

DAVENPORT FIRE DEPARTMENT

Accident Prevention Program

TABLE OF CONTENTS

SECTION I: INTRODUCTION

1.01 PURPOSE	4
1.02 SCOPE AND APPLICABILITY	4
1.03 ENFORCEMENT	4
1.04 MANAGEMENT RESPONSIBILITY	5
1.05 SUPERVISOR/FOREMAN RESPONSIBILITY	5
1.06 EMPLOYEE RESPONSIBILITY	6
1.07 INTERPRETATION OF THE REGULATIONS	6
1.08 REVISIONS	7
1.09 GOVERNMENTAL SAFETY STANDARDS	7
1.10 SAFETY BULLETIN BOARD	7
1.11 SUPERVISOR/FOREMAN MEETINGS	7

SECTION II: ACCIDENTS and INJURIES

2.01 EMPLOYEE RESPONSIBILITY	8
2.02 PERSONAL INJURY AND EMERGENCY	8
2.03 RELEASE FOR WORK AFTER INJURY	9
2.04 RETURN TO WORK PROGRAM	9
2.05 VEHICLE ACCIDENTS	9
2.06 DISASTER EMERGENCY	9
2.07 ACCIDENT INVESTIGATION	10
2.08 FIRST AID – BLOODBORNE PATHOGEN	10

SECTION III: GENERAL SAFETY

3.01 PERSONAL CONDUCT	11
3.02 JOB HAZARDS	11
3.03 HOUSEKEEPING	12
3.04 PERSONAL PROTECTIVE EQUIPMENT	12
3.05 HANDLING OF MATERIALS	13
3.06 MOTOR VEHICLES	13
3.07 FIRE PREVENTION	14
3.08 SAFETY INSPECTION PROCEDURES	15

SECTION IV: WORK AREA SAFETY

4.01 WORK AREA	16
4.02 OFFICE and CLERICAL SAFETY	16
4.03 ELEVATED POSITIONS	17
4.04 UNDERGROUND INSTALLATIONS	17
4.05 SEWERS, PITS and TREATMENT PLANTS	18
4.06 ELECTRICAL FACILITIES	18
4.07 TRAFFIC CONTROL	19
4.08 TRANSPORTING OF EQUIPMENT	20
4.09 TRENCHING and EXCAVATING	21

SECTION V: EQUIPMENT SAFETY

5.01 DRILL PRESSES	21
5.02 ABRASIVE GRINDERS	21
5.03 POWERED MACHINE TOOLS	22
5.04 PORTABLE POWER TOOLS	22
5.05 MECHANIZED EQUIPMENT	23
5.06 MECHANICAL HANDLING EQUIPMENT	23
5.07 MECHANICAL LIFTING AND AERIAL EQUIPMENT	24
5.08 HAND TOOLS	25
5.09 BATTERY MAINTENANCE	26
5.10 WELDING and BRAZING	27
5.11 COMPRESSED AIR AND GAS SAFETY	27
5.12 COMPRESSED AIR TOOLS	28
5.13 EXPLOSIVE ACTIVATED TOOLS	28
5.14 POWER SAWS/CHAINSAWS	29
5.15 PAINTING	29
5.16 CHEMICAL SPRAYING	30
5.17 STATIONARY EQUIPMENT	30
5.18 MOBILE EQUIPMENT	30

SECTION VI: HAZARDOUS COMMUNICATIONS

6.01 PURPOSE	31
6.02 PROCEDURE	31

SECTION VII: FALL PROTECTION/RESCUE

7.01 FALL RESTRAINT (WAC 296-155-24510)	31
7.02 FALL ARREST (WAC 296-45-25510)	32
7.03 FALL HAZARDS	32

SECTION VIII: FIRE PROTECTION STANDARD OPERATING PROCEDURES

8.01 FIREGROUND SAFETY	33
8.02 PROTECTIVE CLOTHING	39
8.03 OPERATING POWER SAWS	40
8.04 STATION SAFETY	43
8.05 GROUND LETTERS	47
8.06 EMERGENCY RESPONDER DECONTAMINATION	49
8.07 EMERGENCY INCIDENT REHABILITATION	51
8.08 EMERGENCY INCIDENT ACCOUNTABILITY	55
8.09 RAPID INTERVENTION TEAM	62
8.10 SAFETY COMMITTEE	64
8.11 ACCIDENT PREVENTION PROGRAM	66
8.12 SAFETY OFFICER	67
8.13 SAFETY MANAGEMENT'S RESPONSIBILITY	68
8.14 MEMBER'S RESPONSIBILITY	69
8.15 SAFE PLACE STANDARD	70
8.16 SAFETY COMMUNICATION	71
8.17 DRIVER ELIGIBILITY and TRAINING	72
8.18 SAFETY BULLETIN BOARD	74
8.19 RESPIRATORY PROTECTION PLAN	76
8.20 MEDICAL EVALUATION FOR RESPIRATOR USE	78
8.21 RESPIRATOR FIT TESTING	80

8.22 RESPIRATOR TRAINING	83
8.23 RESPIRATOR USE	85
8.24 CARE, INSPECTION and MAINTENANCE of RESPIRATORS	87
8.25 FILL STATION PROCEDURES and AIR QUALITY	89
8.26 STRUCTURAL PROTECTIVE CLOTHING CLEANING and MAINTENANCE	89
8.27 CONFINED SPACE	91

APPENDICES

A.01 EMPLOYEE’S INCIDENT/NEAR MISS REPORT	96
A.02 SUPERVISOR’S INCIDENT/NEAR MISS REPORT	98
A.03 EMPLOYEE SAFETY ORIENTATION CHECKLIST	102
A.04 DEPARTMENTAL SAFETY TRAINING	104
A.05 REFUSAL TO SEEK MEDICAL CARE	105
A.06 SAFETY PROGRAMS BY DEPARTMENT	106
A.07 HAZARD COMMUNICATION PROGRAM	107

SECTION I

INTRODUCTION

1.01 PURPOSE

1. The accident prevention regulations herein set forth are for the purpose of preventing injury to persons and property.
2. To develop a high standard of safety throughout all operations within the City and ensure that no employee is required to work under any hazardous or unhealthy conditions.
3. We believe that each employee has the right to obtain personal satisfaction from his/her job. Because the prevention of occupational illness or injury is crucial to this belief, it will be given top priority at all times.
4. It is the City of Davenport's intention to initiate and maintain complete accident prevention and safety training programs. Each individual employed by the City plays an important role in those programs. By accepting mutual responsibility to operate safely and healthfully, we will each contribute to the wellbeing of our co-workers.

1.02 SCOPE and APPLICABILITY

1. These accident prevention regulations shall be effective as of the date of issuance and shall be complied with by every employee of the City under every circumstance where they are applicable.
2. Employees acting in a supervisory capacity shall require all employees working under their jurisdiction to comply with all applicable safety instructions and safe practices.
3. If a difference of opinion arises in the application or interpretation of these regulations, the decision of the employee in charge of the job shall be followed.
4. Departments and divisions may promulgate additional safety regulations to be followed by those persons working or operating under the jurisdiction of those departments. Employees assigned to work at work sites outside their home department will follow the safety procedures of the site at which they are working. The jurisdictional department/division will instruct the employee in the safety procedures specific to their areas of responsibility.

1.03 ENFORCEMENT

1. Disciplinary action covering violations of these safety regulations can be carried out in accordance with personnel policies and state and federal laws.
2. Whenever there is a difference of opinion between the employee and the supervisor/foreman as to whether or not a particular assignment is safe, the judgment of the department head/supervisor/foreman will prevail. The employee may file a grievance regarding the situation in accordance with City grievance procedures.
3. Oral notice will be given to an employee for violating safety or health standards (WISHA and OSHA). The violator will acknowledge the notice in writing and a copy will be retained in his/her personnel file. No specific details will be recorded on the first notice other than the reason for the violation.
4. After review by the Safety Committee, any employee found to be negligent by not using provided safety equipment might be appropriately disciplined. After oral notice, as provided above, a written notice will be issued stating the violation. City personnel policies and procedures will be followed as outlined in said book.

5. No City employee is exempt from these enforcement standards. A department manager may be found in violation of a safety or health standard (WISHA and OSHA) as well as any other employee. Possible violations could include neglecting to ensure that employees are properly protected from accident or injury, or neglecting to maintain a safe work area.

1.04 MANAGEMENT RESPONSIBILITY

1. Each division manager shall make certain a copy of the current safety regulations are kept in a conspicuous place and available to all employees.
2. Each manager shall conduct monthly meetings to discuss accidents and near-miss reports. Any changes to the safety regulations will be announced at this meeting. Meeting minutes will be recorded.
3. Management will schedule any training required by these regulations and keep records of training.
4. Management, in participation with the Safety Committee, shall conduct a review of the training records and crew safety minutes.
5. Actively participate in and support safety and health programs.
6. At least one manager (as designated by Safety Committee and rotated every other year) will participate in project safety and health meetings, accident investigations and job site inspections.
7. Each manager will establish realistic goals for accident reduction in his/her area of responsibility and establish the necessary implementing instructions for meeting those goals. Goals and instructions shall be within the framework established by this document.
8. Each manager will make sure that a safety bulletin board is in place with, at a minimum, all Department of Labor & Industries required notices.
9. It is the manager's responsibility to have the appropriate items stocked in first aid kits in accordance with WAC 296-24-06160 Appendix 2 for each workplace.
10. At least one out of three City employees on job shall be trained and qualified in first aid/CPR. Emergency first aid should be applied with judgment to prevent further injury to the injured.
11. All City employees with occupational exposure shall receive Bloodborne Pathogen training (per the City Bloodborne Pathogen Plan).

1.05 SUPERVISOR/FOREMAN RESPONSIBILITY

1. Each supervisor or foreman shall make certain that all employees under his or her jurisdiction are familiar with these regulations and their application and that each employee has received an initial orientation before beginning work. That orientation must be documented.
2. Ensure each employee supervised is competent and receives training on safe operation of specific equipment or tasks before starting work on that equipment or job.
3. Ensure each employee has been issued and trained in the care and use of personal protection equipment (PPE) before starting work requiring PPE. The proper care and use of all needed PPE will be the employee's responsibility.

4. Ensure that a complete daily walk-through safety check of work area is conducted and that any hazards are corrected. Identify and eliminate job hazards efficiently through job safety analysis procedures.
5. Periodically observe work performance of employees for compliance with safety rules referenced and contained in this program and any department specific safety guidelines. Provide training and take corrective action as necessary. Document the observance of all work-related safety rules in the employee's annual performance evaluation.
6. Set good examples by following established safety rules and attending mandatory training.
7. Provide management with information suggesting work practice changes or equipment that would improve employee safety.
8. Inform and train all employees on the hazardous chemicals they may encounter under normal working conditions or during an emergency situation.
9. All injuries, serious or minor, as well as near misses shall be reported on the *Employee's Incident/Near Miss Report* form (Appendix A.01).
10. Conduct crew/leader meetings, possibly the first five minutes of each work shift, to discuss safety matters and work plans for the day. Discuss any accidents or near misses of previous day. Make written notes of any significant issues and forward with reports.
11. Participate in investigations and inspections on safety and health related matters.

1.06 EMPLOYEE RESPONSIBILITY

1. Each employee of the City shall be required to know and understand each of the safety regulations that apply to the work he or she is performing for the City.
2. Report any unsafe or unhealthy actions or conditions to your supervisor or Safety Committee representative as soon as possible.
3. Report all injuries promptly to your supervisor, no matter how minor.
4. Report all near-miss accidents immediately to your supervisor. All near misses shall be reported on the *Employee's Incident/Near Miss Report* form (Appendix A.01).
5. Always use personal protective equipment (PPE) in good condition where it is required.
6. Never remove or defeat any safety device or safeguard provided for protection of employees.
7. Encourage co-workers, by your behavior and words, to use safe work practices.
8. Make suggestions to your safety representative, supervisor, or management about the changes to equipment or work practices that you think will improve employee safety and health.

1.07 INTERPRETATION of the REGULATIONS

These regulations shall be strictly interpreted. However, when lawful and applicable WISHA and OSHA regulations are contrary to these regulations, such governmental regulations will control.

1.08 REVISIONS

These regulations shall be strictly interpreted. However, when lawful and applicable WISHA and OSHA regulations are contrary to these regulations, such governmental regulations will control.

1.09 GOVERNMENTAL SAFETY STANDARDS

In addition to its own safety instructions and practices, the City and its employees in the performance of their work are subject to regulations of various other governmental agencies. Supervisors shall make certain that all applicable provisions of governmental regulations are followed.

1.10 SAFETY BULLETIN BOARD

1. Purpose: Increase employees' safety awareness and convey City's safety message, designated safety items only.
2. The following items are required to be posted:
 - a. WISHA poster F416-081-00 (required).
 - b. Industrial Insurance poster (required).
 - c. NOTICE (to report all injuries) (recommended).
 - d. Violation Citation and Notice (as appropriate).
 - e. Emergency Telephone Numbers Posted (as appropriate).
 - f. OSHA 200 Summary (required during February of each year).
3. Suggested Items:
 - a. Safety posters.
 - b. Safety Committee minutes.
 - c. Pertinent safety items.
 - d. Have a required reading board for minutes with an initial sheet for each employee in the dept.

1.11 SUPERVISOR/FOREMAN MEETINGS

1. Purpose: To assist in the detection and elimination of unsafe conditions and work procedures.
2. Monthly meetings: Meetings should be held in accordance with the various circumstances involved or when necessary. No set pattern will suit all cases.
 - a. Safety meetings shall be held at least once a month.
 - b. The attendance and subjects discussed shall be documented and maintained on file for one year.
 - c. Copies of the minutes should be made available to the employees by posting or other means.
3. Scope of activities: Certain employees may be designated by their supervisors to assist
 - a. Conduct in-house safety inspections with their supervisor.
 - b. Accident investigation to uncover trends.
 - c. Review accident reports to determine means of elimination.
 - d. Accept and evaluate employee suggestions.
 - e. Review job procedures and recommended improvements.
 - f. Monitor the safety program's effectiveness.
 - g. Promote and publicize safety.
4. Documentation: *Crew Leader Safety Meetings* form is available to assist in documentation activities of crew/leader meetings (see your department secretary).

SECTION II

ACCIDENTS and INJURIES

2.01 EMPLOYEE RESPONSIBILITY

1. Regardless of severity, every City employee must report immediately to his or her supervisor all injuries, accidents and near misses incurred in the performance of duties. This policy will correct current deficiencies and prevent accidents in the future. Prompt reporting of injuries is a requirement of state and federal law. Failure to report an injury promptly could make the injured person ineligible for industrial compensation.
2. Report all equipment damage to your supervisor/foreman immediately.
3. Use your safety equipment as directed – DON'T TAKE CHANCES.
4. Ask questions when in doubt about any phase of your operation – FOLLOW INSTRUCTIONS.
5. Report all unsafe situations or conditions that are potentially hazardous.
6. ONLY operate equipment you are qualified to operate. When in doubt, ask questions.
7. Talk to management/supervisors/foremen at any time about problems that affect your safety or work conditions.
8. The most important part of this program is the individual employee – YOU! Without your cooperation, the most stringent program can be ineffective. Protect yourself and your fellow workers by following the rules. REMEMBER: work safely so you can go home to your family and friends – they need you.
9. All injuries, serious or minor, as well as near misses shall be reported on the *Employee's Incident/Near Miss Report* form (Appendix A.01).

2.02 PERSONAL INJURY and EMERGENCY

1. Minor injury steps:
 - a. Administer first aid and transport if necessary.
 - b. Notify supervisor immediately.
2. Emergency and serious injury steps:
 - a. Unless your job description specifically states otherwise (i.e., paramedic), providing first aid and/or CPR is *not* a job requirement. An employee certified in first aid/CPR may choose to render such assistance under the provisions of the "Good Samaritan" Act.
 - b. Notify supervisor/manager immediately.
 - c. The supervisor/manager will decide whether to:
 - 1) Transport the victim to the nearest hospital emergency room.
 - 2) Call 911.
 - 3) Appoint accident investigation team
 - g. If 911 is called, give the exact location and explain the situation to the best of your ability
 - h. If possible, designate a person to meet and direct emergency personnel

2.03 RELEASE for WORK AFTER INJURY

In all cases of industrial injury requiring the services of a physician, it is the responsibility of the employee to obtain from the physician a release authorizing return to work and any limitations placed on the employee's physical abilities.

The release shall indicate the date upon which the employee may return to work. No employee shall be allowed to return to work without a properly signed release from his or her physician.

2.04 RETURN to WORK PROGRAM

The City has established a Return to Work Program. Provisions of the program are detailed in the City of Davenport Personnel Policies and Procedures manual.

2.05 VEHICLE ACCIDENTS

1. All motor vehicle accidents involving City-owned or other vehicles used in City business shall be reported immediately to the police department. Do not move vehicles or otherwise alter the scene of the accident, unless instructed by the police.
2. Prior to the arrival of police, attempt to reconstruct the accident. Write down pertinent information that has a bearing on the accident, however minor. Written information should include time, place, speeds, names of witnesses, etc. Take photographs if possible.
3. Do not make statements pertaining to responsibility to anyone except your supervisors. Report the accident to your supervisor promptly.
4. In all vehicle-to-vehicle accidents, regardless of the estimated value of damages or whether there are injuries as a result of the accident, a *Washington State Patrol Report* form (call extension 204-22 to obtain the form) must be submitted to the equipment rental/maintenance manager by the next business day.

2.06 DISASTER EMERGENCY

1. No building, equipment, or material of any kind is worth a human life.
2. Any municipal building disaster: Follow the Building Evacuation Plan for each individual building.

Site specific plans will conform to WAC 296-24-567 and WAC 296-24-56701 which include the location of evacuation exits, fire extinguishers, emergency lighting, first aid and BBP kits, medical O2 bottles, emergency eye wash stations and showers shall be clearly marked.

3. Steps for a general disaster:
 - a. Remove injured people, if any, from danger area. Warn people in area of danger, control crowds. Assist any physically or visually impaired from area.
 - b. Assign a person to call the Fire Department – 911. Report exact locations of disaster (fire, etc.) and answer all questions calmly.
 - c. Confine the dangers, if possible.
 - d. Designate a person to go to the street entrance and direct emergency personnel.
 - e. In the case of fire, be sure to use extinguishers suitable for the specific type of fire.

2.07 ACCIDENT INVESTIGATION

1. Whenever there is an accident that results in serious injuries, a preliminary investigation will be conducted by the immediate supervisor of the injured person(s), a person designated by management, an employee representative of the Safety Committee and any other persons whose expertise would aid the investigation.
2. The investigation team will take written statements from witnesses, photograph the accident scene and equipment involved, and note the conditions of equipment and the work area that may have had a bearing on the accident as soon as possible after the accident. The team will make a written report of its findings including a sequence of events leading up to the accident, conclusions about the accident and any recommendations to prevent a similar accident from occurring. The Safety Committee will review the report at its next regularly scheduled meeting.
3. In the event of a fatality, probable fatality, or when an employee is admitted to the hospital as a result of an accident, the City will contact the Department of Labor and Industries within eight (8) hours after becoming aware of the accident. During weekends and evenings, the toll-free notification number is 1-800-321-6742. The notification must be a verbal conversation with a representative of the department. Fax and answering machine notifications are not acceptable. The notification must report the city name, location and time of the accident, number of employees involved, the extent of injuries or illness, a brief description of what happened and the name and phone number of a contact person.
4. When an employee injury is not serious enough to warrant a team investigation, as described above, the supervisor/foreman will prepare a *Supervisor's Incident/Near Miss Report* (Appendix A.02). The supervisor/foreman will forward this report and the *Employee's Incident/Near Miss Report* (Appendix A.01) to the Human Resources Director.
5. Whenever there is a near-miss incident (one that did not, but could have resulted in serious injury to an employee), the incident will be investigated by the supervisor or a team depending on the seriousness of the injury that could have occurred. The *Supervisor's Incident/Near Miss Report* form (Appendix A.02) will be used to report the near miss. The form will be clearly marked to indicate that it was a near miss and that no actual injury occurred. The Human Resources Department will forward the report to the Safety Committee to record.

2.08 FIRST AID – Bloodborne Pathogens

1. All work places shall have the type and size first aid kit and bloodborne pathogen kit required by the General Safety and Health Standards of the State of Washington. Reference – City Emergency Response Plan, Bloodborne Pathogen Plan and Safety Plan.
2. All City vehicles or motorized riding equipment shall be required to carry not less than one (1) ten-unit first aid kit and bloodborne pathogen kit. The kits shall be kept in such a manner as to make it readily available in case of emergency.
3. A minimum of one for every three permanent City employees per job site will be certified in first aid and will also receive Bloodborne Pathogen training. All part-time employees with occupational exposure shall receive Bloodborne Pathogen training within 10 days of employment.

SECTION III

GENERAL SAFETY

3.01 PERSONAL CONDUCT

1. All employees shall conduct themselves in a manner that assures maximum safety to all persons affected by their actions.
2. At no time shall employees engage in practical jokes, scuffling, horseplay, or misuse of City equipment.
3. The use of alcohol or drugs (except as prescribed by a qualified physician) during working hours is prohibited. Violation of this policy is sufficient cause for termination of employment.
4. Any source of ignition, including smoking, is prohibited in any area where a match, flame, spark or careless disposal of lighted material constitutes a fire hazard.
5. Personal work clothing shall be suitable for the individual job and be of the type offering maximum protection from accidental injury. Use good judgment about loose clothing, jewelry, or hanging objects worn while working around moving equipment.
6. Hard hats will be worn in construction sites, in electrical substations, in any work area where there is a potential hazard from falling objects, and by all certified traffic flaggers.
7. Proper eye protection will be worn when you are exposed to flying objects, dust, harmful rays, chemicals, flying particles, etc.
8. Proper footwear will be worn as necessary for the particular job, in accordance with WISHA and OSHA.
9. Gloves, aprons and/or other protective clothing will be used when handling chemicals, hot or cold materials or rough materials.

3.02 JOB HAZARDS

1. Every employee shall be alert for possible hazards that could result in an accident, and act promptly to eliminate the hazard. If the hazard cannot be corrected immediately, report the problem to the immediate supervisor.
2. Report all accidents, injury or non-injury, to your immediate supervisor. When you have been involved in an accident, a lesson has been learned. This lesson is of valuable use to others to prevent their suffering a similar accident. The investigation shall focus on finding the cause, so that future preventative measures can be explored.
4. Supervisors/foremen shall promptly investigate all reported hazards and accidents. Hazards that could cause or contribute to accidents shall be immediately corrected. After correction, a follow-up inspection and report shall be scheduled to assure that corrections remain effective.
5. A copy of each reported hazard or accident shall be sent to the City Administrator for coordination with other departments and review.
6. Each division within the City shall have hazard control plans in place that coincide with specific jobs. All employees shall be trained in their individual work area hazards and be aware of said plan/policies (i.e., the Control of Hazardous Energy (Lock-out/Tag-out) Policy at the Davenport Water Treatment Plant).

3.03 HOUSEKEEPING

1. Loose materials or waste shall not be allowed to accumulate in the work area. This is particularly important in aisles and in the vicinity of ladders, ramps, stairs, machinery and equipment.
2. All aisles shall be clearly defined and kept free of any hazardous obstructions.
3. Aisles in storage areas shall be kept clear for easy access to fire-fighting equipment and to enable firefighters to reach a fire. Areas shall be kept clear around sprinkler control valves, fuse boxes and electrical panels. These areas shall be clearly identified, as governed by WAC 296-24-73505 and UFC codes.
4. Oil, grease, gasoline and other slippery substances spilled on floors and walkways shall be cleaned up immediately. Approved non-combustible absorbents shall be used to dry up spills before cleaning. Flammable liquids shall not be used.
5. Tools shall not be allowed to accumulate unnecessarily in the work area or left on overhead platforms where they could be kicked off on persons or materials.
6. All materials shall be neatly stacked and easily reached by adequate aisles. Cross ties, separators or dunnage shall be used to guard against falling.
7. Materials shall not be stacked within 24 inches of ceiling fire sprinkler heads and also shall not be stacked in such a manner as to project into aisles, to cause tripping hazards.
8. Combustible waste and flammable materials subject to spontaneous combustion shall be deposited only in non-combustible, metal containers with self-closing lids.

3.04 PERSONAL PROTECTIVE EQUIPMENT

1. Prescribed protective equipment shall be used at all times in work areas as designated by safety procedures.
2. Approved hard hats shall be worn when the employee is exposed to a potential hazard from falling objects, when working in a construction area or an electrical substation.
3. Approved hard hats will be required in work areas where possible hazards from falling objects are not present, but protection from bumping type injuries is required.
4. WAC 296-24-088 and City policy require employees to wear steel-toe safety shoes where there may be a risk of foot injury and/or in any area that require hardhats.
5. Goggles, face shields and other suitable protection devices shall be worn when employees are exposed to possible flying particles or possible splashing from chemicals.
6. Approved respiratory masks shall be used when employees are exposed to concentrations of dust, fumes, vapors, gases or airborne pathogens.
7. Approved hearing protectors must be worn when working in areas having high noise levels.
8. Safety devices and guarding provided to protect the employee from injury shall be used at all times and shall not be removed or blocked by operating personnel.

9. Protective equipment shall be kept clean and free from damage. Frequent inspections shall be performed to assure protective equipment offers maximum protection. Damaged or defective protective equipment or clothing shall not be used and shall be replaced or repaired prior to use.

