, or piece of equipment must not be performed until it is assured that the object is free from flammable materials or an explosive mixture of gases. Before welding or cutting begins, the hazardous materials must be removed or vented to the atmosphere to prevent a possible explosion from the expansion of trapped gases.
- Cylinders should not be placed where they might become part of an electric current or within five feet of an electrical outlet. Cylinders should not be allowed to come in contact with energized conductors, ground wires from electrical equipment, or welding machines.
- Valves of compressed gas cylinders should be opened slowly and with the proper wrench.
- Before the regulator is removed from a cylinder, the valve should be closed and all pressure released from the regulator. Use regulators and pressure gauges only with gases for which they are designed and intended. Do not attempt to repair or alter cylinders, valves, or attachments. Any changes in the cylinders should only be performed by the supplier or manufacturer.
- Leaking cylinders must not be used. Such cylinders should be taken away from sources of ignition and the supervisor notified. Leaking compressed gas cylinders should be taken out of service immediately and handled as follows:
 - Close the valves and take the cylinder outdoors well away from any source of ignition.
 - Properly tag or mark the cylinder.
 - If the leak occurs at a fuse plug or other safety device, take the cylinder outdoors well away from any potential ignition source and open the cylinder valve slightly to allow the contents to escape slowly. Tag the cylinder to warn others. (The environmental and health effects of the contents must be evaluated prior to allowing the cylinder to bleed-down.)
 - Post warnings against approaching with lit cigarettes or other potential ignition sources.
 - Promptly notify the supplier and follow their instructions for handling/returning the cylinder.
- Do not remove or change the marks or numbers stamped on compressed gas cylinders. In addition, any labels shall be left in place for identification purposes.

- Cylinders that are heavy or difficult to carry by hand may be rolled on their bottom edge, but they should never be dragged.
- Do not tamper with safety devices in valves or on cylinders.
- Consult the supplier of the gas or the appropriate Material Safety Data Sheet (MSDS) when there are doubts concerning the proper handling of a compressed gas cylinder or its contents.
- When cylinders are transported:
 - Load to allow as little movement as possible.
 - Secure them to prevent violent contact or falling.
 - Remove regulators and put valve protection caps in place.

General Welding and Cutting Safety

- Welding and cutting may only be performed by experienced and properly trained personnel.
- The work area must be inspected for potential fire hazards before any cutting or welding is performed.
- When welding or cutting in elevated positions, precautions must be taken to prevent sparks and hot metal from falling onto people or material below.
- Suitable fire extinguishing equipment should be immediately available at all locations where welding and cutting equipment is used.
- Proper strikers must be used in lighting torches. Matches and cigarette lighters should not be used.
- A fire watch should be maintained whenever welding or cutting is performed in locations where combustible materials present a potential fire hazard. A fire check should be made of the entire area after completion of welding or cutting activities.
- Machinery, tanks, equipment, shafts, or pipes that could contain explosive or flammable materials must be thoroughly cleared and decontaminated prior to the application of heat.
- In dusty or gaseous spaces where there is a possibility of an explosion, welding or cutting equipment should not be used until the space is adequately ventilated.

- Adequate ventilation or approved respiratory equipment should be used while welding in confined spaces or while cutting, brazing, or welding zinc, brass, bronze, stainless steel, galvanized, or lead coated materials.
- Welders should wear clothing made of fire resistant fabrics, gloves, appropriate footwear, sleeves, and a buttoned collar. All protective clothes and equipment should be worn in a manner that provides the most efficient protection from slag or other hot material.
- Regular shaded safety glasses do not provide adequate protection for welding or cutting operations. When using an arc welder, use No. 10 or No. 12 shade lenses. When using acetylene torches for welding or cutting, use No. 5 or No. 6 shade lenses.
- Proper eye protection in the form of safety glasses and a face shield should be worn during any portable grinding activities. Safety glasses should also be worn during any slag chipping activities.

Gas Welding

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

Electric Welding

- No electric welding machine, either A.C. or D.C., should be operated until the frame or case of the machine is electrically grounded for protection from potential shock hazards.
- All ground and electrode lead cables must be inspected before use for bad or damaged connectors. Only connectors designed for joining or connecting should be used for that purpose.