3.05 HANDLING of MATERIALS

WAC 296-62-05105 “What is a caution zone job”? A caution zone job is where an employee’s typical work activities include any of the specific physical risk factors listed below. Typical work activities are those that are a regular and foreseeable part of the job and occur on more than one day per week, and more frequently than one week per year. Heavy, frequent or awkward lifting follows these guidelines:

1. Lifting objects weighing more than 75 pounds once per day or more than 55 pounds more than 10 times per day.
2. Lifting objects weighing more than 10 pounds if done more than twice per minute more than 2 hours total per day.
3. Lifting objects weighing more than 25 pounds above the shoulders, below the knees or at arm’s length more than 25 times per day.
4. Where possible, mechanical equipment should be used to lift heavier materials.
5. All employees are responsible to know and practice proper lifting techniques.
6. Safety is the first priority in determining the methods and procedures used to handle and/or transport materials.

3.06 MOTOR VEHICLES

1. Operators of City-owned vehicles shall be responsible for checking all vehicles. Any safety defects found shall be reported and the vehicle will not be operated until the safety defect has been corrected.
2. Only fully qualified and properly licensed operators shall be permitted to drive or operate City vehicles.
3. All drivers of City vehicles shall comply with all state, county and local rules/regulations governing the safe and legal operations of vehicles.
4. Seat belts shall be worn and secured at all times when the vehicle is moving.
5. The driver shall be responsible for assuring that all passengers are seated and properly secure before moving the vehicle. Under no circumstances shall passengers ride on fenders, running boards, the tops of vehicles or any place not designed for a passenger.
6. Trucks, when used for transportation of employees shall be provided with facilities which will afford safe seating and the truck shall be protected on sides and ends to prevent falls from the vehicle.
7. Trucks transporting materials shall follow these guidelines:
 - a. Maximum vehicle width: 102 inches
 - b. Maximum vehicle height: 14 feet
 - c. Single unit maximum length: 45 feet
 - d. Truck-trailer combination maximum length: 70 feet
 - e. Truck tractor-semi-trailer combination maximum length: 65 feet when operated on highways not on the National Network

- f. Semi-trailer maximum length: at least 48 feet on the National Network (Grandfather lengths greater than 48 feet may apply on the National Network)
- g. The maximum load per tire measure by pounds per inch of tire width shall be:
- 1) Steering axle: 600 lb/in
 - 2) All other axles: 500 lb/in
- h. Except for the steering axles or wide base single tires described below, all axles weighing more than 10,000 pounds shall have at least four tires per axle.
- i. In lieu of four tires per axle, an axle may be equipped with wide base tires, limited to 500 pounds per inch of tire width.
- j. Every state reserves the right to permit or otherwise establish limits in excess of those described above for use vehicle configurations designed to address specific safety or economic concerns.
- k. Each state shall determine effective dates based upon local economic, safety and technological considerations. Amortization of investment and phasing out of single tires to minimize economic and operating disruption of individual companies and effected industries shall be considered factors.
- l. Axle and Gross Weights: The maximum single axle weight shall be 20,000 pounds. The maximum tandem axle weight shall be 34,000 pounds. The maximum gross weight of a vehicle or combination of vehicles computed in accordance with Axle Group Weights (below shall be 80,000 pounds).
- m. Axle Group Weights: The total gross weight in pounds imposed on the highway by any group of two or more consecutive axles on a vehicle or combination of vehicles, shall not exceed the values computed by federal bridge formula "B" as follows:
- $$W = 500 ((LN/N-L)+12N+36)$$
- Where: W = Maximum weight in pounds carried on any group of two or more axles computed to the nearest 500 pounds.
 L = Distance in feet between the extremities of any group of two or more consecutive axles.
 N = Number of axles in the group under consideration. Exceptions to the axle group weights specified above which are federally mandated should be provided for by individual state code. (For additional information on DOT guidelines for material hauling, contact the Street Department at extension 204-26.)
- n. All materials shall be tightly secured to prevent movement in transport. All cargo that extends beyond the end of the bed shall be clearly marked with a red cloth not less than 16 inches square. At night, red lights shall be used.
- o. All drivers of City vehicles shall strictly observe speed limits on public roads and highways.
- p. Speeds in parking lots, maintenance yards or in close proximity to persons or equipment shall be reduced as conditions warrant and are not to exceed 15 M.P.H. Lower speed limits may be imposed in selected areas.

3.07 FIRE PREVENTION

1. While the Fire Department has the primary responsibility for fighting fires, each employee has the responsibility of being alert for possible fire hazards. In the time period between reporting and arrival of fire equipment, the employee may be required to participate in initial fire fighting activities.
2. As many employees as possible shall be trained in the proper use of fire extinguishers.
3. All fire-fighting apparatus shall be kept in a ready condition and be accessible at all times.
4. Types of Fires:
 - a. CLASS "A" FIRES - WOOD, TEXTILES, PAPER, RUBBISH: The quenching and cooling of water is of the greatest importance. Fire extinguishers employing the following substances may be used: water through hose lines using either stream or fog nozzles, soda-acid (chemical) pressurized water, knapsack A-B-C multi-purpose dry chemical pump extinguishers, hand and buggy type water extinguishers. Foam extinguishers may be used, but are not the most effective since foam does not have the cooling effect required.

- b. CLASS “B” FIRES - FLAMMABLE LIQUIDS, GASOLINE, OILS, ETC.: Smothering or blanketing effect of the extinguishing agent is of the greatest importance, especially fires in pools, tanks, etc. Fire extinguishers employing the following substances may be used: foam carbon dioxide (CO₂) and dry powder.
- c. CLASS “C” FIRES – ELECTRICAL EQUIPMENT: Fire extinguishers employing the following substances may be used on electrical equipment fires: dry powder rated for class B-C or multi-purpose dry chemical pump extinguishers rated A-B-C.

- 5. When removing supplies of paints, solvents or other flammables from storage, only the minimum supply to do the job shall be taken. Any unused portions should be returned to storage area. All containers shall be properly labeled as to contents and hazards pertaining to contents.
- 6. Combustible products of rubbish waste or other residues shall not be allowed to accumulate. Oil soaked rags and similar materials subject to spontaneous combustion shall only be stored in non-combustible containers with self-closing lids.
- 7. Flammable liquids shall not be stored in aisles or walkways and shall be so located that there will be no interference with evacuation of the area in case of fire.
- 8. Cigarette butts, matches or other similar materials shall not be discarded without fully extinguishing the substance.
- 9. Ashtrays, cigarette butts or matches shall only be disposed of in approved non-combustible containers.
- 10. The striking of matches or other sources of ignition shall not be permitted within “NO SMOKING” areas.
- 11. All gasoline or flammable solvents or liquids shall not be stored inside building in other than approved flammable storage containers.

3.08 SAFETY INSPECTION PROCEDURES

- 1. The City is committed to aggressively identifying hazardous conditions and practices that could result in injury or illness to employees and will take immediate action to eliminate those hazardous conditions. In addition to investigating accidents for their causes and reviewing injury/accident records, management and the Safety Committee shall have implemented several methods for identifying hazardous conditions before they result in injury to employees/workers.
- 2. Annual Site Survey: Once a year an inspection team made up of members of the Safety Committee will conduct a thorough walk through inspection of each work site. They will list any safety hazards or potential hazards at the walk through. Results of these inspections will be used to control obvious hazards, target certain work areas for more intensive investigation, assist in revising checklists used during regular monthly safety inspections and as part of annual review of the effectiveness of our accident prevention program.
- 3. Periodic Change Survey: Any time a new piece of equipment is received, a change is made in work procedures or changes are made to building structures that may have safety ramifications, Safety Committee representatives shall examine the changed conditions. They will make recommendations to eliminate or control hazards that may be created as a result of the change. Equipment Rental will coordinate with the Safety Committee.
- 4. Monthly Safety Inspection: Each month before the regularly scheduled Safety Committee meeting, each member will inspect their area for hazards using the standard *Safety Inspection Checklist* (Appendix A.07) and talk to coworkers regarding their safety concerns. The committee member will report any hazards or concerns expressed to the whole committee for consideration. Results of area inspections and any actions taken shall be posted in affected

areas. Committee members may, periodically, agree to inspect each other's areas to provide a different perspective. The standard *Safety Inspection Checklist* (Appendix A.07) will be updated as needed.

5. Job Hazard Analysis: Work areas or tasks may be identified as potentially hazardous as the result of a review of injury records, a note on the annual site survey or a reasonable concern expressed by a City employee. In that case, a hazard analysis will be scheduled as soon as possible. A group from the Safety Committee will conduct the study using the *Job Hazard Analysis* (Appendix A.08) form and instructions. The job will be modified as needed to control or eliminate the hazard and employees will be trained in revised operation. The Safety Committee will update the *Job Hazard Analysis* form (Appendix A.08) as needed.

SECTION IV

WORK AREA SAFETY

4.01 WORK AREA

1. Employees shall not be required to work in areas or situations where they may be adversely affected by working under these types of conditions (i.e., extreme heights, underground, closed areas, etc.) without proper protective devices.
2. Always store materials in a safe manner. Tie down or support piles if necessary to prevent shifting, falling or rolling.
3. Shavings, dust, scraps, oil or grease should not be allowed to accumulate.
4. Any refuse must be removed as soon as possible. It is a safety and fire hazard.
5. Remove any loose materials from stairs, ramps, walkways, platforms, etc.
6. Do not block traffic lanes, aisles, fire exits, stairs, etc.
7. Avoid shortcuts – use stairs, walkways, ramps, ladders, etc.
8. Erect proper barriers around floor openings (WAC 296-24-750) and excavations (WAC 296-155-655).

4.02 OFFICE and CLERICAL SAFETY

1. Personnel should not run on walkways or stairways. All personnel shall enter and leave buildings in an orderly manner.
2. All personnel shall observe safe lifting and carrying procedures (refer to Section 3.05) when moving boxes, office machines or other heavy materials. Large boxes or materials shall be moved with mechanical equipment or repacked in smaller parcels. Bulky materials shall not be carried when the view ahead is obstructed or when the materials interfere with stairway handrails.
3. Water, oil or other slippery substances shall be removed at once to eliminate slipping hazards. Extension cords, wastebaskets and other materials shall be kept out of walkways or aisles to prevent tripping hazards. Standing on chairs, boxes or makeshift supports to reach overhead objects is prohibited. Doors shall always be opened with caution

to avoid striking someone on the other side. Keep to the right when walking to avoid collisions. Handrails should be used at all times when ascending or descending stairways.

4. Desk and filing drawers shall be kept closed at all times when not in use. Caution should be observed in opening top file drawers to avoid tipping the cabinet. Only one drawer shall be opened at any one time. When possible, drawers of file cabinets should not open towards a workspace (i.e., desk, chairs, etc.).

5. Spindles and other sharp or pointed objects on desks to fasten papers are prohibited. Special care must be observed in disposing of broken glass or other sharp objects.

6. Cigars, cigarette stubs or matches shall be disposed of in appropriate containers in designated areas.

4.03 ELEVATED POSITIONS

1. Employees shall use approved safety belts, lifelines or other devices that are adequate for maximum protection while working at heights. No person, material or equipment shall be lifted from the ground by supports inadequate for the job. The supports or lines shall be approved supports, sufficiently strong and properly secured in place.

2. All ladders used shall be of good quality, securely placed, held or tied to prevent slipping or falling as per WAC 296-24-780. Ladders shall not be placed in front of doorways unless the door is open, locked or guarded. Employees shall face the ladder when ascending or descending. Materials that interfere with the free use of both hands shall not be carried up or down the ladder.

3. Wooden or non-conducting ladders shall be used by electrical workers and others working near electrical equipment. Straight and/or extension ladders shall have safety feet.

4. Scaffolding shall be built as per WAC 296-24-860.

5. Additional policies that are specific to the department or the project may be established and are applicable.

4.04 UNDERGROUND INSTALLATIONS

1. Underground installations include tanks, pits, pipes, sewers or any underground facility workers may enter to perform maintenance or inspections. Workers must follow confined space entry policies developed for the particular department, conforming to state and federal laws regulating confined space entry.

2. Warning signs and barriers shall be placed around open manholes to provide sufficient warning of the opening and to prevent unauthorized traffic from entering the area.

3. Workers shall not enter sewers or other underground installations without leaving a safety observer in attendance on the outside. The safety observer shall frequently monitor the operation and approaching traffic.

4. Before entering underground structures, the atmosphere of the structure shall be tested with an approved testing device (tested and calibrated within the required time period) to detect the presence of explosive gases, Hydrogen Sulfide or oxygen deficiencies.

5. Personnel shall not enter or work in underground facilities where concentrations of fumes, vapors, gases or oxygen deficiencies are present, without protective devices.

6. Smoking, open flames and spark-producing equipment shall not be permitted in or within 25 feet of any manhole.

7. A lifeline must be worn at all times by persons working in a manhole.
8. WAC Code 296-62-145 and individual department policies will be followed.

4.05 SEWERS, PITS and TREATMENT PLANTS

1. Hydrogen Sulfide is normally present in sewer lines and treatment plants. Hydrogen Sulfide is extremely toxic when inhaled and explosive when mixed with air.
2. Methane Gas is highly flammable, explosive and displaces oxygen in confined or poorly ventilated areas.
3. Carbon Dioxide is formed in large quantities in the sludge digesting process. While not explosive, Carbon Dioxide is an asphyxiating gas and should not be inhaled.
4. The gases produced by digesting sewage sludge may be explosive, toxic or suffocating.
5. Before working in any confined space, the air shall be tested by approved testing devices and retested at periodic intervals to assure that hazardous accumulations of gas do not occur. Forced air ventilation shall be used when necessary to prevent accumulations of hazardous gases.
6. Personal protective equipment to be used in and around confined spaces shall be as prescribed by department policy required by WAC Code 296-24-075. All personnel working in or around sewage facilities shall be familiar with the proper use and care of protective equipment.
7. Sewage normally contains harmful bacteria capable of causing serious disease if precautions are not observed.
8. All cuts, scratches and breaks in the skin shall be cleaned and treated immediately.
9. Food and beverages shall not be permitted in areas where they may become contaminated. Laboratory glassware shall never be used to drink from.
10. Smoking, open flames and spark producing equipment shall be strictly prohibited where flammable or explosive gases are present.
11. WAC Code 296-62-145 and individual department policies will be followed.

4.06 ELECTRICAL FACILITIES

1. Only qualified and properly authorized maintenance personnel shall be permitted to install and maintain electrical facilities and equipment.
2. Each department shall have the Control of Hazardous Energy (Lock-out/Tagout) Policies to be followed as per WAC Code 296-24-110 and OSHA regulations.
3. Personnel working with electrical circuits shall not wear rings, watches or metallic objects that could act as conductors of electricity. Hard hats will be worn in areas of high voltage.
4. Metal ladders and uninsulated tools shall not be used while working with electrical circuits and equipment.
5. Electrical equipment and lines shall always be considered “live” until proven “dead.” Before beginning work, each electrical circuit shall be inspected and tested and, where possible, isolated from the power source. Extreme care shall

be exercised as wires designed to operate at ground potential may become energized by faulty or inadequate connections. The Control of Hazardous Energy (Lock-out/Tag-out) Policies and Procedures shall be applied/adhered to.

6. All electrical cords and portable extension cords shall be equipped with a nonconducting plug and outer socket shell. All electrical cords shall be equipped with the three-prong grounding plug.
7. Electrical cords shall be heavily insulated and not subjected to excessive bending, stretching and kinking. All cords and wires shall be frequently inspected for signs of defects. Damaged or frayed electric wires, cords and plugs shall be immediately replaced by properly trained maintenance personnel determined by specific department policy.
8. Adequate warning signs and barriers shall be installed in plain sight, in all areas where hazardous electrical facilities exist.
9. Overloading of electrical circuits is extremely hazardous and shall not be permitted at any time. The replacement of fuses or circuit breakers with makeshift materials or over-capacity fuses is strictly prohibited.
10. The type of circuit and other conditions shall determine the type of protective equipment required. Rubber gloves, sleeves, blankets, mats and insulated platforms shall be used as required.
11. All insulated protective equipment shall be continuously inspected for defects or damage. Any defective equipment shall be replaced before use.
12. Testing schedules for insulation qualities shall be established for protective equipment and strictly complied with. All users shall verify that equipment has been satisfactorily tested prior to use.

4.07 TRAFFIC CONTROL

1. The intent of this section is to create a safe work area for those employees with their work locations being in/on any street, road, alley or highway.
2. Barricading procedures and traffic control shall comply with state laws and any existing City policy.
3. When it is necessary for an employee or vehicle to work in/on any street, road or highway, proper traffic control will be in place. This control shall consist of coning, coning and flagmen, emergency lighting, signs, or if needed, all of these methods.
4. At locations where flagging or coning is established, there will be an employee with State of Washington Traffic Flagman certification.
5. On-site orientation: The employer must conduct an on-site orientation when flaggers start a new job. This orientation must include, but not be limited to, the flagger's role and location on the job site, equipment, traffic patterns, communications and hazards specific to the work site.
6. Additional warning sign: On roads allowing speeds of at least 45 mph, the employer must provide an additional warning sign marked "Be Prepared to Stop" or "Flagger Ahead". (This is in addition to the advanced warning signs required by the Manual on Uniform Traffic Control Devices.)
7. Highly visible clothing during daylight hours: While flagging during the day, a flagger must wear:
 - a. A high visibility-warning garment designed in accordance with ANSI-SEA 107-1999; and
 - b. A high visibility hard hat

8. High visibility clothing during nighttime hours – While flagging at night, a flagger must wear:
 - a. A high visibility warning garment designed according to ANSI-SEA 107-1999 specifications over white coveralls or other coveralls or trousers designed according to ANSI-SEA 107-1999;
 - b. A high visibility hard hat that is iridescent or marked with reflectorized material
9. During inclement weather, yellow rain gear may be substituted for white coveralls.
10. The rest – Employers must ensure that:
 - a. Flagger workstations are illuminated at night.
 - b. Warning signs reflect the actual condition of the work zone.
 - c. Flaggers are not assigned other duties while flagging.
 - d. Flaggers do not use devices (i.e., cell phones, pagers, radio headphones, etc.) that can distract their vision, hearing or attention. Devices such as two-way radios used by flaggers for communications, directing traffic or ensuring flagger safety are acceptable.

4.08 TRANSPORTING of EQUIPMENT

1. Transportation of equipment to the job site shall be accomplished in accordance with all state and local laws governing traffic control.
2. Mobile equipment operated on streets and highways shall conform to all state and local laws governing motor vehicles. All regulations concerning speeds and load limits shall be strictly observed by personnel operating mobile equipment.
3. When mobile equipment is hazardous to other vehicles on the road, the traffic shall be controlled by flagpersons, signs or temporary barriers.
4. When equipment is to be towed to the job site, use WSP standard safety chains in addition to towing hooks or tow bars. Operators with DOT commercial driver's licenses should be trained in visual inspection procedures for safety chains.
5. Personnel shall never stand or ride on the tow bar while equipment is being towed.
6. Towing should not be scheduled after dark. When emergency needs require nighttime towing, fully operating lights shall be placed at the rear of the tow.
7. When equipment is to be transported by trailer, extreme care shall be taken to prevent equipment from tipping while loading or traveling.
8. Clearance heights along the proposed route shall be reviewed for low hanging objects and operators shall keep a close watch to avoid striking low hanging objects with the equipment.
9. Equipment shall be secured and lashed to the trailer with the wheels blocked to prevent movement.
10. All trailers shall be equipped with fully operating stop and directional lights and they shall be checked for operation prior to transporting equipment.

4.09 TRENCHING and EXCAVATING

1. Determination of the angle of repose and design of the supporting system shall be based on careful evaluation of pertinent factors such as:
 - a. Depth and/or cut soils classification
 - b. Possible variation in water content of the soil.
 - c. Anticipated changes in materials from exposure to air, sun, water or freezing.
 - d. Loading imposed by structures, equipment, overlaying material or stored material.
 - e. Vibration from equipment, blasting, traffic or other sources.
2. Bridges/walkways with standard railings will be provided when employees or equipment are required to cross over excavations.
3. Walls or faces of ALL excavations in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the ground or some other equivalent means in compliance with WAC Code 296-155-655.
4. No person shall be permitted under loads handled by power shovels, derricks or hoists.
5. All employees shall be protected with appropriate PPE for the protection of head, hands, feet and other body parts.
6. For other rules and regulations see Washington State Department of Labor and Industries, Division of Industrial Safety and Health Construction Safety Standards – Trenching and Excavating WAC Code 296-155-650.

SECTION V

EQUIPMENT SAFETY

5.01 DRILL PRESSES

1. Stock to be drilled shall be secured to the press to prevent material from spinning during drilling.
2. The drill shall be completely shut down and stopped before attempting to clear jammed work.
3. When holes are to be drilled beyond the flutes of the drill, the drill shall be removed and cleaned out frequently to prevent jamming or freezing.

5.02 ABRASIVE GRINDERS

1. Sight protection shall be used at all times while operating grinding or polishing tools regardless of size, speed or whether the tools are equipped with transparent protection guards.
2. Grinders, polishers, buffers and other equipment generating dust should be equipped with local ventilation capable of removing all dust. When exhaust ventilation is insufficient to remove all grinding dust, the operator shall use approved respiratory equipment.
3. Hand-grinding operations shall not be attempted without using the machine tool rest. Adjust distance between wheel and tool rest to maintain 1/8” or less separation as the diameter of the wheel decreases with use. Distance between wheel and spark breaker must be kept adjusted not to exceed ¼”.

4. Work shall never be ground on the side of the wheel. Grinding work on the side can weaken the wheel, may cause premature failure and could result in injury from wheel separation.

5.03 POWERED MACHINE TOOLS

1. Powered machine tools include all power driven tools and equipment used in the cutting, shaping, forming or polishing of materials.
2. Material to be worked on shall be secured prior to bringing the material in contact with machinery under power. Movable material shall be secured by jigs, fixtures or other hold-down devices prior to contact with machine cutting surfaces.
3. Burrs, sharp edges or projections that could cause injury or difficulty in processing shall be removed prior to performing additional operations.
4. Cutting edges of tools shall be kept sharp at all times and checked for defects before each operation.
5. Cutting tools shall not be set or adjusted while the machinery is in operation or when the power is on.
6. Operators shall allow all machinery to stop turning of its own accord. Hand pressure shall never be used to slow down or stop turning machinery.
7. Materials or stock being processed or worked shall not be measured or calibrated while in motion. Measurement of material in machinery shall only be accomplished when the machinery is stopped with the switch in the “off” position.
8. Machinery shall only be operated at the recommended speeds for the material being worked and shall not be speeded up to expedite operations.
9. The speed of machinery or rate of material feeding shall not be changed while material is being worked.
10. Operating personnel shall remove chuck keys, wrenches and drifts from the machine and place them in a safe location before starting the operation. Adjustments with these devices shall not be attempted while the machinery is in motion.

5.04 PORTABLE POWER TOOLS

1. Portable power tools receive power from electricity, air pressure, explosive charges or rotating flexible cable. Portable power tools are frequently more hazardous to use than stationary equipment because their mobility and smaller size make protective guarding difficult.
2. Cords, hoses and cables supplying power to portable power tools shall be routed in such a manner as to prevent tripping hazards.
3. Operating personnel shall avoid abusing power supply lines of portable equipment. Excessive scraping, kinking, stretching and exposure to grease and oils will damage lines, cause premature failure and possible injury to the operator or fellow workers.
4. Cords, hoses and cables shall be frequently inspected to detect wear or deterioration. Defective power supply lines shall be replaced before use.

5. Electrical powered tools shall not be used near flammable materials or explosive atmospheres unless they are of the explosion-proof type, meeting the National Electrical Code for explosive areas.
6. At no time will electrical power equipment be operated without proper grounding. All electrical cords and cables shall be of the type that includes a third wire ground.
7. Operation of electrical tools in wet or damp areas is strictly prohibited except in unusual emergency circumstances. When operation is required in wet or damp conditions, extreme care will be exercised to assure effective grounding of equipment and proper use of protective equipment.
8. Electrical cords shall be frequently inspected for damaged or frayed surfaces. Damaged or frayed electrical cords shall not be used until repaired or replaced by maintenance personnel.

5.05 MECHANIZED EQUIPMENT

1. Mechanized equipment in use by the City ranges from grass cutting to heavy construction equipment. The following general rules apply to all types of mechanized equipment.
2. Only fully trained, properly authorized personnel shall be permitted to operate mechanized equipment. (Trained as per division/department policy)
3. Operators shall never leave their equipment with the engine running. When leaving the equipment, the engine shall be completely shut down and all blades and lifts lowered to the full “down” position.
4. No person shall ever attempt to get on or off moving equipment. Unauthorized persons shall not be permitted to ride on equipment at any time.
5. Each individual job condition shall determine the safe operating speed. The speed shall be the minimum required for safe operation and to minimize dust. When excessive dust or glare is present, operators shall wear protective goggles.
6. Particular care shall be exercised in starting, turning and stopping of equipment. Operators shall exercise maximum caution to avoid contacting electrical lines with equipment.
7. Servicing of equipment shall not be performed while the equipment is running or in operation.
8. Fuel for equipment shall be kept in safety cans plainly marked (i.e., Gasoline, Diesel, 2-Stroke, etc.) and the fuel shall be kept isolated from all possible sources of ignition. Servicing shall not be attempted until the engine has cooled.
9. Maintenance or adjustments of equipment shall only be performed by maintenance personnel. When performing maintenance, the equipment shall be completely shut down with all lifts or blades lowered to the full “down” position.

5.06 MECHANICAL HANDLING EQUIPMENT

1. Prior to using forklift, complete forklift safety checklist.
2. Mechanical materials-handling equipment such as hand trucks and forklifts shall be used when loads are too heavy or bulky to be carried efficiently or safely by hand.

3. Hand trucks shall be pushed rather than pulled. Truck handles that expose hands to possible injury shall be equipped with knuckle guards.
4. On handling equipment, the load center of gravity shall be kept low by placing the heavier objects on the bottom and lighter objects at the top.
5. Side stakes, straps or lashing materials shall be used on high loads where there is a possibility of material toppling. Maximum load limits shall be established for material handling equipment and strictly enforced.
6. Floors and other surfaces used in transporting materials shall be kept free of slippery substances, cracks, bumps and other defects that interfere with the safe movement of materials.
7. Equipment shall not be moved until the load is properly stacked and secured.
8. Operators shall be particularly careful when approaching doorways, aisle crossings and other intersections.
9. When self-propelled equipment is parked, the brakes shall be set and the ignition turned off with the transmission placed in low gear or park position.
10. Forklift operators shall travel with forks close to the floor to prevent accidental damage of other materials when turning too sharply. When traveling with a load, forks close to the floor will prevent obstruction of vision. When the load obstructs the forward view, the operator shall only travel in reverse for a clear field of vision.
11. Forklift operators will refuse to lift or move unsafe loads. If an operator believes the load is too heavy or improperly stacked, he will refuse the load and report to his supervisor.
12. Forklifts and other equipment shall not be left unattended while the equipment is running. When leaving the equipment, the engine shall be shut down and the lifts lowered to the floor.
13. Gasoline powered equipment shall not be fueled in buildings, but only at authorized, outdoor points. Equipment shall not be serviced, cleaned or repaired while the equipment is running.

5.07 MECHANICAL LIFTING and AERIAL EQUIPMENT

1. Mechanical lifting devices and aerial equipment includes a wide variety of cranes, derricks, hoist, slings, baskets and platforms. Their use is subject to certain hazards, impossible to safeguard by mechanical means. The safe operation of mechanical lifting devices requires intelligence, care and observance of safety rules.
2. Operation of mechanical lift devices or aerial equipment shall be restricted to personnel who have been trained in the safe use of each type of equipment.
3. Inspection and test schedules shall be established for all mechanical lifting devices and all operators shall be familiar with the inspection schedules of each type of equipment. Prior to use, the operator shall verify that the equipment to be used has been inspected and tested in accordance with the established schedule. This is in the manufacturer's operations and maintenance book. Department policies will be followed.
4. Operators shall never leave a crane, hoist or derrick while the load is still suspended unless the load is suspended over a barricaded area or is blocked up or otherwise supported from the ground.
5. Before entering or leaving the vehicle, each operator shall assure that boom baskets and platforms do not contact electrical equipment.

6. Operators of all vehicles equipped with aerial baskets and outriggers shall lower the outriggers to a firm foundation before the aerial equipment is operated.
7. Before moving the stabilizers, outriggers or hydraulic jacks, the operator shall determine that no one is in a position to be injured. Before operation, outriggers' brakes shall be checked for safe operation prior to lifting a load.
8. Servicing of equipment shall never be performed while the equipment is in operation. Maintenance shall be performed by only qualified maintenance personnel and checked for performance after repair.
9. Vehicles with aerial equipment shall not be moved from one working location to another with the equipment in the raised position.
10. Drivers of aerial equipment trucks shall be constantly alert to the fact that the vehicle has exposed equipment above the truck and allow for necessary clearance.
11. The specified safe loading capacity shall not be exceeded. The manufacturer's suggested safe load requirements shall be observed for all loads to be lifted.
12. All controls shall be checked daily before operation to assure that they operate freely and properly.
13. Upper and lower controls are required for extensible and articulating boom platforms that are primarily designed as personnel carriers. Both controls must be operable and the lower control must be able to override the upper control.
14. No part of a lifting device shall be operated within ten feet of electrical lines except when the lines have been de-energized and visibly grounded at the point of work, or where insulating barriers have been erected to prevent contact with the lines. The only exemption from this rule will be when the work is performed from a device insulated for the work and is performed by either telecommunications employees, line-clearance tree trimming employees or electric utility employees who have been trained in working around exposed electrical lines.
15. Belting off to an adjacent pole, structure or equipment while working from an aerial lift shall not be permitted.
16. Personnel shall never be lifted off the ground without being secured to the equipment by an approved body belt and lanyards.
17. An aerial lift truck may not be moved when the boom is elevated in a working position with men in the basket, except where the equipment is specifically designed for such an operation.

5.08 HAND TOOLS

1. Many persons are under the impression that hand tools are simple devices not requiring caution or training in safe operation. This impression is false. Hand tools are responsible for a wide variety of industrial injuries and property damage.
2. The use of tools shall be confined to the purpose for which intended.
3. Protect tools from corrosion damage. Wipe off accumulated grease and dirt. Moving and adjustable parts shall be frequently lubricated to prevent wear and misalignment.
4. All damaged or worn tools shall be promptly repaired. All tools with mushroomed heads, split or defective handles shall be repaired prior to use. Temporary or makeshift repairs shall be prohibited. Discard all tools that cannot be safely repaired on the job or at the factory.

5. When not in use, tools shall be stored in suitable boxes or containers. Loose tools shall not be stored on ledges or where they will roll off benches or tables. Tools shall be picked up when a job is completed and not be allowed to accumulate in the work area.
6. Metal hand tools are good conductors of electricity. Do not use conducting tools around electrical facilities. Insulated tools approved for electrical work shall be tested frequently for proper insulation.
7. Select the correct size and type of wrench for each job. Wrench handles shall not be extended with pipe or cheaters because the jaws will spread.
8. Use personal protective equipment where applicable and when WAC Code 296-24-650 or department policy calls for it.

5.09 BATTERY MAINTENANCE

1. When performing battery charging or battery maintenance activities, operators are exposed to possible hazards from burns and explosive gases. To reduce exposure to other personnel, all battery charging operations shall be separated from other activities, except when fast-charging an installed battery.
2. Batteries of the unsealed type shall be located in enclosures with outside vents or in well ventilated rooms and shall be arranged so as to prevent the escape of fumes, gases, or electrolyte spray into other areas.
3. Ventilation shall be provided to ensure diffusion of the gases from the battery and to prevent the accumulation of an explosive mixture.
4. Racks and trays shall be substantial and shall be treated to make them resistant to the electrolyte.
5. Floors shall be of acid resistant construction unless protected from acid accumulations.
6. Facilities shall be provided for flushing and neutralizing spilled electrolyte and for fire protection.
7. Metallic objects shall not be placed on uncovered batteries.
8. Face shields, aprons, and rubber gloves shall be provided for and worn by workers handling acids or batteries.
9. Facilities for quick drenching of the eyes and body shall be provided within 25 feet (7.62 m) of battery handling areas.
10. Filler caps shall be in place when batteries are being moved.
11. Facilities for flushing the eyes, body and work area with water shall be provided wherever electrolyte is handled, except when employees are only checking battery electrolyte levels or adding water.
12. Carboy tilters or siphons shall be used to handle electrolyte in large containers.
13. Battery handling equipment which could contact battery terminals or cell connectors shall be insulated or otherwise protected.
14. Batteries shall be free of corrosion buildup and cap vent holes shall be open.
15. When a jumper battery is connected to a battery in a vehicle, the ground lead shall connect to ground away from the vehicle's battery. Ignition, lights and accessories on the vehicle shall be turned off before connections are made.

16. Parking brakes shall be applied before batteries are charged or changed.
17. Chargers shall be turned off when leads are being connected or disconnected.
18. Battery charging installations shall be located in areas designated for that purpose.
19. Charging apparatus shall be protected from damage by trucks.
20. When batteries are being charged, the vent caps shall be kept in place to avoid electrolyte spray. Vent caps shall be maintained in functioning condition.
21. Adequate ventilation shall be provided during charging.
22. Installed batteries shall be secured to avoid physical or electrical contact with compartment walls or components.
23. Smoking and open flames shall be strictly prohibited while working in or around batteries. Electrical equipment used shall be explosion proof and effectively grounded at all times.

5.10 WELDING and BRAZING

1. Welding or open flames shall be prohibited where flammable gases or liquids may be ignited until the possibility of explosion or fire has been eliminated. In confined spaces where ventilation is inadequate, welding itself may produce flammable or explosive gases. Follow department policies regarding hot work.
2. Welding, open flames or external heat shall not be brought into contact with a vessel that may have contained a flammable substance until that vessel has been thoroughly purged or filled with an inert gas or water.
3. Oxygen cylinders and valves shall be kept free from oil and grease. Oxygen under pressure can release sufficient heat to ignite and explode oil and grease on contact.
4. Heating and welding of galvanized and cadmium-coated material shall only be done under controlled, ventilated conditions. The fumes shall be vented away from the operator and persons within the vicinity.
5. Before starting a welding operation, welders shall protect themselves with suitable protective equipment. Welders shall wear helmets, shields, aprons, gloves, gauntlets and other protective equipment as required. Goggles, helmets and shields shall be carefully selected for proper lens shade.
6. Arc welders shall place protective screens around the work area to prevent eye flash burns to other personnel in the area. Welders shall protect their eyes when chipping scarf or metal fragments.
7. Cylinders shall be handled with extreme care. Cylinders shall be stored in the upright position and securely lashed to prevent falling. Compressed gas cylinders shall never be treated roughly. Any damage, suspected or obvious, shall be reported immediately.

5.11 COMPRESSED AIR and GAS SAFETY

1. For general shop and field use, compressed air shall be adjusted for not more than 30 PSI of pressure. For equipment operation requiring higher pressures, only the minimum pressure required to operate the equipment shall be used.

2. Do not use compressed air to clean dirt or debris from equipment. Do not direct compressed air from hoses/nozzles towards persons. Compressed air shall never be used to clean workbenches or other surfaces.
3. Compressed gas cylinders shall only be stored in designated areas away from external heat. The storage area should be away from traffic to minimize possible danger from damage.
4. All cylinders should be stored upright in racks and securely lashed to prevent falling. Adapter covers shall remain in place until removed for use.
5. Oxygen cylinders in storage shall be separated from fuel/gas cylinders and combustible materials by a minimum distance of 20 feet or by a noncombustible barrier at least five feet high.
6. Oxygen cylinders shall be kept free from oil and grease. Oxygen under pressure will produce sufficient heat to cause explosion or fire when released under pressure.
7. Cylinders shall never be dropped or treated roughly. Any damaged cylinders, suspected or obvious, shall be reported immediately.
8. When moving cylinders, adapter covers shall be in place to protect valves. In moving cylinders, valves or caps shall not be used as hand holds.
9. When raising or lowering, use a suitable sling, boat, cradle or platform. Cylinders shall not be raised by electric magnets.
10. When transporting cylinders by hand truck, or truck, the cylinders shall be securely lashed to prevent falling.

5.12 COMPRESSED AIR TOOLS

1. In compressed air tools, air is supplied under high pressure. Only the best quality air hoses, equipped with secure couplings, shall be used.
2. Air supply hoses shall be protected from damage from vehicles or materials at all times. When used across walks or roadways, hoses shall be enclosed in channel-ways.
3. Operators shall turn the air pressure off at the inlet control valve before changing or connecting compressed air tools.
4. Pressure hoses shall be connected by safety chains to prevent hose whipping in the event couplings become disconnected or break.
5. Compressed air tools shall never be pointed at other personnel.
6. Always wear personal protective equipment when using compressed air tools.

5.13 EXPLOSIVE ACTIVATED TOOLS

1. Explosive or powder-activated tools represent hazards normally encountered from ammunition or other explosives.
2. Only fully trained and authorized personnel shall operate explosive actuated tools. Authorized personnel shall only be designated after being trained in explosive tools.

3. Only explosive tools bearing the manufacturer's label and approved by the "Industrial Code of Explosive Powered Tools" shall be used.
4. Loaded tools shall never be carried away from the work site. Tools shall always be left unloaded until ready for use.
5. Tools shall be held firmly against, and perpendicular to, the surface prior to firing.
6. Fasteners of any kind shall not be forced into masonry closer than three inches to the edge, unless special guards are used to prevent flying particles. Fasteners shall not be fired into steel closer than one-half inch to an edge or joint.
7. No tool of this type shall be used to fire projectiles into hardened steel, high tensile steel, cast iron, glazed brick, tile, marble, glass or other extra hard materials.
8. Powder-actuated tools shall not be used in flammable or explosive area.
9. Tools and explosive charges shall be stored separately in portable containers and explosives in locked metal boxes.
10. Misfired cartridges shall be disposed of in a manner that prevents further handling by fellow employees or the general public.

5.14 POWER SAWS/CHAINSAWS

1. Blade guards shall be kept in good condition and not removed or blocked by operating personnel.
2. Blades shall be frequently inspected to detect cracks or other defects. Defective blades shall not be used. If they cannot be restored by repair or sharpening, they must be discarded.
3. When selecting blades, use the correct blade for the job. Substitution of blades that are not right for the job is strictly prohibited.
4. Saws shall not be jammed or crowded into the work surface. Green or wet material shall be cut slowly and with extra caution.
5. When a portable saw is adaptable to bench top use, it shall be securely clamped down before using.
6. When using table type or bench saws for ripping short stock, the hands shall not be used for pushing the stock. A pusher stick must be used.
7. When changing blades, disconnect the saw from the power source to prevent accidental restarting.
8. Approved personal protective equipment shall be used at all times when operating saws. Ballistic nylon chaps and other appropriate personal protection equipment shall be used when operating chain saws.

5.15 PAINTING

1. Painting operations produce highly flammable mists and vapors that are easily ignited. For maximum safety, painting operations should be isolated from all other activities. When isolation is impractical, painting operations shall be separated by fire resistant walls.

2. Paint spray booths shall be constructed and maintained in accordance with the State Safety Code or WAC Code 296-155-170. Paint booths shall be kept clean and equipment stored in an orderly manner. Walls and floors of paint booths may be protected with papers to prevent accumulations of paint deposits. The paper shall be removed and destroyed when contaminated.
3. Paints, paint thinner and solvents shall not be stored in paint booths. All flammable materials shall be stored in approved fire resistant cabinets. Clothing that is saturated with painting materials shall be worn only during painting operations and then removed and stored in well-ventilated metal cabinets.
4. Forced-air ventilation shall be provided in all spray booths where painting is being accomplished. When forced-air ventilation is impracticable, such as for touch-up painting, operating personnel shall wear suitable respirators.
5. All sources of ignition shall be removed from painting operations. Electrical equipment and fixtures used shall be explosion proof and effectively grounded. Mist and vapors produced by painting may be violently exploded by accidental ignition.
6. Paints and solvents may contain toxic substances such as lead or benzyl that are harmful if inhaled or ingested. Eating and drinking shall be prohibited around painting areas.
7. Rags and other waste materials saturated with paint or solvents shall be disposed of in covered metal cans or approved safety cans and emptied daily.
8. WAC and departmental policies shall be followed and personal protective equipment used for all listed above.

5.16 CHEMICAL SPRAYING

1. Chemical spraying programs, where applicable, will be formulated individually by each City department under the guidelines set by the WAC.
2. All employees of each particular department will follow their department's chemical spraying program.

5.17 STATIONARY EQUIPMENT

1. Each department supervisor/foreman will be responsible for the training of employees on equipment used or worked on by them.
2. Each department can write equipment policies so that proper operation, maintenance and training are consistent.

5.18 MOBILE EQUIPMENT

1. Every department supervisor/foreman will be responsible for the training of employees on any and all equipment used in their respective departments.
2. Written policies are required for reference and training on the proper and safe operation of all equipment.

SECTION VI

HAZARDOUS COMMUNICATIONS

6.01 PUPOSE

The purpose of the Hazardous Communication Program is to ensure that the hazards of all chemicals imported or produced by chemical manufacturers or importers are evaluated and that information concerning their hazards is transmitted to affected employers and employees before they use products.

6.02 PROCEDURE

1. Inventory Lists – Know hazardous chemicals in your workplace that are a potential health or physical hazard. Make an inventory list of these chemicals. This list must be a part of your written program.
2. MSDS – Make sure there is a Material Safety Data Sheet (MSDS) for each chemical and that the inventory list and labeling system reference the corresponding MSDS for each chemical.
3. Labeling System – Each container entering the workplace must be properly labeled with the identity of the product, the hazardous warning and the name and address of the manufacturer.
4. Information and Training – Determine appropriate ways in which to train and inform employees on the specific chemicals in your workplace and their hazards.
5. Written Program – Develop, implement and maintain a comprehensive written hazard communication program at the workplace that includes provisions for container labeling, material safety data sheets and employee training.
6. Employees must be made aware of where hazardous chemicals are used in their work areas. They must be informed of the requirements of the Hazard Communication Standard, availability and location of the written program, the list of hazardous chemicals and material safety data sheets.
7. The code specifically requires employers to train employees in the protective practices implemented in their work areas, the labeling system used, how to obtain and use MSDSs, physical and health hazards of the chemicals and recognition, avoidance and prevention of accidental entrance of hazardous chemicals into the work environment.

SECTION VII

FALL PROTECTION/RESCUE

7.01 FALL RESTRAINT (WAC 296-155-24510)

1. Guardrails – scaffolding or other work platforms with standard guardrails.
2. Safety belts/harnesses – with lanyards attached to secure anchorage points.
3. Refer to WAC for applications.

7.02 FALL ARREST (WAC 296-45-25510)

1. When stopping or arresting a fall, personal fall arrest systems shall limit the maximum arresting force on an employee to 1800 pounds (8 kN) if used with a body harness.
2. Personal fall arrest systems shall be rigged such that an employee can neither free fall more than 6 feet (1.8 m) nor contact any lower level.
3. If vertical lifelines or droplines are used, not more than one employee may be attached to any one lifeline.
4. Snaphooks may not be connected to loops made in webbing-type lanyards.
5. Snaphooks may not be connected to each other.
6. Refer to WAC 296-304-09021 for personal fall protection system requirements.

7.03 FALL HAZARDS

1. List of those in work areas ten feet or more above ground, other work surface or water.
2. See WAC 296-155-245 for specific safety codes.

SECTION VIII

FIRE PROTECTION STANDARD OPERATING PROCEDURES

8.01 FIREGROUND SAFETY

TACTICAL POSITIONING:

Positioning of operating companies can severely affect the safety and survival of such companies. Personnel must use caution when placed in the following positions:

1. Above the fire (floors, roofs).
2. Where fire call move in behind them.
3. When involved with opposing fire streams, combining interior & exterior attack.
4. Where Division or Group Supervisor cannot control position or retreat with limited access (one way in or out).
5. Operating under involved roof structures.
6. In areas containing hazardous materials.
7. Below grade fires (basements, etc.).
8. In areas where a backdraft potential exists.

The safety of firefighting personnel represents the major reason for an effective and well-timed offensive/defensive decision and the associated write-off by Command. When the rescue of savable victims has been completed, Command must ask: "IS THE RISK TO MY PERSONNEL WORTH THE PROPERTY I CAN SAVE?"

When operating in a defensive mode, your operating position should be as far from the involved area as possible and still remain effective. Position and operate from behind barriers if available (fences, walls, etc.)

The intent is for personnel to utilize safe positioning where possible or available, in an effort to safeguard against sudden hazardous developments such as backdraft explosion, structural collapse, etc.

When operating in an offensive mode, be aggressively offensive. Effective interior attack operations directed toward knocking down the fire will eliminate most eventual safety problems.

Due to the inherent hazards of the immediate fire or incident scene, efforts will be made by Command to limit the number of personnel on the fire-ground to those assigned to a necessary function. All personnel shall either:

1. Be positioned in Staging.
2. Be assigned to a group (task) or Division (geographic area).
3. Having completed an assignment and no other assignment is available within that sector, crews should be assigned to Staging, until such time as they can be either reassigned to an operating Division/Group or released to in-service status.

The intent of this procedure is to minimize fireground confusion and congestion, and more importantly, to limit the number of personnel exposed to fireground hazards to only those necessary to successfully control the operation. Individuals or crews shall be restricted from wandering about the fireground or congregating in non-functional groups. If you have not been assigned to a Division/Group or you do not have a necessary staff function to perform, stay off the fireground!!!

In extremely hazardous situations (large quantities of flammable liquids, LP Gas, hazardous materials, difficult marginal rescues, etc.) Command will engage only an ABSOLUTE MINIMUM NUMBER OF PERSONNEL within the fireground perimeter. Self-standing master streams will be utilized wherever possible.

In situations where crews must operate from opposing or conflicting positions, such as front vs rear attack streams, interior vs exterior streams, roof crews vs interior crews, etc., utilize radio communications to coordinate your actions with those of the opposing crew in an effort to prevent needless injuries.

Interior crews must be notified and evacuated from interior positions before ladder pipes go into operation. Do not operate exterior streams, whether hand lines, master streams, ladder pipes, etc., into an area where interior crews are operating. This procedure is intended to prevent injuries to personnel due to stream blast and the driving of fire and/or heavy heat and smoke onto interior crews.

LADDER GUIDELINES:

When laddering a roof, the ladder selected shall be one which will extend a minimum of 3-5 rungs above the roofline. This shall be done in an effort to provide personnel operating from the roof with a visible means of egress. If possible, when laddering buildings under fire conditions, place ladders near building corners or fire walls. These areas are generally more stable in the event of structural failure.

When operating either above or below ground level, establish at least two (2) separate escape routes or means where possible, such as stairways, ladders, exits, etc., preferably at opposite ends of the building or separated by considerable distance.

FIREGROUND PERIMETER:

Many safety principles revolve around action that takes place on the fireground. For the purpose of Fire Department Operations, the fireground perimeter can be defined as: "The area inside an imaginary boundary that has been determined by safety considerations according to the foreseeable hazards of the particular incident." The flexible boundary that determines the fireground can be altered by various safety factors. All personnel entering the fireground perimeter shall:

1. Wear protective clothing.
2. Have crew intact (avoid separating companies).
3. Be assigned to a Division or Group.

ALL OTHERS STAY OUTSIDE!!!

SECTOR SAFETY:

The safety of firefighting personnel represents a major reason for fireground sectorization. Division or Group commanders must maintain the capability to communicate with forces under his command so that he can control both the position and function of his companies.

Division, Group, Strike team, Task Force, and Company Officers shall be able to account for the whereabouts and welfare of all crews and crew members, under their assignment. Company Officers shall insure that all crew members are operating within their assigned Division/Group only. Crews will not leave their respective areas unless OK'd by the Division. When crews are operating within a Division, Company Officers shall keep the Division Officer informed of changing conditions within the Division area and particularly those changing conditions which may affect the safety of personnel

Hazards that will affect only a specific area should be dealt with within that Division and not necessarily affect the entire operation.

It is the on-going responsibility of Command to summon adequate resources to tactical situations to effectively stabilize that situation, and to maintain adequate resources during extended operations to complete all operational phases. The rotation of companies will be utilized by Command during extended operations to provide an effective on-going level of personnel and personnel performance. It is the intent of this policy to reduce the fatigue and trauma experienced during difficult operations to a reasonable (and recoverable) level and is in no way intended to lessen the individual and collective efforts expected of all members during incident operations.

PERSONNEL IDENTIFICATION SYSTEM:

As an accountability measure, Division Officers must record and maintain the identity of all personnel assigned to this area.

The following standard method for insuring this vital accountability shall be utilized as conditions dictate the need:

- As Division/Group Officers make assignments, they shall record the names of those personnel.
- Division/Group Officers shall account for each member upon completion of the assignment.

SAFETY OFFICER:

The recognition of situations which present inordinate hazards to fireground personnel and the proper response to safeguard personnel from those hazards is of critical importance to all Fire Department operations. Command has the responsibility to recognize situations requiring the implementation of a Safety Officer.

A Safety Officer shall be established at those incidents posing a high potential danger to personnel such as:

- Fire complexity; i.e. most multiple alarm fires
- Hazardous structural conditions, existing or potential
- Hazardous materials and chemicals, etc.
- Any other situations where a Safety Officer could be advantageous to operational safety.

The establishment of a Safety Officer or his presence on the scene in no way diminishes the responsibility of all officers for the safety of their assigned personnel and of each and every member to utilize common (safety) sense, and to work within the intent of established safety procedures at all times.

STRUCTURAL COLLAPSE:

In recent times, structural collapse has been a leading cause of serious injuries and death to firefighters. For this reason the possibility of structural collapse should be a major consideration in the development of any tactical plan. Structural collapse is always a possibility when a building is subject to intense fire. In fact, if fire is allowed to affect a structure long enough, some structural failure is inevitable.

Regardless of the age and exterior appearance of the building, there is always the possibility that a principle structural supporting member is being seriously affected by fire and may collapse suddenly, inflicting serious injury to firefighters.

In the typical fire involved building, the roof is the most likely candidate for failure; however, failure of the roof may very likely trigger a collapse of one or more wall section(s). This is especially true if the roof is a peak or dome type which may exert outward pressure against both the bearing and non-bearing walls upon collapse. In multi-story buildings or buildings with basements, the floor section above the fire may collapse if supporting members are directly exposed to fire.