- Welders must wear an approved welding helmet, proper protective gloves, and fire-resistant clothing during welding activities. Proper eye protection in the form of safety glasses or a face shield should be worn by the welder and any helpers in the area when chipping slag, grinding, etc. Other employees should not observe electric welding operations unless they use approved eye protection.
- Welders must wear proper eye protection to guard against flying particles when the helmet is raised.
- Welding screens should be used whenever practical to help control potential ultraviolet light exposures to other personnel in the area.
- Welding machines should be placed at least 4 feet apart.
- Firefighting equipment should be placed in the immediate area and a fire watch used as necessary to control any fire potential.

Temperature-Related Illness Awareness

Cold-Related Illnesses

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

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

Heat-Related Illnesses

Heat stroke, heat exhaustion, heat cramps, and heat rash are health-related problems associated with working in hot environments. Heat-related illnesses can be caused by prolonged exposure to hot temperatures, limited fluid intake, or failure of temperature regulation mechanisms in the brain.

The most serious health disorder associated with working in a hot environment is heat stroke. Symptoms of heat stroke include hot dry skin, no sweating, high body temperature, rapid heartbeat, mental confusion, and loss of consciousness. While medical help is being called, the

victim should be moved to a cool area and his or her clothing soaked with cool water. Vigorous fanning of the body will increase cooling. Death can occur if prompt first aid and medical help are not given.

Heat exhaustion occurs as a result of excess fluid loss and failure to replace the minerals and fluid lost during sweating. Signs of heat exhaustion include extreme weakness or fatigue, giddiness, nausea, and headaches. The skin is clammy and moist, and the body temperature is relatively normal. The best treatment for heat exhaustion involves resting in a cool place and drinking plenty of fluids.

Heat cramps are painful muscle spasms that are caused by excessive fluid and salt loss. Such cramps can be treated by consuming fluid replacement beverages.

Heat rash is likely to occur in hot and humid environments where sweat does not easily evaporate from the skin surface. It can be prevented by resting in a cool place and allowing the skin to dry.

By following a few basic precautions, health problems associated with working in hot environments can be prevented:

- Those unaccustomed to working in the heat should be given time to adjust to work in a hot environment.
- Wear light, loose-fitting clothing and a hat. Sunscreen should also be used when prolonged exposures to sunlight may be possible.
- Drink plenty of fluids to help prevent dehydration. Eight to ten ounces of fluid are recommended every ten to fifteen minutes when working in extremely hot or humid conditions. Beverages containing alcohol or caffeine should be avoided.
- Alternate work and rest periods. Heavy work should be scheduled for the cooler parts of the day, if possible.
- Educate employees on the symptoms, treatments, and preventive measures for heat related problems.

Pesticide/Herbicide Safety

- All employees who apply restricted use pesticides or herbicides should be licensed through the structural pest control board or the state department of agriculture.
- Before using any pesticide or herbicide, employees must read the label carefully and

follow the directions and precautions.

- Pesticides must be stored in a properly labeled, tightly sealed container and kept under lock and key at all times. The building, room, or structure should be clearly marked with pesticide warnings.
- Before handling any pesticide or herbicide, the user should review the material safety data sheet and label to identify any personal protective equipment that will be needed to prevent a possible exposure.
- Mix the pesticide or herbicide in a well-ventilated, well-lit area. Mix only at recommended rates and apply only at specified dosages.
- Check application equipment for leaking hoses or connections, plugged or worn nozzles, and examine the filter to ascertain that it is free of debris.
- Employees should try to avoid contact with skin or inhalation of mists or spray.
- Material safety data sheets must be maintained and kept near material and storage locations.
- Spray equipment must be cleansed daily when using oil-based solutions.
- Pesticides and herbicides should not be stored or disposed of where they could contaminate people, property, or waterways.
- Empty containers should be disposed of in a safe manner.
- Pesticides and herbicides should only be applied under favorable time and weather conditions.
- Do not eat, drink, or use tobacco products while handling pesticides or herbicides.

Chain Saw Safety

- Employees operating powered trimming equipment must, at minimum, wear safety glasses or face shields and hearing protection. Other personal protective equipment, such as chaps, gloves, or fall protection, should also be evaluated to gauge its need.
- When starting a chain saw, it should be placed on or against a solid support.
- The operator should grip the chain saw with both hands during the entire cutting

operation.