A knowledge of various types of building construction can be invaluable to the Fire Officer from a safety standpoint as certain types of construction can be expected to fail sooner than others. For example: under fire conditions, light weight metal gusset plate and open web truss roof construction can be expected to fail after minimal exposure (ie.5 minutes). Structures have been known to collapse without warning but usually there are signs which may tip off an alert Fire Officer. Action might be taken to avert any imminent hazard.

TELL-TALE SIGNS:

- Cracks in exterior walls.
- Bulges in exterior walls.
- Sounds of structural movement - creaking, groaning, snapping, etc.
- Smoke or water leaking through walls.
- Flexible movement of any floor or roof where firefighters walk.
- Interior or exterior bearing walls or columns - leaning, twisting or flexing.
- Fire showing at plywood seams or other roof openings.
- Sagging roof structure.

The following construction features or conditions have been known to fail prematurely or to contribute to early structural failure when affected by fire:

Contributing Factors:

- Large open (unsupplied) areas - supermarkets, warehouses, etc.
- Large signs or marquees - which may pull away from weakened walls.
- Cantilevered canopies - which usually depend on the roof for support and may collapse as the roof fails.
- Ornamental or secondary front or sidewalls - which may pull away and collapse.
- Buildings with light weight truss roofs.
Buildings supported by unprotected metal - beams, columns, etc.

Buildings containing one or more of the above features must be constantly evaluated for collapse potential. These evaluations should be of major consideration toward determining the tactical mode (offensive or defensive).

It is a principle Command responsibility to continually evaluate and determine if the fire building is tenable for interior operations. This on-going evaluation of structural and fire conditions requires the input of Company Officers advising their Division Officers and of Division advising Command of the conditions in their area of operation.

EVALUATION:

Interior firefighting operations should be abandoned when the extent of the fire prohibits safe operation or the structure becomes unsafe to operate within. When such conditions become untenable, evacuate, regroup, develop a new plan, communicate, and re-deploy.

Our primary concern, when a hazard which may affect the safety of fire personnel becomes apparent, is the welfare of those personnel. In an effort to protect personnel which may suffer the adverse effects of hazards, such as structural collapse, explosion, backdraft, etc., a structured method of area evacuation must be utilized, one which will provide for the rapid and effective notification of those personnel involved, and one which will be able to accurately account for those personnel.

The method of evacuation selected will vary depending on the following circumstances:

- Urgency of the hazard.
- Type and extent of hazard.
- Perception of the area affected by the hazard.

SEARCH AND RESCUE:

Search and rescue should be performed according to an efficient, well-planned procedure which has included the safety of search crew personnel.

The object of the search effort is to locate possible victims, not create additional ones by neglecting the safety of the search crew.

Prior to entering the search area, all search team members should be familiar with a specific search plan, including the overall objective, a designation of the search area, individual assignments, etc. This may require a brief conference among crew members before entering the search to develop and communicate the plan.

Hose lines should be placed between the victims and the fire to protect them. Individual search activities should be conducted by two (2) or more members where possible.

Company Officers must maintain an awareness of the location and function of all members within their crew during search operations.

A brief look around the floor below the fire may provide good reference for the search team, as floors in multi-story occupancies usually have a similar layout.

Whenever a search is conducted that exposes search crews to fire conditions (particularly above the fire floor), the Search Team should be protected with a charged hose line, in order to insure a safe escape route.

When operating above ground level, ladder the structure to provide an alternate escape route.

If search personnel are operating without a hose line, life lines should be used when encountering conditions of severely limited visibility.

BACKUP PERSONNEL:

Anytime firefighters are required to operate in a structural, confined space fire or hazardous respiratory environment, the officer in charge shall ensure that at least two (2) firefighters, trained and equipped with proper protective clothing including self-contained breathing apparatus, remain free of the contaminated area to effect a rescue of the exposed or disabled firefighters.

HIGH-RISE SAFETY:

Fire personnel conducting operations in high-rise buildings are faced with many non-typical hazards due to the design, elevation, limited access/egress, etc., inherent in these buildings containing a working fire, are to be considered a high hazard area.

STAIRWAYS/ELEVATORS:

If a working fire is suspected in a high-rise building, the following procedures shall be adhered to:

1. Utilize stairways to go aloft if possible.
2. Elevators may be used to go aloft provided the following measures have been taken.
3. The elevator shaft must be checked to insure that heat and fire have not damaged the hoist mechanism. This can be done by checking the space between the door frame and the elevator car and shining a light up the shaft. If smoke or fire is visible in the shaft, **DO NOT RIDE THE**

ELEVATOR. It may be used for equipment only.

Before using an elevator, the nearest enclosed stairway should be identified. If the elevator should stop at a floor with heavy smoke or intense heat, firefighters can then head directly for the stairs without losing time searching for victims.

You must verify that the floor you are going to arrive at is uninvolved. This can be done by utilizing the following measures:

ELEVATORS WITH FIREMEN SERVICES FEATURES:

- Engage the firemen feature
- Take elevator to the floor two (2) floors below the suspected fire floor
- Be prepared to close the elevator door immediately; usually by removing finger from the door control button if fire or smoke is visible on the floor.
- Elevators without the firemen feature shall not be used if a working fire is indicated

If elevators are used to transport personnel and equipment, beware of exceeding the maximum load capacity of the elevator.

When operating on a high-rise building where the potential hazards of falling glass and debris exist,

A fireground perimeter shall be observed by all personnel as a high hazard area.

A fireground perimeter will be at the discretion of Command based on need.

Pumpers supplying water shall utilize hydrants outside the perimeter area if possible.

Command and staff support personnel shall remain outside the perimeter area unless entering the area to assist with interior operations.

To insure accountability of personnel operating in high-rise buildings, the Logistics Officer and the Staging Officer respectively shall record the names of all crew members going aloft or operating on upper floors.

EMERGENCY TRAFFIC:

The emergency traffic announcement is designed to provide immediate notification for all fireground personnel of a notable hazard that is either about to occur, or has occurred.

The used of "EMERGENCY TRAFFIC" should be initiated only when the hazard appears to be imminent. Any member has the authority to utilize the "EMERGENCY TRAFFIC" announcement when it is felt that a notable danger to personnel is apparent. However, considerable discretion should be applied to its use. Emergency traffic announcements become ineffective if overused.

When an imminent hazard has been realized, the emergency traffic process should be initiated. Usually either a Company or Division Officer will be the initiator. The initiator should describe the apparent hazard and order a positive response, usually to evacuate a particular area or section, according to the scope of hazard.

EMERGENCY EVACUATION OF FIREFIGHTERS:

If possible, the Division Officers of those areas to be evacuated should request an acknowledgment of the emergency traffic dispatch from those crews to be evacuated.

Upon receipt of the "Emergency Traffic Evacuation Order", the Company Officers shall assemble their crews and promptly exit to a safer location, where the Company Officer will again account for all crew members. Shortly after the evacuation order, Division/Group Officers shall begin the process of accounting for all evacuated crews. When all affected crews and crew members are accounted for, the evacuation process is complete. At this time, a more specific determination as to the reality or extent of the hazard can be made and efforts initiated to re-deploy or redirect attack forces.

Building evacuation generally involves a shift from offensive to defensive as an operational strategy. In such cases, Command must develop a corresponding operational plan and must communicate that plan to all operating elements. This can be a difficult shift to complete as units are committed to positions in an offensive manner. It is extremely important that everyone gets the word that a strategic shift has been made.

Hazards noted of less than imminent nature should usually be handled by a consultation of Command, Division Officers and/or the Safety Officer, Fire Protection Engineer, Company Officers of outside agency authorities. These officers or specialists should make determination as to the nature and possible effect of the suspected hazard and advise Command that he can make a knowledgeable decision as to the proper course of action.

8.02 - PROTECTIVE CLOTHING

Purpose:

The following are procedures for wearing protective clothing. These procedures apply to all members.

Definition:

Full protective clothing: helmet with eye shield, hood, turnout coat, bunker boots with turnout pants, gloves.

Full protective clothing shall be worn by firefighting personnel while responding to all structural fire alarms. Officers may use their discretion to regulate this in terms of unusual circumstances such as extremely long responses.

It is the intent of this procedure that no member shall cause a delay in any firefighting operation by not being fully prepared to engage in firefighting activities in a safe manner.

Full protective clothing shall be worn at all times when operating on the fireground.

All members shall wear whatever protective clothing is required to afford complete personnel protection, while operating at EMS incidents.

When operating forcible entry equipment and tools, full protective clothing shall be worn. Helmets shall be worn when operating near moving vehicles, such as EMS incidents in the street.

Command may use his discretion to regulate this, in those situations where exceptions to the above SOP appear necessary, such as when the use of protective clothing may compromise patient care, or when it is necessary to operate in close quarters where full protective clothing cannot be worn.

The eye shield or goggles shall be utilized at any time the need for eye protection seems apparent such as during overhaul, when operating hand or power tools and when fighting trash fires, grass fires, and any other fires where the S.C.B.A. is not being worn.

Approved gloves shall be worn while engaged in firefighting, overhaul, training with hose and ladders, when using hand or power tools, and any other situations where injuries to the hand are likely to occur.

8.03 - OPERATING POWER SAWS

When operating power equipment under emergency conditions, accident potential is high, due to adverse operational conditions. A slight miscalculation or sudden unplanned move can result in a serious accident. Performance skill coupled with the use of common sense and the strict adherence to safety procedures can prevent accidents.

PERSONNEL PROTECTION:

Full protective clothing shall be worn by those members operating, and by those members in close proximity to the operations of power saws.

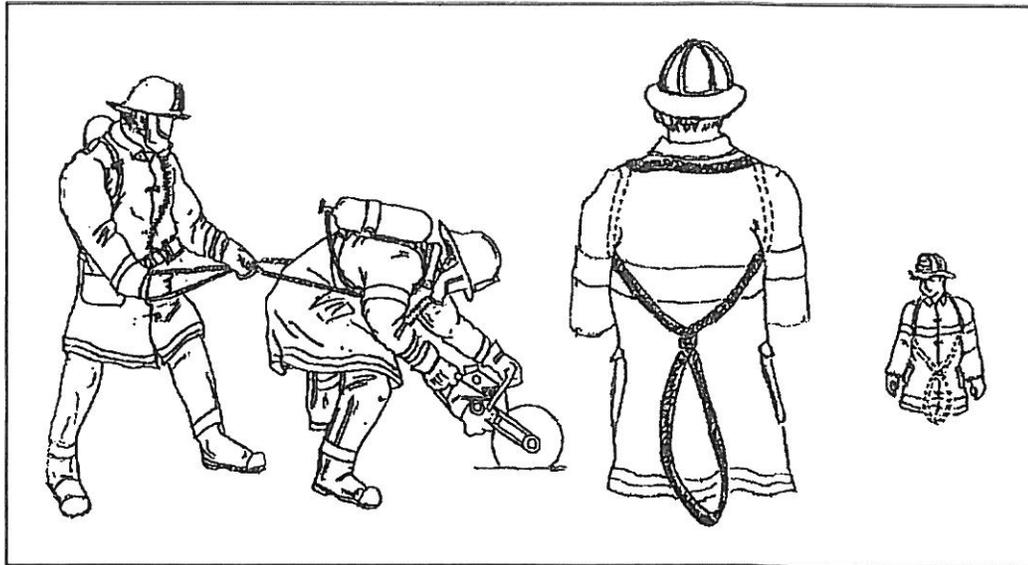
To prevent accidents caused by moving belts, gears, blades, etc., it is imperative that operator and guide have their clothing completely buttoned up and close fitting.

OPERATING PROCEDURES:

Carry the rescue saw with the engine stopped, the blade forward and the muffler away from your body.

Always carry the chain saw with the engine stopped the guide bar and saw chain to the rear and the muffler away from your body.

Keep both hands on the control handles when operating the saw. Use a firm grip with thumbs and fingers encircling the saw handles. Make sure of your footing before operating the saw.



Whenever possible, a team of two (2) firefighters shall perform cutting operations.

The firefighter operating the saw (operator) will be assisted and/or guided by a second firefighter (guide). See illustrations.

The saw shall always be shut down when unattended.

Have a plan of action before putting the saw into operation. Your plan should include:

1. Location & sequence of cuts & openings.
2. Wind direction. Consider its effect on exposures & personnel
3. At pre-planned escape routes, your plan should provide for at least two (2) means of egress, if possible.

Whenever possible, an Officer should be present to supervise cutting operations and to assure compliance with safety procedures. Always place the safety guard in the proper position to provide protection for the use intended before operating the saw.

Power saw operations are safest when cutting on horizontal surfaces near ground level or vertical surfaces at waist level or below.

Operating a power saw above chest height is extremely hazardous and should not be attempted as a normal course of action. This type of operation shall be conducted only under the direct supervision of an officer. The officer ordering this operation shall weigh heavily the value gained against the extreme hazard to personnel.

The use of a power saw from ladders is not recommended if there are alternatives.

The carrying strap shall be used when carrying a saw while climbing a ladder so that both hands are free to grab the ladder rungs.

When operating close to highly combustible or flammable materials, use care to prevent ignition from sparks. Do not operate saws in suspected flammable/explosive atmospheres!!

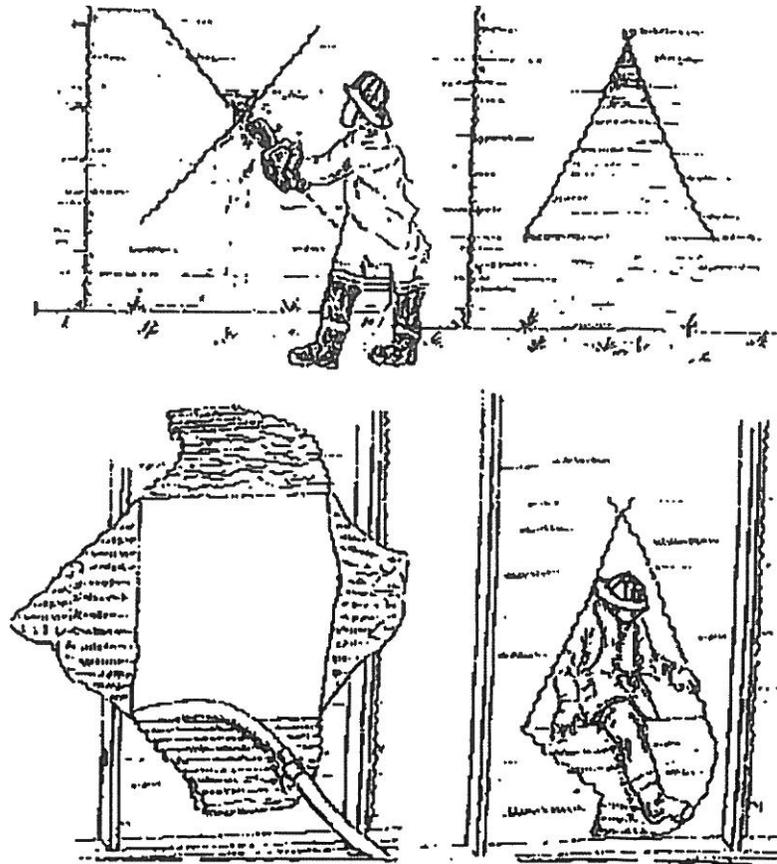
Side pressure or twisting of the blade when operating a power saw should be avoided. The saw should never be forced. If too much pressure is applied to the blade, the hazard of blade breakage (carbide tipped) or blade shattering (aluminum oxide or silicon carbide discs) is increased. A blade which breaks or shatters during cutting operations may cause serious injury to the operator or to others in the area.

The saw cut should be only as deep as necessary. Deep cuts may weaken supporting beams and lead to collapse. The experienced operator will know when he has reached a beam by the sound of the saw.

If conditions permit, scrape gravel and debris from the path to be cut, in order to reduce the danger of injury from flying chips and loose materials.

When using the power saw to open metal buildings, doors, etc., where conditions permit, utilize methods to eliminate the hazards of sharp edges.

Consider making your cut in either an "X" design or a triangular design with the points bent inward. See Illustration.



FUELING AND MAINTENANCE PRECAUTIONS:

Observe all safety regulations on the safe handling of fuel. When necessary to refuel, comply with the following:

1. The saw should never be refueled while the engine is running.
2. If fuel is spilled while refueling, wipe off the saw before starting.
3. Do not operate the saw if there is a fuel leak, send it in for servicing.
4. Do not restart the saw in a small enclosed space after refueling.

Always keep equipment in good, clean, serviceable condition.

Examine the power saw cutting wheel for nicks or defects at the beginning of each shift and after each use.

Clean the wheel (blade) and both wheel washers when installing the wheel. Wheel blotters must be used between washers and wheel to compensate for irregularities in the wheel.

Care must be taken to assure that the abrasive saw blades do not become contaminated with petroleum based products. Such contamination may dissolve the resin which is used to bond the blade, causing the blade to shatter when used. New blades should be stored in plastic bags to insure cleanliness.

8.04 - STATION SAFETY

A large percentage of personnel injuries occur participating in routine activities at or around the station. Most of these injuries could be prevented by observing proper safety practices and adopting a safety conscious attitude.

LIFTING/PULLING:

Utilize the following proper lifting techniques when lifting moderate to heavy objects:

1. Use your legs to lift with, by bending your knees.
2. Keep your back straight.
3. Do not twist your body while lifting-reposition your feet.
4. To lift heavy objects, get your body as close to the object as possible.
5. Heavy objects should ideally be stored at approximately waist level, to prevent unnecessary lifting. Do not attempt to lift or carry more than you can easily handle. If necessary get help!!
6. When you are either dragging hose or raising hose with a halyard do not pull more than you can pull with relative ease. If necessary get help!!

BUILDING AND GROUNDS INSPECTION:

All buildings and grounds shall be inspected every six (6) months by the Department Safety Officer with the proper forms being turned into the Assistant Chief for follow up as needed.

SECTION I - HOUSEKEEPING

1. Are storage and supply rooms kept clean and orderly?
Yes___ No___ NA___
2. Are trash and rubbish stored in proper containers?
Yes_ No_ NA_
3. Are all flammable items (paint, lacquer, paint thinner, etc.) kept in safety containers and stored in approved metal cabinets?
Yes___ No___ NA___
4. Are only non-flammable cleaning agents used throughout the entire building?
Yes___ No___ NA___
5. Is ready disposal of combustible wastes provided?
Yes___ No___ NA___
6. Are areas used for public meetings or other functions always thoroughly checked before securing?
Yes___ No___ NA___
7. Are rags, cloths, etc. used in cleaning stored in an approved, self-closing metal container?
Yes___ No___ NA___

SECTION II - FIRE PROTECTION

1. Are all the fire extinguishers inspected and tagged monthly, and serviced annually?
Yes_ No_ NA_ SERVICE DATE: _____
2. Are all fire extinguishers tagged with latest service record and inspection date?
Yes_ No_ NA_
3. Are fire extinguishers located within 75 feet from any point on each floor?
Yes_ No_ NA_
4. Are extinguishers properly protected from damage and freezing?
Yes_ No_ NA_
5. Is the building protected with a smoke/heat detection system?
Yes_ No_ NA_
6. Is the smoke/heat detection system tested and inspected on a monthly basis?
Yes_ No_ NA_

SECTION III - HEATING AND AIR CONDITIONING EQUIPMENT

1. Has heating equipment been thoroughly inspected by a qualified service man within the past year?
Yes_ No_ NA_ SERVICE DATE: _____
2. Is heating equipment (including flues and pipes) properly insulated from combustible materials?
Yes_ No_ NA_
3. Are heating and air conditioning equipment rooms free from storage?
Yes_ No_ NA_
4. Are heating and air conditioning rooms restricted areas?
Yes_ No_ NA_
5. Is air conditioning equipment clean and serviced annually?
Yes_ No_ NA_

SECTION IV - ELECTRICAL EQUIPMENT AND CONTROL PANELS

1. Has the electrical system been inspected within the past five years by a certified electrician or electrical inspector?
Yes___ No NA___
2. Are electrical panels always kept closed?
Yes_ No__ NA_
3. Are electrical panels always kept clear of storage and obstructions?
Yes_ No_ NA_
4. Is circuitry adequate to handle load demand (not requiring frequent fuse replacement or circuit breaker resetting)?
Yes_ No_ NA_
5. Was electrical system installed by a competent electrician?
Yes_ No_ NA_
6. Is the electrical system regularly maintained by a competent electrician?
Yes_ No_ NA_
7. Are all electrical appliances properly grounded and cleaned?
Yes_ No__ NA_
8. Are electric motors adequately ventilated to prevent overheating and are they cleaned regularly?
Yes_ No_ NA_
9. Are proper size electrical cords used and are they in good condition?
Yes_ No_ NA_

BUILDING AND GROUND INSPECTION

BUILDING
LOCATION: _____

NAME OF INSPECTOR: _____

DATE OF INSPECTION: _____

SECTION 1 - GROUNDS

1. Are parking areas, walkways, stairs, driveways, etc. free from conditions that may cause slipping or falling?

Yes___ No___ NA

2. Is exterior lighting adequate in all areas?

Yes___ No___ NA

3. Is exterior storage of trash and rubbish at least 25 feet away from the building?

Yes_ No___ NA

SECTION II - INTERIOR DOORS AND STAIRWAYS

1. Are all exit doors properly marked?

Yes___ No___ NA

2. Are all exit doors easily accessible?

Yes_ No___ NA

3. Do all exit doors open outward?

Yes_ No___ NA

4. Are all doors easily opened and closed?

Yes_ No___ NA

5. Are all doorways and areas adjacent to them free of obstructions?

Yes_ No___ NA

6. Is the emergency lighting system tested on a monthly basis?

Yes___ No___ NA

7. Is the emergency power generator tested on a weekly basis?

Yes___ No___ NA

8.05 - GROUND LADDERS

Purpose:

The care and use of fire department ladders is of vital importance to all firefighting personnel. Proper maintenance and inspections will insure all users with properly functioning equipment and a greater degree of safety while being used.

Forms:

- Ladder Inspection

Inspection:

All ground ladders shall be cleaned and visually inspected thoroughly at least once every month and after each use. A visual inspection shall include, but not be limited to:

1. Heat sensor label for a change indicating heat exposure.
2. All rungs, for snugness and tightness.
3. All bolts and rivets for tightness.
4. Welds, for any cracks or apparent defects.
5. Beams and rungs, for cracks, breaks, gouges, checks, or deformation.
6. Butt spurs, for excessive wear or other defects.
7. Halyards, for snugness, fraying or kinking.
8. Roof hooks, for sharpness and proper operation.
9. Surface corrosion.
10. Ladder slide areas, for galling or absence of wax.
11. Correct operation of pawls.
12. Cable and pulley system on extension ladders for snugness when the ladder is in the bedded position and free movement.
13. Labels present and legible.
14. Ladders clean with no buildup of dirt, grease, or grime.

Any ladder that did not pass inspection shall be immediately removed from service and reported to the Deputy Chief.

Testing:

All testing shall be performed by in accordance with the most current edition of NFPA 1932, Standard on Care, Maintenance, and Testing for Ground Ladders.

Maintenance:

Maintenance means keeping ladders in a state of usefulness or readiness. A soft-bristle brush and running water are the most effective tools for cleaning ladders. Tar, oil, or greasy residues should be removed with safety solvents. After the ladder is rinsed or anytime a ladder is wet, it should be wiped dry.

8.06 - EMERGENCY RESPONDER DECONTAMINATION

Purpose:

To provide guidance and direction for the decontamination of emergency responders, tools and equipment incidents involving hazardous materials including blood borne infectious agents.

Definitions:

Contamination: The presence or the reasonably anticipated presence of nuisance materials foreign to the normal atmospheres, blood, hazardous waste, or other potentially infectious materials on an item or surface.

Decontamination:

1. The physical or chemical process of reducing and preventing the spread of contamination from persons or equipment at a hazardous materials incident.
2. The use of physical or chemical means to remove, inactivate, or destroy blood-borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Exposure:

Contact via a portal-of-entry (inhalation, ingestion, absorption, parenteral) with a chemical, infectious material, radioactive substance, harmful radiation, or other agent capable of causing harm. Exposure can occur without contamination, as with certain gases, such as carbon monoxide or exposure to ionizing radiation such as X-ray).

Hazardous Substances:

Substances that present an unusual risk to persons due to properties of toxicity, chemical activity, corrosivity, etiological hazards or similar properties.

Technical Decontamination:

Decontamination procedures for responders, tools and equipment distinct from emergency decontamination of victims.

General:

It is generally recognized that firefighting activities are conducted in contaminated environments; therefore, it is prudent to take precautionary measures to mitigate personal exposure. A routine practice of precautionary decontamination is appropriate as one of these measures.

At structure fires, firefighters actively engaged in firefighting activities are to be routinely decontaminated using precautionary decontamination practices as described below, upon cessation of firefighting activity for rehabilitation or preparatory to leaving the scene.

At hazardous materials (HM) incidents and/or weapons of mass destruction (WMD) incidents, contamination by specific hazardous substances may be identified or suspected indicating the need for specific technical decontamination procedures.

At medical incidents, blood or other body fluids may be contacted indicating the need for blood-borne pathogen decontamination procedures.

Structural engines, ladder trucks and rescue trucks shall carry as a minimum a plastic bucket, soft bristle

brush with an attachable long handle, mild detergent (such as Joy), household bleach and two disposable "redress" coveralls and two sets of disposable "booties" (shoe covers).

Decontamination Principles:

Removal of contaminated clothing reduces contact exposure to contamination. Removal of hazardous substances using water (rinsing) is a dilution technique. Removal of hazardous substances using soap and water (washing) is a dilution and mechanical removal technique with the soap acting as a "wetting" agent to help "float" contaminants off of the body. Rinsing with copious amounts of water flushes away any soap/contaminant residue, hence the name, "Wash and Rinse".

Using a solution of 0.5% bleach (one part household bleach to 9 parts water) adds a neutralizing affect through oxidation of the contaminant by the bleach. The use of bleach is not recommended except for specific contaminants such as biological agents and nerve agents.

Hand Washing:

Responders who provide patient care or handle items contaminated with blood or other potential infectious materials (OPIM) should wash their hands immediately after doffing and disposing of latex gloves. Alcohol based Hand Sanitizer is available on all BLS equipped apparatus for this purpose. In addition, liquid detergent (such as Joy) is carried on all department structural engines, and rescue trucks. When in rehab, responders should also wash their hands before eating or drinking.

"Spot" Decontamination:

"Spot" decontamination may be used when small areas of a firefighter's SFFPC become contaminated with known hazardous substances such as typically encountered on vehicle accidents (gasoline, diesel fuel, oil, radiator fluid, brake fluid, battery acid, etc., and/or body fluids). Consideration shall be given to washing the bottoms of boots.

1. Position firefighter where runoff water will not create a problem or provide for containment.
2. Flush the contaminated area(s) with water spray to remove solid materials (gross decon).
3. Wash the contaminated area(s) of SFFPC with detergent and water solution using a softbristle brush. 4. Rinse the contaminated area(s) of SFFPC thoroughly.

Precautionary Decontamination:

Precautionary decontamination shall be used after firefighters wearing SCBA and Structural Fire Fighting Protective Clothing (SFFPC) operate in potentially contaminated environments such as structure fires, clandestine labs, chemical spills or other incidents where contamination with hazardous substances is suspected to have occurred. Soot, attic insulation, contact with unknown liquids, etc. may be evidence of such contamination.

1. Position firefighter where wash and rinse water will remain in areas already exposed to firefighting runoff (alternatively, a decontamination reduction corridor as described below may be set up to contain runoff water).
2. Rinse SFFPC and SCBA with water spray to remove solid materials (gross decon).
3. Wash SFFPC and SCBA with soap and water solution using Jong handled soft bristle brushes, then rinse thoroughly (wash and rinse decon).
4. Remove SCBA.
5. Wash hands thoroughly with soap and water then rinse with flowing water.

8.07 - EMERGENCY INCIDENT REHABILITATION

Purpose:

To ensure that the physical and mental condition of members operating at the scene of an emergency or a training exercise does not deteriorate to a point that affects the safety of personnel or that jeopardizes the safety and integrity of the operations.

Scope:

This procedure applies to emergency operations and training exercises where strenuous physical activity or exposure to heat or cold exists.

Responsibilities:

The Incident Commander shall consider the circumstances of each incident and initiate rehab team response early in the incident, if they were not part of the original dispatch, to provide for the rest and rehabilitation for all members operating at the scene.

The EMS Coordinator will serve as the Rehab Team Supervisor. The Rehab Team Supervisor is responsible for establishing and maintaining a team of qualified responders, who are ready and able to respond when conditions indicate that rest and rehabilitation, is needed for personnel operating at an incident scene or training evolution. He is also responsible to...

1. Contact the incident commander to ascertain scene requirements and to make adequate provisions available.
2. Establish appropriate levels of Rehab with regard to terrain, weather, time of day, etc.
3. Ascertain if citizens involved in the incident will need Red Cross contact.

The Rehab Team is responsible to provide medical evaluation, treatment and monitoring; food and fluid replenishment; mental rest; and relief from extreme climatic conditions and the other environmental parameters of the incident, according to the level defined for the incident.

Supervisors:

All supervisors are to maintain an awareness of the condition of each member operating within their span of control and ensure that adequate steps are taken to provide for each member's safety and health. The command structure shall be utilized to request relief and the reassignment of fatigued crews.

Personnel:

During periods of hot weather, members are encouraged to drink water and activity beverages throughout the work day. During any emergency incident or training evolution, all members shall advise their supervisor when they believe their level of fatigue or exposure to heat or cold is approaching a level that could affect themselves, their crew, or the operation in which they are involved. Members should also remain aware of the health and safety of other members of their crew.

Definitions:

Level I Rehab: Provision of basic necessities for fire/EMS support on incidents with an expected operational period less than 4 hours. Level I support should include

- Fluids, hot or cold as needed
- Quick energy foods
- Initial medical evaluation
- Involved citizen welfare

- Sanitary facilities

Level II Rehab: Provision of basic necessities for fire/EMS support on incidents with an expected operational period between 4 and 12 hours. Level II support includes Level I, plus

- Response of additional Rehab personnel
- Fluids, hot and cold
- Sack lunches
- Continued medical evaluation
- Shelter
- Medical support
- Support for Rehab operations after dark (i.e. light, heat, etc.)
- Disposal of all waste materials

Level III Rehab: Provision of necessities for extended fire/EMS incident with an expected operational period greater than 12 hours. Level III support includes Level II, plus

- Scheduling 12-hourshifting for
 - Rehab Personnel
 - Meals
 - Medical Personnel
- Shelter
 - On-scene shelter for fire-ground personnel
 - Personal hygiene facilities
 - Ancillary services close to the fireground
 - Supplies
 - Storage
 - Adequate replacement supplies
 - Security

Rehab Personnel Identification:

Personnel assigned to the Rehab Team will be provided with an orange vest marked "Rehab". The vest is to be worn at all times while on the fire-ground.

Additionally, the Department will issue a photo identification card identifying them as a member of the Fire Department Rehab Team. Members should have their card with them when they respond to an incident scene.

Rehab Team Response:

The Rehab Team will be dispatched by pager as determined by the Department's response procedures. The general criterion is as follows:

- Working structure fire
- Second alarms
- Extended operations
- Extremes in weather conditions
- As determined and requested by the incident commander

Initial Response: The Rehab Team Supervisor will contact the incident Commander to ascertain scene requirements, then

- Secure appropriate supplies or arrange for requested services
- Proceed to the scene and support Level I Rehab
- When necessary, initiate additional Rehab Team response
- Confer with the IC for establishment of Level II or Level III Rehab when extended operations are indicated.

Additional Rehab Team Response: When Level II or III Rehab response is needed, the chief will contact for additional resources.

- Upon arriving on-scene, members will response directly to the Rehab Supervisor
- In the event the Rehab Supervisor is not on-scene, and Level I Rehab has not been initiated, the responder(s) should begin establishing Level I rehab unless otherwise directed by the Incident Commander.

In instances where a Level I incident requirements warrant additional rehab personnel, the Rehab Supervisor will contact the Incident Commander and make a request for additional personnel. The *location* for the Rehabilitation Area will normally be designated by the Incident Commander. If a specific location has not been designated, the Rehab Supervisor shall select an appropriate location based on the site characteristics and designations below.

Site Characteristics

- It should be in a location that will provide physical rest by allowing the body to recuperate from the demands and hazards of the emergency operation or training evolution.
- It should be far enough away from the scene that members may safely remove their turnout gear and SCBA and be afforded mental rest from the stress and pressure of the emergency operation or training evolution.
- It should provide suitable protection from the prevailing environmental conditions. During hot weather, it should be in a cool, shaded area. During cold weather, it should be in a warm, dry area.
- It should enable members to be free of exhaust fumes from apparatus, vehicles, or equipment (including those involved in the Rehab Team operations).
- It should be large enough to accommodate multiple crews, based on the size of the incident.
- It should be easily accessible by EMS units.
- It should allow prompt reentry back into the emergency operation upon complete recuperation.

Site Designations (examples)

- A nearby garage, building lobby, or other structure.
- Several floors below a fire in a high rise building.
- A school bus, municipal bus, or bookmobile.
- Fire apparatus, ambulance, or other emergency vehicles at the scene or called to the scene.
- Retired fire apparatus or surplus government vehicle that has been renovated as a Rehabilitation Unit. (This unit could respond by request or be dispatched during certain weather conditions.)
- An open area in which a rehab area can be created using tarps, fans, etc.

The Rehab Supervisor shall secure all necessary resources required to adequately staff and supply the Rehabilitation Area. The following supplies are examples of items which may be necessary to secure, depending on incident needs:

- Fluids - water, activity beverage, oral electrolyte solutions and ice.
- Food - soup, broth, or stew in hot/cold cups.
- Medical - blood pressure cuffs, stethoscopes, oxygen administration devices, cardiac monitors, intravenous solutions and thermometers.
- Other - awnings, fans, tarps, smoke ejectors, heaters, dry clothing, extra equipment, floodlights, blankets and towels, traffic cones and fireline tape (to identify the entrance and exit of the Rehabilitation Area).

Accountability:

Members assigned to the Rehab Team shall enter and exit the Rehabilitation Area as a team. The team designation, number of members, and the times of entry to and exit from the Rehabilitation Area are to be documented by the Rehab Supervisor or his/her designee on the Company Check-In/Out Sheet.

Members are not to leave the Rehabilitation Area until authorized to do so by the Rehab Supervisor.

Guidelines:

Rehabilitation Team Establishment;

Rehabilitation should be considered by staff officers during the initial planning stages of an emergency response. However, the climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehabilitation Area. Any activity/incident that is large in size, long in duration, and/or labor intensive will rapidly deplete the energy and strength of personnel and therefore merits consideration for rehabilitation.

Climatic or environmental conditions that indicate the need to establish a Rehabilitation Area are a heat stress index above 90 F (see table 1-1) or wind-chill index below IOF (see table 1-2).

Hydration:

A critical factor in the prevention of heat injury is the maintenance of water and electrolytes. Water must be replaced during exercise periods and at emergency incidents. During heat stress, the member should consume at least one quart of water per hour. The re-hydration solution should be a 50/50 mixture of water and a commercially prepared activity beverage and administered at about 40 F. Re-hydration is important even during cold weather operations where, despite the outside temperature, heat stress may occur during firefighting or other strenuous activity when protective equipment is worn. Alcohol and caffeine beverages should be avoided before and during heat stress because both interfere with the body's water conservation mechanisms. Carbonated beverages should also be avoided.

Nourishment:

The department shall provide food at the scene of an extended incident when units are engaged for three or more hours. A cup of soup, broth, or stew is highly recommended because it is digested much faster than sandwiches and fast-food products. In addition, foods such as apples, oranges, and bananas provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided.

Rest:

The "two air bottle rule," or 45 minutes of structural firefighting work-time, is recommended as an acceptable level prior to mandatory rehabilitation. Members should re-hydrate (at least eight ounces) while SCBA cylinders are being changed. Firefighters having worked for two full 30-minute rated bottles, or 45 minutes, should be placed in the Rehabilitation Area for rest and evaluation.

In all cases, the objective evaluation of a member's fatigue level shall be the criteria for rehab time. Rest should not be less than ten minutes and may exceed an hour as determined by the Rehab Supervisor. Fresh crews, or crews released from the Rehab Team, shall be available in the Staging Area to ensure the fatigued members are not required to return to duty before they are rested, evaluated, and released by the Rehab Supervisor.

Recovery:

Members in the Rehabilitation Area should maintain a high level of hydration. Members should not be moved from a hot environment directly into an air conditioned area because the body's cooling system can shut down in response to the external cooling. An air conditioned environment is acceptable after a cool-down period at ambient temperature with sufficient air movement. Certain drugs impair the body's ability to sweat and extreme caution must be exercised if the member has taken antihistamines, such as Actifed or Benadryl, or has taken diuretics or stimulants.

Medical Evaluations:

Emergency Medical Services - EMS should be provided and staffed by the most highly trained and qualified EMS personnel on the scene (at a minimum of BLS level). They should evaluate vital signs, examine members, and make proper disposition (return to duty, continued rehabilitation, or medical treatment and transport to medical facility). Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluids for re-hydration. Medical treatment for members, whose signs and/or symptoms indicate potential problems, should be provided in accordance with local medical control procedures. EMS personnel should be assertive in an effort to find potential medical problems early.

Heart Rate and Temperature - The heart rate should be measured for 30 seconds as early as possible in the rest period. If a member's heart rate exceeds 110 beats per minute, an oral temperature should be taken. If the member's temperature exceeds 100.6F, he/she should not be permitted to wear protective equipment. If it is below 100.6 F and the heart rate remains above 110 beats per minute, rehabilitation time should be increased. If the heart rate is less than 110 beats per minute, the chance of heat stress is negligible.

Documentation - All medical evaluations shall be recorded on standard forms along with the member's name and complaints and must be signed, dated and timed by the Rehab Supervisor or his/her designee.

8.08 - EMERGENCY INCIDENT ACCOUNTABILITY

INCIDENT ACCOUNTABILITY OF FIREFIGHTERS:

It shall be the responsibility of the Incident Commander to account for the location and safety of all personnel within an EMERGENCY INCIDENT PERIMETER at an emergency incident.

DEFINITIONS:

COMPANY OFFICER: Officers and Acting Officers in charge of Engine companies, Ladder companies, or Teams.

EMERGENCY INCIDENT: Any situation to which the Fire Department responds to deliver emergency services including: rescue, fire suppression, medical treatment, and other forms of hazard control and mitigation.

EMERGENCY INCIDENT PERIMETER: Any area where for safety reasons, the public are not allowed access.

HELMET SHIELD: A plasticized shield backed with Velcro that attaches to the front of the member's helmet. The helmet shield has letters and/or numbers identifying a command, company, unit, or administrative assignment.

The helmet shields will be made of a reflective material and contain the agencies identification in 1/2" black letters or numbers at the top center of the shield (limit of 3). The type of company followed by the unit number will be placed across the middle of the shield in 2" reflective letters and numbers (limit of 4).

The helmet shields shall be color coded as follows:

- All Officers - white with orange letters and numbers
- Firefighters - orange with white letters and numbers
- Paramedics - The paramedic officer will use the white shield and the other paramedics will use the orange shield, plus they will have a blue reflective strip on their helmets.

INCIDENT TERMINATION: The conclusion of Fire Department operations at the scene of an incident, usually the departure of the last unit from the scene.

NAME TAG: A Velcro backed plastic tag with a member's rank (if appropriate), last name, and personnel identification number.

PASSPORT: Approximately 2" x 4" boards made of Velcro and plastic used to identify and account for members and teams. Members affix Name Tags to Passports.

PRIMARY PASSPORT: White Passport

RESERVE PASSPORT: Green for shift changes and temporary replacement for lost primary and splitting companies.

BLANK GREEN PASSPORT: To make up passport for out of area resources.

FIREFIGHTER ACCOUNTABILITY SYSTEM: A procedure that utilizes Helmet Shields, Passports, Name Tags, and Status Boards to track the assignment of Commanders, Companies, Teams, and Individuals at an emergency incident.

FIREFIGHTER ACCOUNTABILITY SYSTEM MARK-UP KIT: A kit designed to expand the Passport System at large incidents and provide immediate replacement for lost or damaged system materials.

ROLL CALL: A poll of all Teams at an emergency incident to account for all personnel at that incident.

STATUS BOARD: A large hard plastic board with Velcro strips upon which commanders hold passports of assigned teams and take notes.

VELCRO PAD: A permanently attached Velcro pad on a portable radio or (specified location) to which passports are attached.

PROCEDURE: The Department will use the Firefighter Accountability System in conjunction with the Incident Command System, to identify individual members of a team and their assignment, and account for the assignment of teams and units at an emergency incident.

The Firefighter Accountability System shall be expanded to accommodate multiple alarm companies, mutual aid companies, and/or volunteer response companies and individuals.

RESPONSIBILITY: Commanders at an emergency incident shall all use the Firefighter Accountability System to account for those Officers, Companies, and Firefighters assigned to the incident.

All Officers, or Acting Officers, shall use the Firefighter Accountability System to account for all subordinate units or personnel within their direct span of control.

All Officers and Firefighters shall maintain an awareness of each other's physical condition and shall use the command structure to request help, relief, and reassignment of fatigued or injured crews or members.

All Officers, and Company Firefighters are accountable for the safety of themselves and other members of their Company. Company members shall maintain a constant awareness of the position and function of all members working with them.

Company members must always be in contact with each other through one of the following methods:

- VOICE (Not by radio)
- VISUAL
- TOUCH

Exception: Radio or phone contact is permissible for apparatus operators, chief officers and commanders, lobby control teams, etc. where the location of such personnel is constant and is known by the remainder of the company or response.

If a Company member is in trouble, the other member(s) of the team shall take appropriate steps to:

- PROVIDE DIRECT HELP
- CALL FOR HELP
- GO GET HELP

Members will stay together as Companies when in the emergency incident perimeter, and as otherwise directed by the Incident Commander until the incident termination.

Maintenance of Shields and Passports

Company Officers shall be responsible to supervise the maintenance and proper placement of Helmet Shields and Passports during the entire shift of duty and at emergency incidents.

When reporting directly to duty at the station or incident, ALL MEMBERS ARE RESPONSIBLE TO MAINTAIN:

- The correct Helmet Shield on their helmet.
- Their Name Tags on the correct Primary Passports
- Place a second name tag on apparatus where you removed your helmet shield.

Where staffing allows and incident needs dictate splitting a Company into two separate teams, Company Officers will assign the members of the Companies and the Company Officer "B".

Company Officers are responsible for members under their direct control. When Company "B" is split away from the Primary Company Officer, the Company "B" Officer is accountable for transferring the Company "B" Passport.

Materials and supplies for the ongoing support of the Firefighter Accountability System (spare tags, Velcro, etc.) shall be maintained by the training lieutenant.

PASSPORT SYSTEM IMPLEMENTATION

Materials:

The Firefighter Accountability System utilizes removable Helmet Shields, Primary and Backup Passports, Name Tags, and Portable Status Boards.

Helmet Shields:

Each company or apparatus shall have a reflective Helmet Shield or reasonable facsimile (such as tape) for each assigned company member on duty and for each member likely to respond on that company or apparatus, plus one additional officer and Firefighter shield. The purpose of the helmet shield is to clearly identify the member's agency, the type of company, unit number and rank to which the member is assigned. All Helmet Shields are to be kept on the headliner of the apparatus, or other designated location, when not actually on a helmet. Helmet Shields shall be in place on the member's helmet BEFORE participating as an in service team member.

Helmet Shields shall be color coded as follows: Officers -
WHITE

Firefighters - ORANGE

Note: Paramedic personnel shall have a REFLECTIVE BLUE STRIP ON SIDE OF THEIR HELMET

Passports:

The purpose of a passport is to provide accountability of company members after entering an emergency incident perimeter.

Passports are a three part board that contains the following information:

- Top portion contains
- Company designator (engine, ladders, etc.)
- Fire Department or Agency Designator

- Unit Number
- Split Company Designator (if applicable) "Engine 2 3¹¹

Examples:

Middle portion holds team members, name tags

The blank bottom portion is for recording the division "assignment" or for logging time on air at confined space rescue incidents.

Passport color codes:

White - Primary, normally used by everyone at the incident.

Green - Reserve, for splitting Companies

There shall be one white Passport (primary) provided for each on duty Chief and Company.

The Primary Passport shall be attached to the apparatus dashboard or visor until used as a passport for entrance into an emergency incident perimeter.

Reserve Passports (green)

Engraved company designated green passports are kept in the apparatus (dash or visor) for:

- Replacing a lost Primary Passport.
- Members who need to report for shift change at the emergency incident.
- To be used when splitting companies

Blank green passports are carried in chiefs' vehicles and are used for:

- Temporary replacement of engraved, company designated green flexible passports that have been placed in service.
- Additional make up companies and mutual aid companies that respond to the incident scene without passports.

Name Tags:

Each member of the Fire Department shall maintain a minimum of four Velcro Name Tags. Two name tags are kept on the underside of each helmet assigned to the firefighter. These name tags are the ones that are attached to the primary and back up passports when reporting for duty.

Important:

Name Tags must be attached to the passports BEFORE SIGNING ON DUTY AND/OR BEFORE RESPONDING WITH THE APPARATUS, OR WHEN ASSIGNED TO A COMPANY AT THE SCENE, IN THE CASE OF VOLUNTEER OR CALLED BACK FIREFIGHTERS.

Company Officer Name Tags are the first or top Name Tag placed on the Passports.

EMERGENCY INCIDENTS

Reporting to the Incident:

When a Company or Team reports to an Incident, Staging, Division or Group Commander, they transfer their Primary Passport(s) to the Commander of the incident or assigned division except as defined below.

Primary Passport(s) will remain with the apparatus on the apparatus dash or visor when:

- A company is the only unit at the incident.
- Companies are committed as first arriving unit(s) to initial attack at an incident before the establishment of a Command Post. The initial attack Incident Commander operating in the "Mobile Co_ and" mode must either stabilize the situation within 15 minutes, pass command, or withdraw and establish a command post and initiate the use of a status board.
- Companies are on or directed to a remote side of an emergency incident before the establishment of a Division Supervisor's position.

When first arriving Companies that have not transferred their passports to a Command Position (IC, Division or Group Supervisor) leave a hazardous area, they will report their Company status to the Incident Commander by radio or face to face contact.

Command Will:

Direct the unit or Company to a command position (IC, Division or Group Supervisor) for a new assignment where they will transfer their Passport(s), Or, The IC will be responsible to gather the passports from the operating and assigned companies.

It may be necessary to assign an aid to assist the Interior Division Supervisor by positioning on the building exterior and operating the interior division status board to keep track of the passports for the assigned interior companies.

During emergency incidents:

Officers will require the transfer and use of Passports at every incident with two or more companies assigned.

Staging Area Managers and Rehab Group Supervisors will record the time that Companies report to Staging or Rehab.

When a Commander (Incident, Division or Group) relieves a Company, the Commander will:

1. Confirm with Company leader that all Company members are accounted for,
2. Return the Company's Passport(s) to the Company Officer,
3. Direct the Company Leader to Staging or another Command Position, and
4. Advise the designated Commander that the Company has been directed to report to that Commander.
The receiving Commander WILL ACKNOWLEDGE and record that information on his Status Board.

Roll Call:

Commanders and Company Officers will conduct an emergency incident Roll Call using the Passport System as follows:

- When a Company is relieved of an assignment and transferred to a different Division or Functional Area, Commanders will confirm that Company Leaders have conducted a Roll Call.
- When a Commander presumes a Firefighter or Company is missing or trapped, the IC will then conduct a Roll Call of the emergency incident to confirm the status of missing personnel, and will start rescue efforts at the last known location.

Example:

"Command with Emergency Traffic"

"Command to Dispatch and All Divisions, an unidentified distress call has been transmitted." "Command

to all Divisions, conduct a roll call of your units."

"Division 'B' OK"

"Division 'C' OK"

"Roof Division OK"

"Division 'B' to E

45 conduct a roll call."

45, OK"

45 to Division 'B' all members accounted for"

"Division 'B' to Command all accounted for."

"Command Division B accounted for."

NOTE: Whenever possible, Roll Call will be conducted without the use of the radio by face to face Communications to keep the frequency-clear.

Before there is a change from an offensive to defensive fire ground strategy: "Command to all Divisions, we are setting up to change to a 'DEFENSIVE STRATEGY' "

"Withdraw all units from the building and conduct a roll call." "Division 2 to Command, OK, withdrawing."

"Rooftop, OK, withdrawing."

"Division 'C' to Command, all units accounted for and out."

"Division 2, all units accounted for and out of the building."

"Command to Division 'C' and Division 2, OK."

"Roof to Command, all units off the roof and accounted for." "Command, OK."

When there is a catastrophic change in the incident such as building collapse, explosion, backdraft, sudden flooding, release of vapor clouds, etc.

When the Incident Commander or Company Leader determines that a need for a Roll Call exists.

Required Materials:

Fire Department Training Officer shall be responsible to order materials and maintain supplies for the Firefighter Accountability System in accordance to the attached specifications as follows:

1. One engraved white Passport for each possible Company or two or more persons from a Company, Command vehicle, Special Unit or reserve apparatus.
2. One Helmet Shield for each On Duty Officer and Firefighter assigned to the apparatus or can be expected to respond to or with.
3. Replacement name tags for lost or damaged equipment.
4. Green engraved Passport(s) or each assigned Passport.
5. Velcro pads for attaching to apparatus.
6. Minimum of one (I) status board for each command vehicle.
7. Firefighter Accountability System Make-up Kits for each duty chief vehicle are to contain materials as follows:
 - a) Three Status Boards.
 - b) Twelve (12) blank green passports for make-up kits.
 - c) Four feet (4') of 2" wide white Velcro for making Name Tags and temporary Helmet Shields, one pair of

- scissors, two permanent marking pens, four (4) extra grease pens and one roll of 2" wide medical tape.
- d) One (1) roll of duct tape, 1 black grease marker, 1 black felt tip pen.
 - e) Six Passports for each Command Vehicle.
 - f) Twelve (12) 3/8" x 2" blank white name tags.

8.09 - RAPID INTERVENTION TEAM

Purpose:

Provide immediate capability for the rescue of members operating at structure fires in hazardous atmospheres by the establishment of RIT.

Definitions:

Buddy System: A team of at least two or more persons with positive communication that remain in close proximity to each other.

Initial Stage:

The period of time during initial attack, when one team may operate in the hazardous atmosphere providing that one additional firefighter remains on "standby" outside the hazardous area. Once additional resources have arrived, two "standby" firefighters must be present.