- The saw bumper should be against the tree or limb before starting a cut.
- Chain saw operators should regularly clear the immediate area around their work to make certain that brush or limbs will not interfere with the chain saw or operator.
- Chain saws should not be modified in such a way to allow locking of controls in the “on” position.
- The chain saw engine or motor should be stopped when:
 - Working on any part of the chain or cutting bar
 - Being moved from one location to another
 - Leaving the unit unattended
- Gasoline-driven chain saw engines should be stopped when they are being refueled. If gasoline is spilled on the chain saw during refueling, it must be wiped off before the engine is started.
- A gasoline-driven chain saw should not be used above shoulder level.
- Employees shall not approach the chain saw operator within the reach of the saw blade while it is in operation.
- Ropes, pulleys, etc., should be used as necessary to lower larger limbs that may endanger persons and property if allowed to free fall.
- The proper use of fall protection and ladders should be reviewed with all employees prior to working from a position other than ground level.

Forklift Safety

- Forklifts should only be operated by authorized personnel who have been properly trained in their use. This training should be documented and consistently used with all authorized operators and trainees.
- The operator is responsible for inspecting the equipment before it is used. The brakes and controls should also be tested by the operator prior to use. (Needed repairs must be reported immediately.)
- Equipment must be operated at a safe speed for existing conditions. Go slowly around

corners. Avoid holes and loose material.

- Seat belts must be worn when operating a forklift with rollover protection.
- Clearances should be checked in all directions, particularly overhead clearances.
- Forklifts should not be fueled while the engine is running.
- Forks should be placed under the load as far as possible. Loads should not be raised or lowered while traveling. Loaded or empty, forks should be carried as low as possible, but high enough to clear uneven surfaces (usually about 6-12 inches on level surfaces).
- Operators should always face the direction of travel and keep their arms and legs inside the operator's compartment.
- Load limits as specified by the manufacturer should not be exceeded.
- Do not travel with the load raised as this causes the center of gravity to rise, which may affect the tipping potential.
- Only the operator is allowed on the equipment during operation, unless a seat is provided for another occupant.
- A secured platform specifically designed for that purpose must be used when lifting personnel.
- Unattended forklifts (operator 25 feet away or forklift not in his view) must have the load fully lowered, controls neutralized, power shut off, and brakes set.

Equipment with internal combustion engines should not be operated in enclosed areas for long periods of time so as not to exceed the allowable levels of carbon monoxide.

Backhoe/Loader Safety

- Operators must be adequately trained and qualified to operate the equipment. The operators must become thoroughly familiar with the equipment before using it, and they must understand the contents of the operator's manual.
- The operator is responsible for inspecting the equipment before it is used. The brakes and controls should also be tested by the operator prior to use. (Needed repairs must be reported immediately.) Observe proper maintenance and repair of all pivot pins, hydraulic cylinders, hoses, snap rings, and main attachment bolts daily.

- Seat belts must be worn on all equipment with rollover protection.
- Operators should maintain three points of contact with the equipment when entering or exiting. This will allow the operator to regain balance if a slip occurs.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict the operator's view to the rear of the vehicle. If an alarm is not present, the operator should honk the horn to warn others of the moving vehicle. Back-up alarms should be operable at all times.
- Only the operator is allowed on the equipment during operation, unless a seat is provided for another occupant.
- Employees must never be allowed to ride in the bucket or use the bucket for an elevated platform.
- Walk around the equipment to observe for children and others before starting up. Consider the use of a spotter when backing the equipment.
- Keep bystanders in the clear while operating the equipment. No one is allowed in a ditch while a backhoe is excavating.
- Locate underground utility lines and overhead power lines before starting to dig. (Always contact utility companies to physically locate any underground lines.) Do not operate a backhoe within 10 feet of an overhead electrical line. Hand-dig in the vicinity of all known underground utility lines and pipelines.
- Never attempt to lift loads in excess of the equipment's capacity.
- Never allow anyone to get under the equipment or reach through the lift arms while the bucket is raised.
- Relieve the pressure in any hydraulic lines before disconnecting them to make repairs. Any hydraulic implements that are not relieved should be physically blocked to protect against mashing injuries during maintenance or repair activities. Physical blocks may include safety stands, timbers, or cinder blocks that can withstand the force.
- Use care at all times to maintain proper stability. Drive at safe speeds over rough ground, on slopes, when crossing ditches, and when turning corners.
- To prevent upsets when operating on a slope, avoid using the full reach and swinging a loaded bucket to the downhill side.