Positive Communication:

Contact maintained through visual, audible, physical, safety guide rope (or hose line), electronic means, or by other means enabling coordination of their activities.

Rapid Intervention Team (RIT):

A team of at least two standby firefighters designated, dedicated and equipped to initiate an immediate search and rescue operation to locate, protect and remove injured, lost, trapped or endangered firefighters.

Standby Firefighter:

A firefighter fully equipped with appropriate protective clothing, SCBA, and appropriate equipment positioned outside the hazardous atmosphere available to initiate the rescue of firefighters.

Standby firefighters may perform other duties provided positive communication is maintained with the entry team(s) and those duties do not interfere with the standby member's ability to participate in a rescue as appropriate.

General Principles:

Incident Command is responsible for the overall safety of all members and all activities occurring at an emergency incident and shall therefore initially and continually evaluate the situation and risks to operating teams.

Personnel shall use the "buddy system" at all times when operating in hazardous areas.

Command should consider providing for at least one company on standby or in Staging for immediate deployment to deal with "setbacks" or unexpected events.

Initial Stage Standby (2 In - 1 Out):

During the "initial stage" of a structure fire-incident where additional resources are enroute, and where exceptional circumstances indicate that immediate action may be necessary to prevent or mitigate the loss of

life or serious injury to citizenry or firefighters, then one team of at least two firefighters may operate inside the hazardous area providing that at least one additional firefighter is assigned to stand by outside the hazardous area. The standby firefighter must be equipped with full protective equipment and SCBA. The standby firefighter may be the pump operator or any firefighter properly equipped to enter the hazardous atmosphere and initiate a rescue. The standby firefighter must remain available for immediate deployment and be in positive communication with the firefighters on the interior or in the hazardous atmosphere. This presumes close proximity to the incident (pump operators at the supply end of a reverse lay would not qualify as a standby firefighter).

Arrival of Additional Crews (2 In - 2 Out):

Upon confirmation of a "working structural fire", Command will contact Dispatch and upgrade the incident to an 11W which will add at least one additional engine company to the incident as part of the 11W dispatch code. The primary use of this additional engine company will be to establish and provide the RIT function if not provided for sooner.

Once additional crews are on the scene and assigned, the incident shall no longer be considered in the initial stage. The incident commander shall evaluate the situation and risks to operating crews. First and primary consideration shall be given by the IC to providing a rapid intervention team commensurate with the needs of the situation. Tactical objectives in support of priority operations such as ventilation, search and rescue, utilities control, water supply and backup hose lines are essential for victim rescue, firefighter safety, incident stabilization and control. Essential tactical priorities may take precedence over the assignment of a Rapid Intervention Team.

Utilization of Rapid Intervention Teams:

The composition, structure, and number of rapid intervention teams shall be flexible and based on the type of incident, duration, size and complexity of the operation. The need for multiple RITs shall be evaluated (e.g., complex structures with multiple divisions and/or large structures with multiple entry points may require several RITs).

When a RIT is deployed or when multiple RITs are assigned, a *Rapid Intervention Group (RIG)* should be created with a Group Supervisor assigned to supervise the activities of the RIG.

A company assigned to RIT or RIG shall report for their assignment wearing full protective clothing and SCBA. The team shall have the following minimum equipment: a portable radio set to the correct tactical channel, a light box, an "irons" set (flat head axe with a Halligan bar), a Thermal Imaging Camera (TIC) if available and a Rescue Air Kit (RAK) if available. In addition, each member shall have a personnel hand light, and a utility strap. A pocketknife is highly recommended. Additional tools and equipment such as bolt-cutters, wire-cutters, power-saws, etc. may be obtained from apparatus and staged with RIT.

The RIT Leader shall receive a briefing from the IC and review the accountability board or ICS 201 for the purpose of understanding the tactical situation, objectives, assignments, communication plan, and likely location of personnel. Of particular importance to RIT is the location and status of access and egress points throughout the building, barriers such as security bars, and other known hazards. If a Pre-plan is available, RIT should review it. The RIT Leader shall monitor the command channel and tactical radio traffic and keep informed of the changing tactical situation.

A RIT shall be on standby at or near a logical access/egress point and shall remain established as long as firefighters are exposed to a hazardous atmosphere or as long as deemed necessary by the IC.

RITs may be rotated into the incident as relief crews as long as another crew is immediately available to replace it as the assigned RIT and has been adequately briefed.

Deployment:

Deployment of a RIT shall be considered by the IC when a firefighter or crew is injured, trapped, lost or disoriented, fails to acknowledge radio calls, a "Mayday" is transmitted, or any other situation requiring assistance from the RIT.

A RIG Supervisor should be assigned. The RIG should be informed of who is missing, trapped, or injured; their last known location or suspected location, best access/egress, current structural conditions, current fire conditions, tactical assignments and known hazards. An action plan for the RIG must be quickly developed by the RIG Supervisor and communicated up the chain-of-command to the IC. It must be coordinated with other incident operations.

Deployment of a RIT shall be broadcast as a "Mayday" announcement, stating the purpose of the deployment, the objective of the RIT, the area of operation and a new tactical channel. RIG shall operate on the initial tactical channel along with the lost or "down" firefighters. Acknowledgement by company shall be required to ensure the change in tactical frequencies occurs.

Acknowledgement can also serve as a "Roll-Call":

Additional companies shall be assigned to RIG to maintain at least one company on standby. Do not delay the deployment of the RIT(s) if an additional company is not present. The IC shall consider ordering additional resources to backfill for the assigned RIT and to provide a tactical reserve.

All assigned companies on the incident shall continue to perform their assigned tasks and objectives unless directed otherwise by Command or Operations. Major effort must be sustained to confine fire and provide aggressive ventilation to remove heat and smoke from the RIG operating area.

8.10 - SAFETY COMMITTEE

Purpose:

To minimize health risks and safety hazards.

References:

WAC 296-305-1505

WAC 296-305-1507

WAC 296-24-045

Safety Committee:

The Safety Committee shall be composed of three (3) representatives grouped as follows:

- One (1) member selected by the Department Chief.
- Two (2) elected representatives of the Department.

The number of employer-selected members shall not exceed the number of employee elected members. Elected representative committee members and alternates shall be elected by the members: Members are eligible for consecutive terms. Should a vacancy occur, a new member shall be elected by the representative group prior to the next scheduled meeting.

Duties:

The Safety Committee shall have the following duties:

1. Review safety and health inspection reports to assist in the correction of identified unsafe conditions or practices.
2. Evaluate accident investigations conducted since the last meeting to determine if the cause of the unsafe acts or unsafe condition involved was properly identified and corrected.
3. Evaluate the accident and illness prevention program with a discussion of recommendations for improvement where indicated.
4. Review and evaluate employee written suggestions or complaints.
5. Provide reports including recommendations for increased safety, to the Department Chief.

Chairperson:

1. The Chairperson shall be elected by the committee and shall have the following duties: Prepare and distribute the agenda.
2. Chair the meeting and facilitate discussion.
3. Solicit members to serve on sub-committees and write reports. Record minutes and distribute to committee members.
4. The committee may elect a secretary to take minutes.
5. Minutes of each meeting shall be prepared and distributed to committee members within one week of a meeting for review.
6. Attendance shall be recorded.
7. Subject(s) discussed and action taken on reports and recommendation shall be documented.
8. Minutes from the previous meeting shall be approved by the committee at the next meeting.
9. Approved minutes shall be sent to the Chief or designee for review.
10. After review, approved minutes shall be distributed for posting on safety bulletin boards throughout the Department.

Meetings:

1. The Safety Committee normally is scheduled to meet regularly on the first Monday of January, April, July, and October.
2. The length of each meeting shall not exceed one hour except by majority vote of the committee.
3. The committee shall approve the date, hour, and location of meetings and may change the meeting date, time, and location.
4. In the event of cancellation(s), meetings shall be rescheduled to satisfy a minimum mandatory standard of one (1) hour per calendar quarter.
5. Special meetings may be called at the request of any member by the Department Safety Officer or the Safety Committee Chairperson.
6. All members must be notified of special meeting time, location and purpose.

Agenda Format:

Call to order by Chairperson.

Roll call of members.

Introduction of visitors

Reading, correction, and approval of the minutes of the last meeting

Unfinished business

Reports on matters held over from last meeting.

List all corrections and suggestions which have not been acted upon since last meeting New business

Review of accidents, investigations, reports and statistics. Review employee written suggestions or complaints.

Reports by members or sub-committees

Set (confirm) date, time, and location of next meeting.

Adjournment

8.11 - ACCIDENT PREVENTION PROGRAM

Purpose:

Describe the Department's written safety and accident-prevention program.

References:

WAC 296-305-01505: Safety Standards for Firefighters, Accident Prevention Program

Intent:

It is the intent of the Department to provide its members with the safest workplace reasonably attainable under the conditions to which members are or will be exposed.

Written Safety Program Description:

The Department's written safety program includes the following topics, covered by various policies, procedures, standard operating procedures, rules, regulations and training materials:

- General health & safety;
- Personal protective equipment & clothing;
- Emergency medical protection;
- Hazardous chemical protection;
- Respiratory equipment;
- Automotive fire apparatus;
- Fireground operations; Technical rescue operations;
- Training;
- Fire service equipment;
- And Facilities.

Safety Orientation Program:

The Department's safety orientation program includes:

- Injury and exposure procedures, including instruction on the location of first-aid facilities and equipment;
- Reporting procedures for unsafe conditions and practices; The use and care of required personal protective equipment;
- Appropriate actions to take in event of emergencies including building evacuation;

- Identification of hazardous gases, chemicals or materials used by the Department along with instructions on the safe use and emergency action following accidental exposure;
- A description of the Department's safety program;
- An on-the-job review of the practices necessary to perform initial job assignments in a safe manner.

Safety Committee:

The Department's safety committee shall serve in an advisory capacity to the Fire Chief (see SOP 10). Employees may submit written suggestions or complaints to the safety committee.

Facility Inspections:

Inspections of fire stations and other facilities shall be made routinely and records maintained to ensure that stations are reasonably free of recognized hazards.

8.12 - SAFETY OFFICER

Purpose:

To establish the duties and responsibilities of the Department Safety Officer

References:

WAC 296-305-01507, Safety Standards for Firefighters, Fire Department Safety Officer NFPA 1521, Fire Department Safety Officer, 1997-Edition

Procedures

General:

The DSO shall report directly to the Department Chief or to the Department Chief's designated representative.

Additional assistant safety officers may be appointed.

The Incident Command shall have ultimate responsibility for incident scene safety. Qualifications of the DSO

The DSO shall have and maintain knowledge of:

- Current applicable laws, codes, and standards regulating occupational safety and health for the fire service.
- Occupational safety and health hazards involved in emergency operations.
- Current principles and techniques of safety management.
- Current health maintenance and physical fitness issues that affect fire service members.
- Infection control practice and procedures.

Authority:

The DSO, through the fire chief, shall have the authority and responsibility to identify and recommend correction of safety and health hazards and act on all matters relating to the operation and administration of the Accident Prevention Program.

The DSO has the authority to bring notice of hazards, unsafe conditions, unsafe acts, or unsafe practices to whoever has the ability to cause correction.

The DSO shall maintain a liaison with staff officers regarding recommended changes in equipment, procedures, and recommended methods to eliminate unsafe practices and reduce existing hazardous conditions.

Duties and Responsibilities:

The duties and responsibilities of the DSO shall include, but are not limited to:

- Manage the accident prevention program.
- Plan and coordinate safety activities.
- Be a member of the safety committee.
- Ensure all occupational injuries, illnesses, exposures, and fatalities, and all accidents involving fire Department strict vehicles, apparatus, equipment, or facilities are investigated.
- Devise corrective measures to prevent accidents.

Realizing safety training and record keeping are management's responsibility, the DSO shall ensure the following requirements are being met:

- Safety training is provided for all employees.
- Safety directives are enforced by supervisors and are complied with.
- Records are maintained of, but not limited to, the following:
 - Accidents
 - Injuries Inspections
 - Exposures
 - Medical Monitoring
 - Safety meetings Apparatus
 - Equipment Protective clothing
 - Other fire department safety activities.

8.13 – SAFETY MANAGEMENT'S RESPONSIBILITY

Purpose:

To describe the responsibility of management within the safety program.

Reference:

WAC 296-305-01509, Safety Standards for Firefighters, Management's Responsibility.

General:

The Department shall establish, supervise, maintain, and enforce in a manner that is effective:

- A safe and healthful working environment, as it applies to non-combat conditions or to combat conditions at a fire scene after the fire has been extinguished, as determined by the officer in charge.
- An accident prevention program.
- Programs for training employees in the fundamentals of accident prevention.
- Procedures used by the Department Safety Officer and Incident Commander to ensure emergency medical care is available for members on duty who become ill or injured.
- An accident investigation program.

The Department shall be responsible for providing suitable expertise to comply with all testing requirements

contained in WAC 296-305, Safety Standards for Firefighters. Such expertise may be secured from within the Department, from equipment and apparatus manufactures, or other suitable sources.

Members who are under the influence of alcohol or drugs shall not participate in any fire department operation or other function. This rule does not apply to persons taking prescription drugs as directed by a physician or dentist providing such use does not endanger the member or others.

Alcoholic beverages are not allowed on Department property or in or on Department vehicles.

The use of tobacco products inside Department facilities or in or on Department vehicles is not allowed.

A Safety Bulletin Board used exclusively for safety and health related information shall be provided in all Department facilities in compliance with applicable safety regulations (See SOP 220 - Safety Bulletin Board) The Department shall maintain a hazard communication program as required by Chapter 296-62 WAC, Part C, which will provide information to all members relative to hazardous chemicals or substances to which they are exposed, or may routinely be exposed to, in the course of their duty.

The Department shall assure that members who are expected to do interior structural firefighting me physically capable of performing duties that may be assigned to them during emergencies.

The Department shall not permit members with known physical limitations reasonably identifiable to the Department, for example, heart disease or seizure disorder, to participate in emergency activities unless the member has been released by a physician to participate in such activities.

8.14 - MEMBER'S RESPONSIBILITY

Purpose:

To describe the responsibility of Fire Department members, paid and volunteer, within the safety program.

Reference:

WAC 296-305-01511

Incident Response Pocket Guide, NWCG, January 2004.

General:

Members shall cooperate with the Department and other each other in efforts to eliminate accidents.

Each member shall comply with the provisions, policies, procedures, and guidelines of the Department and the provisions of WAC 296-305 that are applicable to his/her own actions and conduct in the course of his/her duty.

Each member will adhere to and operate within the Fire Department's Emergency Risk

Management Policy:

- Significant personal risk may be incurred to save a human life,
- Reasonable personal risk may be incurred to save significant property,
- Minimal personal risk may be incurred if neither human life nor significant property is at risk.

Each member has the responsibility to develop and maintain situation awareness and utilize the risk management process for every tactical assignment (See Incident Response Pocket Guide, page I).

1. Members shall immediately notify their immediate supervisor of unsafe work practices and of unsafe of equipment, apparatus, or work places.

2. Members shall apply the principles of accident prevention in their work. They shall use all required safety devices, protective equipment, and safety practices, as provided and/or developed by the Department.
3. Each member shall take proper care of all personal protective equipment.
4. Members shall attend required training and/or orientation programs designed to increase their competency in occupational safety and health.
5. Members who are under the influence of alcohol or drugs shall not participate in any fire department operations or other functions. This rule does not apply to persons taking prescription drugs as directed by a physician or dentist provided such use does not endanger the member or others.
6. Members shall not bring alcoholic beverages onto Department property or in or on Department vehicles. Tobacco products shall not be used inside Department facilities or in or on Department vehicles.
7. Members are responsible to follow procedures regarding the posting of Department information and maintain posting locations in a clean and orderly condition.
8. Members shall review all posting periodically to ensure they have current information distributed by the Department.

8.15- SAFE PLACE STANDARD

Purpose:

To establish procedures to maintain a safe workplace standard

Reference:

WAC 296-305-01513

Definitions:

General

The Department shall furnish and require the use of appropriate safety devices and safeguards for all their members and employees. All firefighting methods and operations shall be so designed as to promote the safety and health of members and employees. The Department shall do everything reasonably necessary to protect the safety and health of members and employees.

No member or other employee shall:

Remove, displace, damage, destroy or carry off any safety device, safeguard, notice or warning furnished for use in any employment or place of employment.

Interfere in any way with the use of any safety device, method or process adopted for the protection of any member or employee.

Any unsafe condition shall be immediately reported to the immediate supervisor. Prompt action shall be taken by the supervisor to eliminate the hazard. Hazards which cannot be eliminated shall be reported to the Duty Chief.

Any observed unsafe act shall be immediately corrected by the immediate supervisor. Department facilities and equipment shall be maintained so as to promote safety.

8.16 - SAFETY COMMUNICATION

Purpose:

When a member observes a safety or circumstance that cannot be immediately corrected, and/or authority to correct the problem or circumstance is not sufficient, the following process shall be used to communicate the issues up through the chain-of-command until the problem reaches a level in the organization that has the authority to solve the problem.

Describe the Problem and Recommend a Solution:

Describe the safety problem and any circumstances that may be contributing to the problem.

Example: There is a slipping hazard at station X in the apparatus bay that is caused by personnel not removing standing water from the floor after washing apparatus. Some personnel have been reminded several times to mop up water but are not consistently doing so.

List any WAC's, Department SOP's or other applicable standards that apply. Example:
WAC296-305-055C9(3) states that the floor shall be kept free of water.

List and evaluate options to mitigate or resolve the safety problem:

Example:

- 1) Provide a reminder to all personnel to keep the water off of the floors. This has no cost and is easy to do, but it has already been done numerous times and is apparently not sufficient motivation for some members to ensure compliance.
- 2) Hold firefighters and supervisors accountable for failure to keep water off the floors. No cost, easy to implement and should motivate those members who need it. Will likely create short-term unhappiness and could result in discipline of some members.

Recommend the preferred alternative:

Example: implement both options 1 and 2.

Forward up the Chain of Command:

Each officer up the chain of command is responsible to review the report for clarity and completeness. If Jacking, return the report back down the chain of command and have it rewritten until clear and complete information is obtained. If a receiving officer can take appropriate action to resolve the problem they are to do so, however the report must be forwarded on to the Department Safety Officer (DSO) for review and possible additional action. If the officer cannot resolve the problem they are to append their recommendation and forward up the chain of command to the DSO.

The Department Safety Officer is responsible for reviewing and handling safety communication reports. The DSO can take action to resolve the problem, request involvement from the safety committee to resolve the problem, or forward the problem and recommended action to the Department Chief for resolution.

Safety Committee Involvement and Approval of the Department Chief:

Action recommended by the safety committee and approved by the Department Safety Officer will be forwarded to the Department Chief for final resolution.

8.17 - DRIVER ELIGIBILITY and TRAINING

Purpose:

To describe minimum driver eligibility requirements and procedures used to determine eligibility and minimum driver/operator training requirements.

Definitions:

Driver: Any person who is in actual physical control of a Department vehicle.

EVAP Program: A training program meeting the requirements described in the Washington State Emergency Vehicle Accident Prevention (EVAP) Standard, March 2000; including classroom, rodeo and road test components.

Minimum Requirements:

New and existing members shall meet all of the following minimum requirements to be eligible to drive and operate Department vehicles:

- Be at least 18 years of age.
- Possess a valid Washington State Driver's License.
- Meet medical requirements set forth for career and volunteer firefighters respectively.
- Be fully insurable under the comprehensive liability insurance program covering the Department as approved by the Board of Commissioners.
- Obtain and maintain Department EVAP certification.
- Complete prescribed Department training requirements for apparatus operation.
- A valid WA State Driver's License is a condition of employment for all employees and volunteers.

Duty to Report:

Members are responsible to report any suspension or revocation of their Suspension or Washington State Driver's License to the Fire Chief within 72 hours or the Revocation of next working shift.

Driver's License:

ANNUAL DRIVER LICENSE VERIFICATION

Members will present upon request a valid Washington State Driver's License for inspection and photocopying by the Department.

Each member will sign a release authorizing the Department to request and review their Motor Vehicle Report annually or more frequently at the discretion of the Fire Chief.

DEPARTMENT REVIEW OF DRIVING RECORD

Each new employee and volunteer is required to:

- Provide a current Abstract of Complete Driving Record, or
- Complete appropriate request forms authorizing the Department to obtain a complete driving record.
- Applicants not licensed by Washington State for the past three years may be required to provide driving records from the previous state(s) in which they had a driver's license.

THE FINAL DECISION REGARDING DRIVING RECORD "ACCEPTABILITY" RESTS WITH THE FIRE CHIEF.

EVAP Training

The Department recognizes and conducts EVAP training that meets or exceeds the requirements of the current Washington State Emergency Vehicle Accident Prevention (EVAP) Standard.

EVAP Certification is dependent upon:

- Passing the EVAP final written test with a score of at least 80% correct; and
- Demonstrating proficiency on a Department approved rodeo exercise; and
- Demonstrating proficiency on a Department approved road test.

The rodeo exercise and road test must be performed utilizing the vehicle or a vehicle of similar type, weight, wheelbase and function as normally driven by the operator.

Student drivers may only operate Department vehicles while under the direct supervision of a qualified driver.

Drivers successfully obtaining Department EVAP Certification shall have a line added to their Department ID card with the statement "EVAP Certified".

EVAP Annual Refresher Training

Each driver is required to maintain EVAP Certification by:

- Passing a written quiz (minimum score of 80% correct) on driving laws, rules, and procedures; and
- Demonstrating proficiency in the Department EVAP rodeo course and documenting two (2) hours of road drive time each year; or
- Completing the entire EVAP driver-training program on a four-year cycle.

Members who fail to complete the annual refresher training must repeat the entire EVAP course to maintain certification. Members must obtain the classroom portion on their own time and without compensation or reimbursement by the Department.

All EVAP training and driver/operator training shall be reported to the Training Division following Department procedures.

Leave of Absence

Drivers returning from a Leave of Absence (LOA) longer than six (6) months must re-certify by demonstrating proficiency in the department EVAP rodeo course and then documenting two (2) hours of road drive time on apparatus they were previously qualified to operate.

8.18 - SAFETY BULLETIN BOARD

Purpose:

To describe procedures for posting safety and health related information on Department safety bulletin boards.

Reference:

WAC 296-305-01509 (5)

Safety and Health Bulletin Board:

A Safety Bulletin Board exclusively for safety and health information shall be provided and maintained in Department facilities. It shall be large enough to display the following required safety and health posters:

- Washington Department of Labor and Industries
 - Notice to Employees
 - off a Job Injury Occurs
 - Job Safety and Health Protection
 - Your Rights as a Non Agricultural Worker
 - Washington Law Prohibits Discrimination in Employment
- Washington Employment Security Department
 - Notice to Employees - Unemployment Benefits
- U.S. Department of Labor
 - FLSA Minimum Wage Poster (overlaid by Washington Minimum Wage)
 - Employee Polygraph Protection Act
 - Family Medical Leave Act of 1993
- U.S. Equal Employment Opportunity Commission
 - Equal Employment Opportunities in the Law

Safety Committee Meeting Minutes, Posting and Retention

1. Minutes of Safety Committee meetings shall be posted on the Safety Bulletin Board after approval by the Department Chief.
2. Minutes are to remain posted for a minimum of three months after which they may be removed. The Department Safety Officer shall maintain a file of copies of safety committee meeting for at least one year.

Annual Work Related Injury/Illness Reporting Posting:

The Department Safety Officer shall post on the Safety Bulletin Board in the designated location the annual Summary of Work Related Injuries and illnesses from February 1 through April 30th.

Safety Bulletin Posting and Review:

Safety Bulletins shall be posted in the designated location on the Safety Bulletin Board.

Safety bulletins are to remain posted for a minimum of three months, after which they may be removed. The Department Safety Officer shall maintain a file of copies of safety bulletins for at least one year.

Station Officer and Firefighter Responsibility:

It is the responsibility of the station officer receiving safety minutes or safety bulletins to make a notation in the station log and to immediately post the documents on the Safety Bulletin Board in the designated location.

Station Captains are to ensure the Safety Bulletin Board is maintained in a neat, orderly, and clean appearance and that posted documents are intact and legible. If documents need replacement, contact the Department Safety Officer.

Members shall review the Safety Bulletin board each time they are on duty to ensure new safety information is not overlooked.

Layout of Safety Bulletin Board

Each poster is 8 W" x 11". Entire space is 44" x 31". Bold == Required Poster:Green boarder (green tape) surrounds he entire safety portion of the bulletin board

**SAFETY/ HEALTH BULLETIN BOARD
FOR THE EXCLUSIVE POSTING OF SAFETY AND HEALTH RELATED ITEMS**

Unemployment Poster	FLSA Federal Minimum Wage overlaid by Washington Minimum Wage	Family & Medical Leave Poster	SA F E T Y I N F O R M A T I O N
			EAP Brochures (406 on a clip)
If Job injury Occurs Poster	Job Safety and Health Protection Poster	Rights of Non-Agricultural Workers Poster	SAFETY MEETING SAFETY MINUTES BULLETINS
Equal Opportunity Employment Poster	Polygraph Protection Act Poster	Washington Law Prohibits Discrimination in Employment	

8.19 - RESPIRATORY PROTECTION PLAN

RESPIRATORY PROTECTION PROGRAM ADMINISTRATION AND EVALUATION

Purpose:

To describe the scope, administration and personnel responsibilities of the Department's Respiratory Protection Program.

References:

- WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment Protection
- WAC 296-62: General Occupational Health Standards, Part E Respiratory Protection

Definitions:

PLHCP: Physician or licensed healthcare professional.

Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.

Scope:

The Department's Respiratory Protection Program includes the following SOPs (along with their referenced forms, job sheets, skill sheets and other materials):

- SOP-19: Respiratory Program Administration and Evaluation
- SOP-20: Medical Evaluation for Respirator Use
- SOP-21: Respirator Fit Testing
- SOP-22: Respirator Training
- SOP-23: Respirator Use
- SOP-24: Care, Inspection and Maintenance of Respirators
- SOP-25: Fill Station Procedures and Air Quality

Department Responsibilities:

The Department's written respiratory protection program includes the general requirements outlined in WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment Protection.

The Department provides:

- An adequate number and size of respirators on Department apparatus for Department personnel to use during the performance of their duties.
- Training for the proper use of respirators and respiratory equipment when such equipment is necessary to protect the health of the employee.
- Respirators that are applicable and suitable for the purpose intended.

The Department Safety Officer shall:

- Supervise and administer the Department's Respiratory Protection Program.
- Use a physician or licensed health care professional (PLHCP) to determine whether or not a member is medically fit to be assigned to a task requiring the use of a respirator.
- Appraise the effectiveness of the respirator program at least annually and take appropriate action to correct identified defects found in the program. Annual program evaluation includes, but is not limited to the following:
 - Surveying the workplace to verify the current written program is protecting members from identified respiratory hazards.
 - Ensuring that requirements of the current written program are carried out.
 - Reviewing the respiratory training program to ensure relevancy, sufficiency and effectiveness.
 - Ensuring that immediate supervisors are enforcing procedures requiring the use of respirators.
 - Querying personnel to obtain their views on the program's overall effectiveness including respirator "fit", selection and maintenance.

Member Responsibilities

Every member/employee, who uses a respirator, is required to participate in the Department's respiratory medical evaluation program.

Members using respirators shall:

- Attend required training sessions and demonstrate acceptable knowledge and skill proficiency whenever tested.
- Maintain a level of respirator use proficiency expected by the Department.
- Use only the make, model, and size respirator for which they have passed a fit test within the last twelve months.
- Select and use provided respirators in accordance with procedures, instructions and training received.
- Inspect respirators and respiratory equipment on assigned apparatus when coming on duty, and perform any needed cleaning, refitting, or routine maintenance.
- Complete required inspection/maintenance forms and logs, and inform their officer that the equipment is "In-service" or "out-of-service".

Company officers are responsible and accountable for the condition and maintenance of respirators and respiratory equipment on apparatus and shall ensure subordinates select and correctly use appropriate respirators when such use is necessary to protect the health of members.

Do not modify respirators and respiratory equipment in any way without Support Services' recommendation and Department Safety Officer approval.

Support Services shall:

- Purchase and procure respirators and respiratory equipment.
- Maintain an inventory of respirators and respiratory equipment.
- Repair respirators and respiratory equipment as requested.
- Perform technical preventative maintenance on respirators, respiratory equipment, fill stations, and cascade systems.
- Ensure that SCBA cylinders and cascade cylinders receive hydrostatic tests as required.
- Maintain and review inspection, use, preventative maintenance, and repair records of respirators, respiratory equipment, fill stations, and cascade systems.

Training Officer Responsibilities:

The Training Officer is responsible to ensure that;

1. All members receive sufficient training to maintain demonstrated proficiency in the selection and operation of respirators and respiratory equipment they may be required to use.
2. Quarterly testing is conducted to ensure proficient donning of SCBA.
3. All members receive annual review training and testing on their knowledge and use of respirators and respiratory equipment selection, operation, maintenance, and safety considerations.
4. Training records are maintained.

EMS Coordinator Responsibilities:

1. The Department EMS Coordinator is responsible to ensure that:
2. New members receive and pass fit testing prior to wearing respirators in the workplace.
3. All personnel receive annual required respirator fit testing as scheduled or, if by make-up testing, in a timely manner
4. Fit test equipment is used and maintained according to manufacturer requirements.
5. Annual fit test records are maintained.

8.20 - MEDICAL EVALUATION FOR RESPIRATOR USE

Purpose:

To describe the requirements and procedures for members that use respirators in the workplace to participate in medical evaluation.

References:

WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment Protection WAC 296-62: General Occupational Health Standards, Part E, Respiratory Protection Forms
 Medical Respiratory Evaluation -Required Information Report of Medical Evaluation for Respirator Use
 OSHA Respirator Medical Evaluation Questionnaire (Mandatory) [provided by PLHCP]

Definitions:

PLHCP: Physician or licensed health care professional.

Medical Evaluations for Respirator Use Required

Before a member is fit tested or required to use a respirator in the workplace, the Department shall provide for and ensure that a respiratory medical evaluation is conducted to determine the member's ability to use a respirator.

A *Respirator Medical Evaluation Questionnaire* shall be completed by the member for review by the Department designated physician or licensed health care professional (PLHCP).

The Department has one designated PLHCP provider:

Occupational Medicine Associates, 323 East Second Street, Spokane WA, 99202 is the current PLHCP who will review and evaluate career personnel respirator questionnaires.

The Department reserves the right to add or change providers.

The Department shall provide the PLHCP:

- A copy of WAC 296-62, Part E, Respiratory Protection.
- A copy of the Department's respiratory protection program.
- Information on the type of respirators used to include:
 - Weight of respirator.
 - Frequency of use.
 - Expected physical work effort.
 - Duration of use.
 - Additional PPE to be worn.
 - Temperature and humidity extremes that may be encountered.

Members shall complete the Department provided questionnaire or a questionnaire provided by the PLHCP. The PLHCP may elect to use their own internal questionnaire as long as it meets the requirements of WAC 296-62; and additionally may modify the questionnaire as allowed for in Part B (PLHCP Discretionary Questions). The questionnaire shall be administered:

- Confidentially - the Department shall not review the content of a member's medical questionnaire at any time.

- During the member's normal working hours or at a time and location convenient to the member.
- In a way that ensures the member understands its content.

Members shall be provided an opportunity to discuss the questionnaire and examination results, if any, with the PLHCP.

Follow-up evaluations and/or examinations necessary to make a final determination of medical qualification to wear a respirator shall be at the discretion of the PLHCP.

A written recommendation from the PLHCP regarding the member's ability to use the respirator must be obtained and filed in the member's confidential medical file. The recommendation must provide only the following information about the member:

- Any limitations on respirator use related to the medical condition of the member, or relating to the workplace conditions in which the respirator will be used, including whether or not the member is medically able to use the respirator.
- The need, if any, for periodic future medical evaluations.
- A statement that the PLHCP has provided the member with a copy of the PLHCP's written recommendation.

A member may have future respiratory medical evaluations if:

- The respiratory questionnaire is part of scheduled medical evaluations required by the Department.
- To include fitness for duty exams for career members.
- The PLHCP recommends the member be evaluated at a set interval.
- The member reports physical or physiological changes, or signs or symptoms that may have an effect on the ability to use a respirator.
- A supervisor or a staff officer observes physical changes or signs or symptoms that may have an effect on the member's ability to use a respirator.
- A change occurs in the workplace conditions that may result in an increased physiological burden.

If a member has a previous respiratory medical evaluation from a fire service agency, the Department may rely on that respiratory medical evaluation if:

- A copy of the written recommendation is provided to the Department.
- The previous working conditions are substantially the same.

If/when a member is no longer required to use a respirator, the Department may discontinue respiratory medical evaluations.

8.21 - RESPIRATOR FIT TESTING

Purpose:

To describe fit test procedures for members who may be required to wear respirators while performing their duties.

References:

WAC 296-305-0400 I: Safety Standards for Fire Fighters, Respiratory Equipment Protection
WAC 296-62: General Occupational Health Standards, Part E, Respiratory Protection

Forms

Job Sheet: Respirator Fit Test Procedure (Porta-Count)

The Rainbow Passage, Fairbanks, G. 1960 "Voice and Articulation Drill Book" Harper & Row, New York.

Fit Test Report

Definitions:

Fit factor: A quantitative estimate of the fit of a particular respirator face piece to a specific individual, and typically estimates the ratio between the measured concentrations of a substance in ambient air to its concentration inside the respirator when worn.

Fit test: The use of an accepted protocol to qualitatively or quantitatively evaluate the fit of a respirator face piece on an individual.

Quantitative fit test (QNFT): An assessment of the adequacy of respirator face piece fit for and individual by numerically measuring the amount of leakage into the respirator.

Fit Testing Required

Each new member shall be fit tested before acceptance and before being permitted to use respirators in a hazardous atmosphere. Only members with a properly fitting respirator face piece shall be permitted by the Department to function in a hazardous atmosphere with respirators.

Fit testing shall be repeated:

- At least once every twelve months.

- Whenever there are changes in the type of SCBA or respirator face piece used.

- Whenever there are significant physical changes in the user such as weight changes of ten percent or more, scarring of face seal area, dental changes, cosmetic surgery, or any other condition that could affect respirator fit of the face piece seal.

Quantitative Fit Testing

The Department has chosen to use a WISHA-accepted quantitative fit test (QNFT).

EMS Coordinator Responsibilities

The Department EMS Coordinator is responsible to:

- Fit test new members (prior to wearing respirators in the workplace).

- Provide annual required respirator fit testing as scheduled and for timely make-up testing.

- Maintain respirator fit test records.

- Train an adequate number of personnel to administer respirator fit testing.*

Fit Testing Schedule

All personnel will be tested in January of each year.

Makeup tests will be scheduled and conducted as soon as possible for personnel absent on the scheduled test date(s).

New members who have been fit tested and accepted will not need to be tested again with their assigned group as long as the interval between subsequent tests is not more than 1 year.

Respirators Provided by the Department

The Department utilizes two (2) tight-fitting respirators for member use. Fit testing is required as follows:

Positive pressure demand self-contained breathing apparatus (SCBA):

MSA Firehawk.

O Fit testing is required for all suppression members.

HEPA filter mask: Different brands of N-95, N-100, P-95, or P-100 masks are available for fit testing. Masks are issued to each member after the correct size and brand are determined by fit testing.

O Fit testing is required for all suppression members.

Fit Test Procedure

Fit testing shall be done according to the protocol contained in the *Job Sheet: Respirator Fit Test Procedure (Porta-Count)*.

Pass/Fail Criteria

Full face piece (SCBA) minimum passing fit factor is 500.

Fit Test Records

Respirator fit test records shall include:

Written guidelines for the test including pass/fail criteria.

Type of respirator tested including manufacturer, model and size. Type of fit test and instrumentation or equipment used.

Name or identification of the test operator. Name of person tested.

Date of test. Results of test.

Test result printout signed by the member.

Fit test reports shall be retained for respirator users until after administration of the next fit test. The current printout of each fit test report shall be filed alphabetically by member name and retained by the Deputy Chief.

Any test that results in a failure to pass will be saved, printed and filed as above with a RED mark in the upper right-hand corner. A hand written notation shall be made on the printout indicating the probable cause of the test failure.

The fit test report must be signed and dated by the test administrator and the member tested. Participation in fit testing is also documented training

8.22 - RESPIRATOR TRAINING

Purpose:

To describe minimum training required for Department personnel using respirators.

References:

WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment Protection WAC 296-62: General Occupational Health Standards, Part E, Respiratory Protection

Training Required for All Respirators: All members using respirators, including supervisors and persons issuing respirators must be trained by qualified persons to:

Recognize medical signs and symptoms that may **limit** or prevent the effective use of respirators and the importance of medical evaluation by a Physician or Licensed Health Care Professional (PLHCP).

Identify respirators provided by the Department and their general locations.
Understand the capabilities and limitations of each provided respirator.

Demonstrate the ability to evaluate respiratory hazards by identifying chemical state and physical form.

Recognize and understand Hazmat labels and placards, and use available reference materials such as the current edition of the Emergency Response Guide (ERG) to identify materials and recommended protective reactions.

Understand when an atmosphere should be considered Immediately Dangerous to Life and Health (IDLH) and Self-Contained Breathing Apparatus (SCBA) must be used.

Identify additional factors to consider when selecting a respirator for use.
Understand the importance of a proper fit when using respirators.

Identify factors which may interfere with a seal on a tight-fitting face piece.

Identify how improper fit, use or maintenance can compromise the protective effect of the respirator.

Demonstrate how to inspect, don, check for a seal and doff the respirator.
Demonstrate how to clean and sanitize respirators or properly dispose of respirators.
Demonstrate how to maintain (or request maintenance) and store respirators.

Identify situations where controlled breathing techniques are required to conserve air supply.
Demonstrate controlled breathing techniques used to conserve air supply.

Additional Minimum Training Required for SCBA Respirators:

Additional training for all members using SCBA shall include the following:

Identify the specific reasons for the need to wear SCBA.

Identify the components of the SCBA, including the safety features.

Identify the purpose and demonstrate the use of the integrated Personal Alert Safety System (PASS) device.

Identify the specific reasons for needing the Rescue Air Kit (RAK).

Identify the components of the RAK, including the 30-minute 2216 psig carbon wrapped bottle. Demonstrate how to change an air bottle.

Demonstrate how to use the emergency features such as the by-pass valve, buddy breathing, and the Universal Air Connection (UAC) during a malfunction or depleted air supply.

Demonstrate skill proficiency, as required by the Department, in donning an SCBA each quarter.

Demonstrate how to change an air bottle on the RAK.
Demonstrate how to utilize the Rescue Air Kit in buddy breathing.

Additional Training for HEPA Respirators:

Additional training for all members using HEPA respirators shall include the following:

Identify the specific reasons for the need to wear HEPA masks.

Identify how to tell when a HEPA mask should be discarded and replaced.

Demonstrate skill proficiency in donning and doffing HEPA masks.

Annual Testing Required:

All members shall be tested annually on SCBA and HEPA respirators. Annual testing shall be administered in the same month as fit testing. Makeup testing will be scheduled and conducted as soon as possible for personnel absent on the scheduled test date(s).

Testing, to the Department's standards, shall generally include knowledge of the respiratory protection equipment being used; including selection and limitations, operation, safety considerations, donning and doffing procedures, and inspection and maintenance procedures.

The training officer will maintain test banks and skill test sheets and ensure that required testing is conducted and that test result records are maintained.

Retraining:

Retraining must be completed when the following occur:

1. Changes in the workplace or the type of respirator render previous training obsolete or incomplete.
2. The member's knowledge or use of the respirator indicates that the member has not retained the knowledge or skill required.
3. After an extended leave of absence of six (6) months or more.
4. Any other situation that arises indicating retraining may be necessary.

Training Records:

Respirator shall be recorded on a Training *Activity Report*

Training documentation, including written test scores and pass/fail skills test results must be recorded to support the ability to generate reports showing members qualified by training and annual testing to use:

SCBA. HEPA. SAR.
SCBA using inline adapter

8.23 - RESPIRATOR USE

Purpose:

To describe the procedures to be followed when using respirators

References:

WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment Protection
WAC 296-62: General Occupational Health Standards, Part E, Respiratory Protection

Definitions:

Tight fitting face piece: A respiratory inlet covering that forms a complete seal with the face.

User Seal Check: The specific technique for positive pressure respirators and negative pressure respirators used to verify an adequate seal each time it is put on.

General Requirements for Using Respirators:

All members shall comply with the requirements of the following SOPs before using a respirator:

SOP-20, Medical Evaluation for Respiratory Use.
SOP-21, Respirator fit testing.
SOP-22, Respirator training.

Members shall use only respirators they have been fit tested for.

Respirators shall be selected for use based on an evaluation of the known or suspected respiratory hazards present. The respirator selected must be adequate to protect the health of the user.

Supervisors are responsible to monitor the working environment and degree of subordinate exposure or stress. When there is a change that may affect respirator effectiveness, the supervisor must reevaluate the continued effectiveness of the respirator.

When wearing a respirator in a hazardous atmosphere, members must immediately leave the hazardous atmosphere if they experience the following:

- Vapor or gas breakthrough (odor, eye irritation, metallic taste, etc.).
- Changes **in** breathing resistance.
- Leakage into the face piece.
- Severe discomfort associated with wearing the respirator.
- Illness or sensations of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever and chills.

Additional Requirements When Using a "Tight-Fitting" Face Piece:

Facial hair (stubble, moustache, sideburns, portions of a beard, low hairline, bangs, long hair) that

comes between the sealing periphery of the face piece and the face or interferes with the valve function of SCBA, or any respirator is not permitted.

Wearers of a respirator shall not wear contact lenses if the risk of eye damage is increased by their use.

If a spectacle, goggle, or face shield must be worn with a face piece, it shall be worn so as to not adversely affect the seal of the face piece to the face. Only spectacle kits provided by the manufacturer shall be used with SCBA face pieces.

Eye glass straps or temple bars shall not pass between the seal or surface of the respirator and the user's face.

Any condition that interferes with the face-to-face piece seal or valve function that cannot be immediately corrected will disqualify that respirator from being used in a hazardous atmosphere.

Members are required to perform a user seal check each time they put on the respirator.

Members using a properly functioning respirator shall not compromise the protective integrity of the face piece by removing the face piece for any reason while in a hazardous atmosphere or in an atmosphere where the quality of air is unknown.

Precautionary decontamination shall be initiated prior to removal of the respirator face piece whenever emergency scene activities result in suspected contamination with hazardous substances.

Self-Contained Breathing Apparatus (SCBA):

SCBA shall be worn and used by all members when working in an IDLH, or potentially IDLH atmosphere. In addition, SCBA shall be worn when investigating any report of smoke or visible flame inside a building, vehicle, or any enclosure, including dumpsters. The face piece shall be donned and operating "on air" prior to:

Entering areas with visible smoke.

Opening any appliance, enclosure or hidden space when the presence of fire is suspected.

The integrated PASS device shall be checked and verified as operating properly prior to entering a hazardous atmosphere.

If the service life of the SCBA air supply is greater than fifteen minutes, it may be used to enter an IDLH atmosphere from the self-contained air supply, provided that not more than twenty percent of the noted air supply is used during entry.

Members using SCBA shall operate in teams of two or more.

Members shall not remove SCBA until the atmosphere has been determined to be safe. Such determination shall be made by the Incident Commander or Incident Safety Officer.

The exchange of air supply bottles during suppression or overhaul activities shall take place in an uncontaminated atmosphere.

HEPA filter Masks:

HEPA filter masks may only be worn as protection from environments containing particulate materials or as protection from respiratory exposure to airborne pathogens such as tuberculosis. *HEPA filter masks may not be used as protection from gases or vapors.*

Wearing HEPA filter masks during overhaul phases at structure fires must be authorized by the IC and only after atmospheric testing has been conducted to ensure hazardous levels of CO and/or other gases are not present.

HEPA masks worn during overhaul may be disposed of as normal trash.

HEPA masks worn as protection from airborne pathogens such as tuberculosis shall be disposed of as infectious waste.

8.24 - CARE, INSPECTION AND MAINTENANCE of RESPIRATORS

Purpose:

To prescribe procedures for the care, inspection, and maintenance of respirators.

References:

WAC 296-305-04001: Safety Standards for Fire Fighters, Respiratory Equipment
Protection WAC 296-62: General Occupational Health Standards, Part E, Respiratory
Protection

Definitions:

Support Vehicles: Trailers or staff vehicles that respond to support incident activities.

Weekly and After-Use Inspection

The inspection procedure done on a monthly basis and/or after any use and recorded on the appropriate monthly and after- use inspection log.

General Requirements

All suppression personnel trained to use respirators shall use reasonable care when handling the equipment and shall maintain an understanding of the correct inspection, cleaning and storage methods for respirators.

Fire suppression personnel shall not engage in any preventative maintenance and repair of any respirator. Need for any preventative maintenance and/or repair, other than cleaning, shall be directed to Support Services.

All respirators shall be inspected during cleaning and after each use.

HEPA filter masks shall be inspected prior to each use. Soiled HEPA filter masks are to be discarded and a replacement obtained.

In cases where there is a reported failure of an respirator, or the unit needs repair, the unit shall be removed from service, tagged and recorded as out-of- service and set aside for repair by Support Services personnel. Support Services shall be promptly notified following proper procedures

Respirator Inspection Frequency and Documentation:

Monthly Checks Required

SCBA and RAK stored on apparatus, support apparatus or in a station but not on apparatus, shall be inspected monthly.

After Use Checks Required:

Respirators shall be cleaned and inspected after each use. After-use inspections shall be documented on the appropriate after-use log as described in the previous section.

Cleaning and Disinfection of Respirators:

SCBA, including RAK components, shall be cleaned after each use. Face pieces that may be used by more than one member must be sanitized after each use as part of the cleaning process.

HEPA filter masks are considered disposable and soiled masks may be discarded after use.

Storage of Respirators:

Respirators shall be stored to protect against dust, sunlight, excessive heat, extreme cold, excessive moisture, damaging chemicals and physical damage.

SCBA shall be securely mounted in quick release type brackets on apparatus.

Spare SCBA cylinders shall be secured in brackets or tubes.

HEPA filter masks are individually issued and may be stored in a paper bag. Do not use a plastic bag or zip- lock bag as this may trap moisture and encourage the growth of mold and/or bacteria.

Respirator Preventive Maintenance and Repair:

All respirators shall be inspected and tested by Support Services for re- certification in accordance with manufacturer requirements and specifications every 12 months. The 12-month window shall begin from the date of original acceptance inspection and testing.

Support Services personnel conducting scheduled maintenance testing, and repair shall be trained and certified by the manufacturer as repair technicians.

Preventive maintenance shall be carried out annually to ensure that each respirator is clean and in good operating condition. Scheduled preventive maintenance shall follow the manufacturer recommendations and shall include:

- Testing of components.
- Replacement of worn or deteriorated parts.
- Repair as necessary.

Respirators that have been repaired shall be tested before being returned to service.

Record Keeping:

A record of inspection dates, findings and remedial actions shall be kept for each respirator. Such records shall be recorded on Department provided forms and shall include (but are not limited to):

- Daily inspections.
- Monthly inspections.

Scheduled preventive maintenance performed by Support Services. Repairs made by Support Services.

8.25 - FILL STATION PROCEDURES AND AIR QUALITY

Purpose:

To describe procedures used to fill air bottles with safe quality air by using and maintaining Department fill stations and cascade systems.

References:

WAC 296-305-0400 I: Safety Standards for Fire Fighters, Respiratory Equipment Protection

WAC 296-62: General Occupational Health Standards, Part E, Respiratory Protection

ANSI/CGA G7. I: Compressed Gas Association Commodity Specification for Air, 1993

General:

Support Services is responsible to ensure that required maintenance, testing and record keeping are performed and to review all check lists and reports completed by suppression personnel for all Department SCBA, fill stations and cascade systems.

Air Quality Testing

Support Services shall ensure that air samples are taken from fill station cascade systems and tested quarterly. Tested air shall meet the requirements of ANSI/CGA G7.1 - Commodity Specification for Air, with a minimum air quality of grade D, as well as meeting a water vapor level of 24 ppm or less. Records shall be kept of air quality testing.

SCBA, Fill Station and Cascade System Maintenance

The compressor fill station and cascade fill stations shall be maintained according to WAC 296-62-07111 and manufacturer's recommendations. Records shall be kept of all such maintenance.

Cascade system "H" tanks on Rescue 71 shall be hydrostatically tested every 10years.

8.26 - STRUCTURAL PROTECTIVE CLOTHING CLEANING AND MAINTENANCE

Purpose:

To outline procedures for the inspection, cleaning and record keeping of structural protective clothing. These procedures apply to all suppression personnel.

Definitions:

Advanced Cleaning: The thorough cleaning of ensembles or ensemble elements by washing with cleaning agents.

Routine Cleaning:

The light cleaning of ensembles or ensemble elements performed by the user without taking the elements out of service.

Advanced Inspection: The thorough inspection of ensembles or ensemble elements by technically trained

personnel.

Routine Inspection: A superficial inspection of ensembles or ensemble elements by the end user.

Structural Protective Clothing: Includes firefighter turnout clothing, helmet, gloves, hood, and boot.

Record Keeping

Support Services personnel shall maintain a structural protective clothing database to include the following records:

- Person to whom protective clothing is issued Date and condition when issued
- Manufacturer and model name
- Serial number
- Month and year of manufacture
- Date and findings of Advanced Inspections
- Date and findings of Advanced Cleanings
- Reason for Advanced Cleanings and who performed cleaning
- Date of repairs, who performed repair, and description of repair
- Date of retirement
- Date and method of disposal

The database shall be limited to firefighter turnout clothing and helmets manufactured in accordance with NFPA 1971-2007, Standard for Protective Ensembles for Structural Firefighting.

Inspection

Employees are responsible for the care and maintenance of all issued structural protective clothing. Personnel shall conduct a *Routine Inspection* after each use. Any deficiencies noted during a *Routine Inspection* shall be immediately reported to Support Services.

The Department shall conduct *Advanced Inspections* semi-annually. Advanced inspections shall include all structural protective clothing issued by the Department as well as structural protective clothing purchased by individual personnel. Advanced Inspections shall be performed by manufacturer trained and certified personnel. Results of Advanced Inspections shall be forwarded to Support Services for record keeping.