- Always center and raise the boom before moving to a new location.
- Do not attempt to exit the equipment while it is still in motion. Apply the parking brake and shut down the engine before leaving equipment.
- Lubrication activities or mechanical adjustments must not be attempted while the equipment is running if there is a possibility of contacting a pulley, belt, or shaft that is in motion.
- Park the equipment on level ground when possible. At a minimum, the bucket should be lowered, the brakes set, the transmission engaged, and the engine killed when parking.
- Use care in attaching towing lines to the equipment. Pulling from the tractor rear axle or any point above the axle may cause an accident.
- Slow-moving vehicle signs and other warning devices should be used to help other motorists in spotting the backhoe/loader from a safe distance.

Dump Truck Safety

- No one should ride in the bed of the dump truck.
- Employees should not remain in the cab when the bed is being loaded unless the cab is protected against impact.
- Check overhead clearances before raising the bed. Be aware of overhead electrical lines.
- Be sure hoist is not engaged before moving the truck.
- Loose material should be covered to prevent blowing debris and spillage.
- Windows should be closed during loading and unloading to control dust accumulation inside the cab.
- Operators of dump trucks must possess a valid commercial driver's license.
- Operators are responsible for cleaning debris, mud, rocks, etc. from the bed, fenders, and other truck body parts.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict the driver's view to the rear of the vehicle. If an alarm is not present, the operator should honk the horn to

warn others of the moving vehicle. Back-up alarms should be operable at all times.

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

For additional safety information, also see General Safety Rules for Motor Vehicle and Equipment Operation.

Tractor/Shredder Safety

- The operator must wear a securely fastened seat belt if the tractor/shredder is equipped with roll-over protection.
- Guards around chains, shafts, pulleys, gears, etc. must always remain in place while the equipment is in operation.
- Use caution when operating near slopes, cuts, depressions, drop-offs, soft shoulders, ditches, etc. Operators must constantly watch for hidden objects and uneven ground. Hazardous areas should be pre-cleaned and special hazards removed prior to mowing.
- Care must be used when entering traffic areas, crossing railroad tracks, etc.
- Operators should maintain three points of contact with the equipment when entering or exiting. This will allow the operator to regain balance if a slip occurs.
- Back-up alarms are a useful warning device and should be used when possible, especially on larger vehicles and equipment that may severely restrict the operator's view to the rear of the vehicle. If an alarm is not present, the operator should honk the horn to warn others of the moving vehicle. Back-up alarms should be operable at all times.
- Only the operator is allowed on the equipment during operation, unless a seat is provided for another occupant.
- Lubrication activities or mechanical adjustments should not be attempted while the equipment is running if there is a possibility of contacting a pulley, belt, shaft, etc. that is in motion.
- Take sharp turns at low speed.

- Proper personal protective equipment should be worn at all times. On a tractor with an uncovered cab, the operator should at a minimum, wear safety glasses and hearing protection. Other personal protective equipment, such as gloves, face shields, sleeves, or boots should be evaluated for individual jobs. Sunscreen should also be used in areas where the operator may be exposed to sunlight for long periods of time.
- Slow-moving vehicle signs and other warning devices should be used to help other motorists in spotting the tractor/shredder from a safe distance.

Grounds Maintenance Safety

Power Lawn Mowers and Edgers

- All power lawn mowers must be equipped with adequate guards, which should remain in place while the mower is in use.
- Prior to making adjustments, inspections, or repairs, the employees should permit the mower to come to a complete stop. A spark plug wire should be removed, if necessary, for energy control.
- When operating a mower or edger, the employee should:
 - Remove any rocks, pieces of wire, or other foreign objects from the area.
 - Avoid directing the discharge opening toward the operator or other individuals in the vicinity.
 - Mow across the face of the slope when mowing on a slope or incline.
 - Wear proper personal protective equipment for the task being performed. Necessary personal protective equipment may include safety glasses, goggles, face shields, hearing protection, and work boots.

Chippers

- Chippers should never be parked directly under the tree being trimmed.
- If the chipper is parked on or near the roadway, advance warning signs, flaggers, cones, etc. should be used to identify and protect the work area.
- Spectators should never be allowed to stand near the machine while brush is fed into the chipper.

- Employees should never place hands or other parts of the body into the brush chipper while the chipper is in operation.
- The battery cables should be disconnected prior to performing any task that may potentially put the operator in contact with the cutting blades.
- Tools or other metallic objects should not be used to push brush into the chipper.
- The ignition key must be removed when the chipper is left unattended.
- Safety glasses and hearing protection must be worn by all employees near the chipper, and other personal protective equipment may be necessary depending on the activity. In addition, workers must be aware of entanglement hazards involving loose fitting clothes, gloves, etc.
- Employees should be familiar with emergency shut-off procedures and ensure that the emergency shut-off is operational prior to use.