Cleaning:

Routine cleaning shall be performed as needed. Routine cleaning may include brushing away dry debris or gentle rinsing with water. Advanced Cleaning shall occur when clothing is soiled or exposed to products of combustion, known chemicals, and bodily substances. A record of Advanced Cleaning shall be forwarded to Support Services for record keeping. Clothing that is contaminated with tar, oil, or an unknown substance shall be placed out of service, bagged and sent to Support Services.

Protective clothing shall be washed separately from other garments using the turnout washer at Station 71. Non PPE articles of clothing shall not be laundered in turnout washers.

Repair and Disposal:

Repair of equipment manufactured in accordance with NFPA 1971-2007, Standard for Protective Ensembles for Structural Firefighting, shall be performed by the original manufacturer, a certified Independent Service Provider, or manufacturer trained personnel. Repair will usually be limited to

firefighter turnout clothing and helmets. Gloves, hoods, and boots found to be unserviceable shall be disposed of.

8.27 - CONFINED SPACE

Purpose:

The purpose of this procedure is to establish guidelines for conducting confined space rescue operations. Confined spaces include trenches, excavations, deep shafts, tunnels, vaults, storm drains, sewers, piping, wells, water towers, storage tanks, silos, tank trucks, rail car tanks, collapsed structures, or any other location where ventilation and access are restricted by the configuration of the space. These factors may also apply to basements or attics. Confined space incidents may involve injured persons, persons asphyxiated or overcome by toxic substances, cave-ins or fires occurring within the space. Pre-incident planning is an important factor in dealing with these situations.

Tactical Considerations:

The confined space incident is best organized into four phases. The first phase involves fire personnel arriving on scene, initiating command, and performing a size up. The second phase includes pre-entry operations to prepare fire personnel for victim removal. The third phase includes confined space entry operations and victim removal. The fourth phase involves termination of the incident. Command should call for a law enforcement representative if there has been a serious injury or death.

Size Up:

The first phase involves fire personnel arriving on scene, initiating command, and performing a size up. Phase one is divided into a primary assessment and secondary assessment that will be performed. The following procedures should be followed when performing phase one of a confined space rescue.

The Primary Assessment

1. Command should attempt to secure a responsible party or witness to the accident to determine exactly what happened.
2. An immediate assessment of the hazards present to rescuers should be done.
3. Identify any language barriers that may be present between witness(s) and rescuers. If there are language barriers present, command should call for a bilingual individual to assist with communications with witness(s) and/or victims.
4. If no witness is present, command may have to look for clues on the scene that may indicate what has happened.
5. An assessment of the victim(s) should be done to determine how many victims, how long the victims have been down, the mechanism of injury, and the survivability profile of the victim.
6. Command should consider ambient conditions and how they will affect a victim.
7. An early decision must be made as to whether the operation will be run in the rescue or recovery mode.
8. Establish communications with the victim as soon as possible.
9. Locate confined space permit and all other information about the space.
10. Command should consider assigning a public information officer to deal with the victim's family and the news media.

The Secondary Assessment

Command should determine what type of confined space is involved.

1. Identify what types of products are stored in this space.
2. Identify what known hazards are present (mechanical, electrical, etc.).
3. Locate a diagram of the confined space, including entry and egress locations.
4. Identify the structural stability of the confined space.
5. Identify any hazardous materials located in the confined space.
6. Obtain a copy of confined space entry permit.
7. Command should consider the effect of temperature extremes on personnel, and consider early rotation of personnel operating on scene, approximately every 15 to 20 minutes, 30 minutes in the winter.
8. Command should consider if the proper equipment is on-scene to complete the operation. This includes, but is not limited to:
 - Atmospheric monitoring equipment
 - Explosion-proof lighting
 - Explosion-proof communications
 - Supplied air breathing apparatus or remote air Cascade system
 - Victim removal systems/equipment
 - Ventilation equipment with a CFM of 4000-5000 and necessary ductwork

Initial Operations:

The first phase involves fire personnel preparing to enter the confined space. Phase two includes making the general area and rescue area safe, identifying operations groups, and ventilation. The following procedures should be followed when performing phase two of a confined space rescue.

1. Establish a perimeter around the general area. The size of the perimeter should be dictated by the atmospheric conditions, wind direction, structural stability, etc.
2. Stop all unnecessary traffic in the area.
3. Assure vehicles are parked downwind from incident if vehicles are running.
4. Establish ventilation to the general area if necessary.
5. Assign fire personnel or police personnel at perimeter entrance to prohibit entry of unauthorized persons.
6. Assign a Safety Officer responsible for overseeing operations.
7. Assign a Rehab Officer.
8. Assign an Accountability Officer responsible for fire personnel on the scene.
9. Command should assign a Hazard Group to determine exactly what hazards and products are within the confined space. The Hazard Group shall do atmospheric testing in the space to determine oxygen level, flammability, and toxicity.
10. Based on readings, the Hazard Group should advise command of the proper level of personal protective equipment.
11. Any instruments used to monitor the confined space shall have:
 - An audible alarm
 - Be calibrated to 10% of the LEL and of the calibrant gas
 - Have the audible alarm set for 10% flammability range
 - Have the audible alarm set for oxygen at 19.5% and 23.5%
 - Have the audible alarm set for carbon monoxide at 35 ppm
 - Have the audible alarm set for hydrogen sulfide at 10 ppm

12. Any oxygen reading below 12%, command should recognize that the LEL reading will not be accurate.
13. The Hazard Group shall give command atmosphere readings at least every 5 minutes with an announcement of offensive or defensive mode (i.e., rescue or recovery).
14. Utilities, including electrical, gas and water should be secured and locked out. If it is not possible to lock/tagout/blankout the Safety Officer shall post a guard to assure the utilities are not turned on during the operation.
15. Any product that is in or flowing into the confined space must be secured and blanked off if possible. It may be determined that the space must be drained of any product prior to entry.
16. Any manufacturing or processing equipment must be shut down prior to entry. If possible, all equipment should be locked and tagged out and brought to a zero energy state.
17. The structural stability of the confined space should be evaluated. If there is a potential for collapse, appropriate measures must be taken to assure the structural stability of the space.
18. Command should assign a Ventilation Group to establish the proper ventilation of the confined space.
19. The Ventilation Group should consult with Safety Officer and Hazard Group to determine the proper type of ventilation for the space.
20. The Ventilation Group must consider the effects on the atmosphere that positive or negative pressure ventilation will have (i.e. increase or decrease the flammability of atmosphere). It could require both positive and negative ventilation. This will be based on the vapor density or molecular weight of the product.
21. The Ventilation Group may consider negative pressure ventilation if there is only one entry point. Atmospheric monitoring will be required to ensure a nonexplosive environment is present in the exhausted vapor area.
22. The Ventilation Group must also consider the effects the exhaust is having on the operation.

The Hazard and Ventilation Groups are extremely important parts of a confined space operation. Personnel with thorough knowledge of atmospheric monitoring and ventilation technique should staff them.

Entry Operations:

Phase three of the confined space incident involves entry operations. This phase involves the task of removing the victim and 11 associated activities to assist in removing the victim. This phase will be performed the closest available qualified mutual aid resource.

Termination:

Phase four of the confined space rescue is the preparation for and termination of the incident. The following procedures should be followed when performing phase four of a confined space rescue.

1. The Accountability Officer should perform the final personnel accountability report.
2. Fire personnel should remove tools and equipment used for rescue/recovery. If there has been a fatality, the Extrication team may consider leaving tools and equipment in place for investigative purposes.
3. If entry personnel and/or equipment have been contaminated during the rescue/recovery, proper decontamination procedures shall be followed prior to putting the equipment back in service.

4. Secure the scene. Prior to turning the property back over to the responsible party, one final reading of atmospheres shall be taken and recorded.
5. Consider debriefing all personnel.
6. Return to service.

APPENDICES

A.01 Employee's Incident/Near Miss Report
Refer to attached form.

A.02 Supervisor's Incident/Near Miss Report
Refer to attached form.

A.03 Employee Safety Orientation Checklist
Refer to attached form.

A.04 Departmental Safety Training
Refer to attached form.

A.05 Refusal to Seek Medical Care
Refer to attached form.

A.06 Safety Programs by Department
Refer to attached list.

A.07 Hazard Communication Program
Refer to attached program.

A.01 - EMPLOYEE'S INCIDENT/NEAR MISS REPORT

Date: _____

Employees Last Name, First Name, MI

_____, _____

Time of injury, or when pain first noted Location where Injury/Near Miss occurred

1. What were you doing when the incident occurred? *(Please be specific)*

2. Specific body part(s) involved/injured?

3. How did the injury/near miss occur?

4. Was another employee involved? Yes No (Explain)

5. Please list the names of any witnesses:

6. a. What condition of tools, equipment or job site caused or contributed to the accident or near miss?
Be specific. OR None

b. What caused or contributed to above unsafe condition? Check all that apply. Answer only if item 6.a) above applies.

- | | |
|-------------------------------|---------------------------------|
| 1) Defective via normal use | 9. Exposure to heat/cold |
| 2) Defective via abuse/misuse | 10. Poor preventive maintenance |
| 3) Safety inspection failure | 11. Ventilation defect |
| 4) Housekeeping failure | 12. Caused by other employee |
| 5) Illumination defect | 13. Caused by employee |
| 6) Faulty design | 14. Cause other than above |
| 7) Faulty construction | 15. Unable to determine |
| 8) Exposure to corrosion | |

7. a. What did the employee do or fail to do that caused or contributed to the accident or near miss?
Be specific. OR None

b. What caused or influenced above unsafe actions(s)? Check all that apply. Answer only if item a) above applies.

- | | |
|--------------------------------|------------------------------|
| 1) Unaware of hazard | 9. Fatigue influenced action |
| 2) Did not know safe procedure | 10. "Under the influence" |
| 3) Low level job skill | 11. Defective vision |
| 4) Ignored known hazard | 12. Defective hearing |
| 5) Tried to save time | 13. Other physical condition |
| 6) Tried to avoid effort | 14. Cause other than above |
| 7) Tried to avoid discomfort | 15. Unable to determine |
| 8) Illness influenced action | |

8. In your view, what might possibly be done to prevent injuries or near miss incidents of this type?

EMPLOYEE'S STATEMENT: The facts as I have stated them are true to the best of my knowledge.

Signature of Employee: _____ Date of Report: _____

Completed form should be turned in to immediate supervisor within 24 hours

Completed form needs to accompany Supervisor's Report Form

Reviewed by Supervisor: _____ Date: _____

A.02 - SUPERVISOR'S INCIDENT/NEAR MISS INVESTIGATION

Date: _____ REPORT FOR: Near Miss/Injury/Fatality/Property Damage

1. Employee's Last Name First Name MI: _____, _____

2. Department/Division: _____

3. Job Position: _____

4. Incident Date: _____

5. Incident Time: _____

6. OUTCOME: Lost Work Days

of Lost Work Days: _____

Did Employee Seek Medical Treatment? Yes No

Return to Work Authorized: _____

No Lost Work: _____

7. Type of Injury and body parts injured:

8. Accident/Near-Miss Site

9. Specific job being done at time of accident/near miss (example: hooking up of load, loading truck, changing cable, etc.)

10. Check type of accident: Struck by Contact by Trapped in Caught between Same level fall Different level fall
Exposure to Struck against Contact with Caught on Strain/Exertion Other, explain:

11. What occurred? Describe in sequence:
a. Employee's location and position, and what he/she was in:

b. How he/she was doing the task:

c. What occurred to trigger the accident

d. The type of accident and contact agent

e. Give background information. (If necessary)

12. Witness(es) Names

If not City Employee -- Contact Phone Number _____

13. a. What condition of tools, equipment or job site caused the accident/near miss?

14. a. What did the employee do or fail to do that caused or contributed to the accident/near miss? Be specific. OR None or contributed to the accident/near miss? Be specific. OR

b. What caused or contributed to above unsafe condition?

c. What caused or influenced above unsafe action(s)?

Check all that apply. Answer only if item 13. a) applies. Check all that apply. Answer only if item 14. a) applies.

- | | | | |
|--------------------------------|-------------------------------|--------------------------------|------------------------------|
| (1) Defective via normal use | 9. Exposure to heat/cold | 1. Unaware of hazard | 9. Fatigue influenced acti |
| (2) Defective via abuse/misuse | 10. Poor preventive maint. | 2. Did not know safe procedure | 10. "Under the influence" |
| (3) Safety Inspection failure | 11. Ventilation defect | 3. Low level job skill | 11. Defective vision |
| (4) Housekeeping failure | 12. Caused by other employee. | 4. Ignored known hazard | 12. Defective hearing |
| (5) Illumination defect | 13. Caused by employee | 5. Tried to save time | 13. Other physical condition |
| (6) Faulty design | 14. Cause other than above | 6. Tried to avoid effort | 14. Cause other than above |
| (7) Faulty construction | 15. Unable to determine | 7. Tried to avoid discomfort. | 15. Unable to determine |
| (8) Exposure to corrosion | | 8. Illness influenced action. | |

15. What action has been taken () or be taken () to prevent recurrence? (Mark all that apply)

- | | | |
|--|----------------------------------|----------------------------------|
| 1. Reinstruction of person(s) involved | 8. Job safety analysis ordered | 15. Use of safety supplies |
| 2. Reprimand of person(s) involved | 9. Safety guard/device installed | 16. Improved illumination |
| 3. Discipline of person(s) involved | 10. Protective equipt. required | 17. Improved ventilation |
| 4. Preventive instruction of others | 11. Tool/equipt. repair/replace | 18. Standardize job procedure |
| 5. Job reassignment of employee | 12. Improve storage | 19. Reduction of noise/vibration |
| 6. Improved inspection procedure | 13. Eliminate congestion | 20. Better temperature control |
| 7. Improved cleanup procedure | 14. Better design/construction | 21. Correction of other than |

Others: _____

16. Describe details of corrective action taken or planned.

17. Person responsible for planned corrective action:

18. Do you question the validity of this claim: Yes No

19. Investigated by (SIGNATURE and POSITION)

20. Reviewed and approved by _____

Dept. Head: _____ Date: _____

Safety Head: _____ Date: _____

ROUTING: TO SAFETY COMMITTEE CHAIRMAN WITHIN TWO WORKING DAYS.

ACCIDENT/NEAR MISS INVESTIGATION GUIDELINES

1. The purpose of an investigation is to find the cause of an accident or near miss incident and prevent further occurrences, not to fix blame. An unbiased approach is necessary to obtain objective findings.
2. Interview the party(s) involved and available witnesses, as soon as possible, to determine the following:
3. Circumstances preceding and surrounding the incident -- what were underlying and contributing causes, as well as immediate causes.
4. What physical hazards existed at the time of the accident or near miss, such as unprotected openings, poor housekeeping, slippery surfaces, protruding nails, etc.?
5. Were defective tools, equipment or materials provided to workers -- or were they improperly used?
6. Was personal protective equipment not provided, was PPE defective, not used, or used improperly?
7. Did unsafe work practices contribute to the incident, including improper lifting or handling of materials?
8. What safety rules or safety training might have prevented the accident or near miss.
9. What unsafe conditions or unsafe actions were caused by a third party, i.e., other contractors or another firm's employees?
10. If possible, interview involved workers at the scene of the accident or near miss and "walk through" an enactment. Be careful not to repeat the act that caused in injury.
11. Privacy is important during interviews. Interview witnesses one at a time. Talk with anyone who has knowledge of the incident, even if they did not actually witness it. Express sincere appreciation to anyone who helped with the investigation.
12. Record names, addresses and statements of witnesses. Consider taking signed, dated statements if facts are unclear or an element of controversy exists.
13. If a third party or defective product contributed to the incident, save any evidence. It could be critical to the recovery of claim costs.
14. In major incidents, use sketches, diagrams and photos to document details graphically. Take measurements when appropriate.
15. Define corrective action that should be taken to prevent recurrence. Who will be responsible for this action and when must it be completed? Every investigation should include an action plan.
16. Share all incident investigation information with key personnel on the job site.

A.03 - EMPLOYEE SAFETY ORIENTATION CHECKLIST

Instructions: Each employee shall receive a safety orientation before beginning work. This checklist documents that each required item was covered in the orientation. The supervisor is to place a check in each relevant box to indicate that the item was covered. Employees are NOT to sign this form unless all relevant items have been covered and all questions have been answered satisfactorily.

The employee _____ has been:

___ Informed about the elements of the written safety program that outlines the Department's safety efforts.

___ Shown where the Department's safety policies manual is located and has read it.

___ Told who is the Department's safety representative.

___ Told and shown how to report all injuries.

___ Told and shown how to report all hazards to Department management.

___ Shown the location of first aid supplies and who to call for first aid.

___ Shown the location of all exits and the route(s) from the assigned workstation.

___ Told of the Department's Emergency Response Plans and their location and how to use them.

___ Shown how to operate and the location of the Department's fire extinguishers.

___ Shown the location of safety shower, eye wash stations, and emergency lighting.

___ Trained on chemicals hazards according to the Hazardous Communication Program training requirements and:

___ Knows the location of the MSDS binders and program document.

___ Knows how to read labels and use MSDS sheets.

___ Knows generally what kinds of chemicals are used at the Department and their hazards.

___ Knows specifically about the hazards and precautions of the chemicals that the employee will be using.

___ Trained on the safe methods to perform the specific job that the employee is assigned including any hazards associated with that job.

___ Given any personal protective equipment (PPE) required and trained on how to use and care for it. PPE required for this job. List PPE issued _____*

___ Trained on the City's Blood Borne Pathogen (BBP) exposure control plan and:

___ Trained of Department's site specific BBP plan and knows the location of the Department's BBP kits.

The following safety programs DO/DO NOT apply to this employee's assigned tasks (If yes, then the supervisor is to place a check in each box to indicate that the item was covered):

___ Provided any formal training required to do the assigned job such as proper lifting, forklift operation etc. Initial formal training given: _____*

___ Knows that each employee is to fully participate in the Department's and City's on-going safety training programs.

___ Trained on Department's Hazardous Energy Control Program and General Lock-out/Tag-out procedures and:

___ Knows the location of and how to use the Specific Lock-out/Tag-out procedures.

___ Knows the location of and how to use Lock-out/Tag-out devices.

___ Trained on Department's Confined Space Program and the location and use of related equipment.

___ Trained on Department's Fall Protection/ Rescue Program and the location and use of related equipment.

___ Trained on Department's Scaffolding/ Ladder Safety Program and the location and use of related equipment.

___ The signatures below document that the above orientation was completed on the date listed. Both parties accept responsibility for maintaining a safe and healthful work environment.

Date: _____ Supervisor: _____

Date: _____ Employee: _____

A.05 - REFUSAL TO SEEK MEDICAL CARE

DATE OF INCIDENT: _____

EMPLOYEE NAME: _____

SUPERVISOR NAME: _____

BRIEF DESCRIPTION OF
INCIDENT: _____

BRIEF DESCRIPTION OF
INJURY: _____

EMPLOYEE INITIALS: _____ SUPERVISOR INITIALS: _____

After the above-referenced incident, my supervisor:
_____ encouraged me to seek medical care.
_____ I chose not to follow that advice.

EMPLOYEE SIGNATURE: _____ DATE: _____

- Original to Human Resources Director.
- Copy to department file.

A.06 - SAFETY PROGRAMS BY DEPARTMENT

ADMINISTRATION

- Blood-borne Pathogen Exposure Control
- CPR/First Aid Certification

ENGINEERING

- Blood-borne Pathogen Exposure Control
- CPR/First Aid Certification
- Traffic Control/Flagger Certification

FIRE DEPARTMENT

Automotive Fire Apparatus	Hazardous Chemical Protection
Emergency Medical Protection	Health & Safety Program
Emergency Operations	Personal Protective Equipment
Facilities	Respiratory Equipment
Fire Service Equipment	Wildland Fire Fighting

MAINTENANCE DEPARTMENT

- Blood-borne Pathogen Exposure Control
- Confined Space Entry
- Fall Protection/Rescue
- Hazardous Energy Control

POLICE DEPARTMENT

- Blood-borne Pathogen Exposure Control
- CPR/First Aid Certification
- Emergency Vehicle Operation Training
- Firearms Training

WASTEWATER TREATMENT PLANT

- Blood-borne Pathogen Exposure Control
- Confined Space Entry
- Hazardous Energy Control
- Ladder Policy
- Pump Removal Standard Operating Procedure
- Scaffolding Policy

WATER TREATMENT PLANT

Auto-Dialer/Pager System	Hazardous Communication/Material
Blood-borne Pathogen Exposure Control	Hazardous Energy Control
Chlorine Emergency Response Plan	Lab Spill Policy
Confined Space Entry	Ladder Policy
Emergency Response Plan	Personal Protective Equipment
Fall Protection/Rescue	Respirator Program
Glucagon Emergency Kit (for insulin reaction)	Scaffolding Policy
	Substation Safety Policy

A.07 - HAZARD COMMUNICATION PROGRAM

A. City Policy

The City of Davenport Fire Department is committed to the prevention of exposures that result in injury and/or illness; and to comply with all applicable state health and safety rules. To make sure that all affected employees know about information concerning the dangers of all hazardous chemicals used by the City's Fire Department, the following hazard communication program has been established. This written program will be available in the Davenport Fire Station and in City Hall for review by any interested employee.

All work units of the City of Davenport Fire Department will participate in the hazard communication program.

B. Container Labeling

The Fire Chief or his/her designee will be responsible for container labeling procedures, reviewing, and updating. The labeling system used at the City of Davenport Fire Department is as follows:

- Follow all recommendations on the original MSDS
- Label subsequent containers with proper identification markings or signage.

The procedures for labeling of all containers, and reviewing and updating label warnings are as follows:

- The Fire Chief and/or his/her designee shall review and update the label warnings as necessary.
- Information will then be made available to all employees/volunteers prior to use of the product or chemical.

It is the policy of the City of Davenport that no container will be released for use until the above procedures are followed.

C. Safety Data Sheets (SDS)

The Fire Chief is responsible for establishing and monitoring Davenport Fire Department's SDS program. This person will make sure procedures are developed to obtain the necessary SDSs and will review incoming SDSs for new or significant health and safety information. This person will make certain that any new information is passed on to affected employees.

The procedures to obtain SDSs and review incoming SDSs for new or significant health and safety information are as follows:

1. Review new SDSs with those currently on file and replace as necessary.
2. New SDSs will be filed in the SDS binder with the other MSDSs after the proper training and information is performed and the product is placed on the hazardous chemical's list.
3. If no SDS is supplied with a product place a phone call to the manufacturer to obtain a copy or research on the internet at the manufacturer's recommendation. Perform the proper training and information of the product and then list the item on the hazardous chemical list and file in the SDS binder.

Copies of SDSs for all hazardous chemicals in use will be kept in a binder in the Chief's office. SDSs will be made available to all employees during each work shift and training sessions. If an SDS is not available or a new chemical in use does not have an SDS, immediately contact the Fire Chief.

Note: If an alternative to printed Material Safety Data Sheets is used (such as computer data), provide a description of the format and where to find the information.

D. Employee Information and Training

The Fire Chief and his/her designee are responsible for the employee/volunteer's training program. The procedures for how employees/volunteers will be informed and trained are as follows:

1. Each monthly training meeting addresses issues and hazards the department may face and the personnel practice and are trained on those potential incidents.
2. Employees/volunteers will be informed at the beginning of the training meetings of any changes or new information. For those not attending a meeting will get the information from the training information board posted in the Chief's office.

The Fire Chief and his/her designee will make sure that before starting work, each new employee/volunteer of the Davenport Fire Department will attend a health and safety orientation that includes information and training on the following:

- An overview of the requirements contained in the Hazard Communication Standard.
- Hazardous chemicals present at his/her work place.
- Physical and health risks of the hazardous chemical.
- The symptoms of overexposure.
- How to determine the presence or release of hazardous chemicals in his/her work area.
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment.
- Steps the Davenport Fire Department has taken to reduce or prevent exposure to hazardous chemicals.
- How to read labels and review SDSs to obtain hazard information.
- Location of the SDS binder and written hazard communication program.
- An overview of the requirements contained in the Hazard Communication Standard.

Before introducing a new chemical hazard into any section of this employer, each employee/volunteer in that section will be given information and training as outlined above for the new chemical.

E. Hazardous non-routine tasks:

Periodically employees/volunteers are required to perform hazardous non-routine tasks. Non-routine tasks that are performed at the Davenport Fire Department include but not limited to confined space entry. For each response the employee/volunteer will be ready with safety gear to respond to any routine and non-routine tasks to include full turnout gear, gloves, helmet, and SBA system.

F. Multi-employer work places

It is the responsibility of the Fire Chief to provide employers of any other employees/volunteers at the work site with the following information:

- Copies of SDSs (or make them available at a central location) for any hazardous chemicals that the other employer(s)' employee/volunteer may be exposed to while working.
- Inform other employees/volunteers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
- Provide other employers with an explanation of the labeling system that is used at the work site.

It is also the responsibility of the Fire Chief to identify and obtain SDSs for the chemicals the contractor is bringing into the work place.

G. List of hazardous chemicals.

The following table lists all know hazardous chemical used by our employees/volunteers. Further information on each chemical may be obtaining by reviewing SDSs located in the SDS Binder found in the Fire Chief's office.

The criteria (e.g., label warnings, SDS information, etc.) used to evaluate the chemicals are:

1. Identify the product.
2. Determine information on the product by the accompanied SDS.
3. Store or use the product as to the recommendations on the SDS.
4. List the item on the List of Chemicals.
5. File the SDS in the SDS Binder in the Chief's office.