Poison Ivy/Oak/Sumac Awareness

Common poison ivy can be recognized by its three green, glossy leaflets that turn yellow in the fall. Western poison oak can be recognized by its vine form and three leaflets that are green or brown in color, with yellow veins and brownish/yellow stems. In addition, the leaves are covered with hair on the underside and there are groups of hairy, yellowish berries. Poison sumac is recognizable as a woody shrub or small tree, 5 to 20 five feet tall and containing 7 to 13 leaflets per stem. The leaves turn red in the fall. Poison sumac has cream-colored berries that hang in loose groups from the branches.

Sensitivity to poison ivy, poison oak, or poison sumac can vary, and some people who do not appear sensitive may develop sensitivity on later exposures. Exposures to poison ivy, poison oak, or poison sumac are greatest in the spring and summer months when the oil (urushiol) is most abundant. Onset of the rash is from a few hours to several days after exposure. The skin becomes red and blisters appear, usually accompanied by itching. As symptoms progress, swelling and fever may develop.

Workers who are going to be in areas where poison oak or ivy is likely to grow should wear long pants, long sleeves, and, if practical, gloves and boots. The best protection is to identify the plant and avoid contact. For highly sensitive people, a barrier cream can provide even greater protection.

Be aware that the plant's oily resin sticks to almost all surfaces and can even be carried in the

wind (on particles of dust) when there is a fire burning.

If contact with poison ivy is suspected:

- Wash all exposed areas with cold running water as soon as possible. If this is done within five minutes, the water should neutralize or deactivate the urushiol in the plant's oil before it can bond with the skin and create a rash. Soap is not necessary and may even spread the oil.
- If possible, change clothes. Wash all clothing outside with a water hose before taking it into the work area or home to prevent the oil from being transferred to furniture or rugs. Resinous oils can last on tools and clothing for months unless properly cleaned or laundered.
- Treat mild rashes with lotions and by soaking in an oatmeal bath or covering the rash with wet compresses. Contact a physician for treatment of severe cases or if the irritation is not cleared up in three or four days.

General Painting Safety Rules

- The manufacturer's directions must be read and followed carefully when applying any finishing materials, such as lacquer, enamel, paint, etc. If questions arise as to the hazards of the substance, refer to the applicable MSDS.
- Personal protective equipment, as recommended by the manufacturer, must be used when applying the products.
- Any spray painting must be done with an adequate amount of clearance from any potential sources of ignition. When possible, painting should be performed in isolated areas where ignition sources do not exist or are very minimal.
- Proper ventilation and adequate respiratory protection must be addressed before any application begins.
- Any flammable substances, such as paints or thinners, must be stored in proper storage areas or in a UL-listed metal storage cabinet.
- Any flammable substances removed from their original containers must be stored in UL-listed storage containers if the original container does not meet the requirements.
- Use metal containers when transferring flammable liquids, especially those that are known Class I flammable liquids. Refer to material safety data sheets for flammability information.

- Use the proper type of respirator at all times when applying toxic paints. If questions arise as to the toxicity of the paint, refer to the applicable MSDS.
- All employees required to use respirators shall be included in the city's respiratory protection program and trained on the proper use of the assigned respirator. The employees must also be made aware of any limitations of the respiratory protection.
- No more than one day's supply of flammable substances should be kept outside of an approved storage area.
- Clean up all spills promptly and in accordance with the requirements on the MSDS.
- Dispose of oily, paint- or solvent-soaked rags in metal containers with tight fitting lids to prevent possible chemical reactions that may result in spontaneous combustion.
- Use properly designed and erected ladders, scaffolds, elevated mobile work platforms, etc., when painting above ground level. Do not work or place elevated equipment within 10 feet of power lines.
- When using spray guns and compressed air:
 - Follow all rules concerning the safe handling of combustible and flammable materials.
 - Exercise caution in the handling of compressed air equipment.
 - Adjust and regulate the air pressure on the spray gun before starting work.
 - Clean the spray gun and other equipment thoroughly after each use.
- Read and follow the manufacturer's directions carefully when applying any finishing materials, such as lacquer, enamel, paint, etc. If questions arise as to the hazards of the substance, refer to the applicable MSDS.
- Personal protective equipment, as recommended by the manufacturer, must be worn when applying the products.
- If a spray booth is available, it should be used whenever possible. All employees should be trained on the use of the booth ventilation system, and it should be in operation during every spraying operation.

General Office Safety

- Employees should exercise caution walking up and down stairs and use handrails

whenever possible.

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

Ergonomics Awareness

Work Stations

- Chairs should be easily adjustable and provide good lumbar support. If feet cannot rest firmly on the ground, a footrest may be provided. Chairs with a five-point base are recommended because they are more stable.
- Sufficient legroom must be allowed for seated operators.
- Monitors should be positioned directly in front of the operator. The operator's eyes should be level with the top of the screen. Viewing distance between the user's eyes and the screen should be approximately 16 to 22 inches.
- The equipment or sources of light should be positioned so that glare or bright reflections on the display screen are minimized.
- Adjust the height of the chair and/or keyboard so that the shoulder-elbow-arm angle is approximately 70 to 90 degrees.
- Keyboard heights and placement should be adjustable. A cushioned palm rest should be used if needed to keep user's hands and fingers in the same plane as the forearm and to avoid resting wrists and forearms on sharp table edges.
- Work surface heights should range from 23 to 28 inches for seated work stations. In addition, the work area should be well organized with routine operations within easy reach and easily accessible.
- Document holders should be placed adjacent to and at the same height as the display screen.
- Operators should adjust positions frequently and get up and move around to help avoid fatigue.

Lighting, Noise, and Heat

- Adequate but not excessive heat should be provided.
- Windows should be equipped with adjustable blinds.
- Task lighting should be used where extra illumination is required.

- Noise above 85 to 90 decibels (dB) may be harmful to workers. When exposed to high noise levels, employees should use hearing protection equipment to ensure proper working conditions.
- Whenever possible, noisy machines and equipment should be isolated in a remote location.
- Work practices should be tailored to prevent heat/cold-related disorders. Employees exposed to hot environments must know the appropriate medical steps to counteract potentially life threatening situations such as hypothermia, heat stroke, heat exhaustion, and heat cramps.

Aggressive Animal Awareness

- Any employees who are likely to encounter an aggressive animal during the performance of their normal duties (e.g., policemen, firemen, meter readers, utility workers) should be given basic instructions to protect themselves.
- If an aggressive animal is encountered, animal control should be contacted immediately.
- The area should be cleared of other people while waiting for animal control. Crowds may scare the animal and cause it to attack.
- The animal's owner or handler should be contacted, if possible.
- Running away is not advised unless it is certain the person can quickly reach a place of safety.
- The best tactic is to back away slowly while continuing to speak in a firm, calm voice.
- If more than one animal is present, it is advisable to back against any available object to prevent an attack from the rear
- If the animal attacks, a baton, billy-club, or stick should be used to strike the animal rather than throwing anything at it. Sprays may also be useful as a deterrent if available, but should only be used if the person is upwind and has been made familiar with its use.
- Backing an animal into a corner, may cause it to attack.

SECTION III. DISCIPLINARY PROCESS

Disciplinary Policy

Safety Reprimands

The city has developed a progressive disciplinary policy that applies to the safety and health program of this organization. The disciplinary policy is a tool to ensure enforcement of the rules and procedures for a safe and healthful working environment. The disciplinary policy applies to all city employees.

If employees do not follow documented safety rules/procedures, the employee reprimand form in Exhibit 13 should be used. Supervisors should make every effort to make sure employees are following safe work practices.

Verbal Warnings

Supervisors may issue verbal warnings to employees who commit minor infractions or violations of the safety rules or safe work practices. Continued violations or verbal warnings will lead to more stringent action.

Written Warnings

Supervisors may issue written warnings for the following:

- Repeated minor violations of safety rules or procedures
- Single serious violations of a rule or procedure that could have potentially resulted in injury to the employee or another employee or could have caused property damage
- Activities that could potentially result in injury or property damage

Disciplinary Leave

Supervisors may recommend and management may institute disciplinary leave for the above reasons and the following:

- A single serious violation of a rule or procedure that results in injury to an employee or property damage

- Repeated violations or nonconformance to safety rules or procedures

Termination

Supervisors may recommend and management may concur in the termination of any employee for serious violations of the above circumstances.

Documentation

The safety officer will maintain records of disciplinary action. Violations of city rules, safety rules, regulations, or procedures will be documented by filling out an employee reprimand report. The report must state the type of violation and corrective action taken. The employee must read and sign the report to acknowledge that he or she understands the seriousness of the violation.