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CHAPTER 1

CONCEPT AND RESPONSIBILITIES

I. Purpose

The City's Injury & Illness Prevention Program (IIPP) provides the foundation from which each department designs its safety program to address its unique activities. All safety and health policies and procedures, both Citywide and departmental, are to be carefully observed so that employee accidents and injuries can be kept to a minimum. For purposes of this manual, the term "Injury and Illness Prevention Program" also refers to "Safety Program" or "Safety Manual".

II. Goals

The primary goal of the IIPP described in this manual is to prevent accidents that may cause personal injury, damage to property, or both. Meeting this goal will lessen the human suffering, high cost and waste associated with accidents. Although profit is not a purpose of municipal operations, effective loss control is desired to ensure the fullest utilization of the public property and funds entrusted to us.

Through management and employee support and participation in a sound IIPP designed to develop and maintain employee awareness in operational safety, we expect to continually reduce the number of accidents we experience.

The IIPP described in this manual is designed to assist in the elimination of accidents. An accident is defined as an unplanned occurrence caused by an unsafe act or an unsafe condition which may result in personal injury, property damage, or both, and which always interrupts the planned course of action.

III. Program Objectives

- A. To provide employees with a safe place and safe conditions in which to work through identification and elimination of hazards.
- B. To ensure that supervisors accept their basic responsibilities for the safety of employees and property, and guarantee the consistent enforcement of safety requirements by all levels of management at all locations.
- C. To make certain that each employee understands that acceptance and performance of Individual safety responsibilities is a condition of employment.
- D. To make every effort to instill safety awareness in each employee.
- E. To provide employees with knowledge of the most safe and effective method of performing their job through continuing instruction and training.
- F. To adhere to all local, State, and Federal safety and health codes, recognizing that these are considered only minimal safety requirements in many instances.

IV. Program Implementation

It is recognized that certain terminology and expressed procedures in this program cannot be applied equally by all. This is due to the wide diversity of operations within the City government and the necessary differences in organizational structure within various departments. There are some details that might be impossible or impractical for one Department Head to implement while another would have no difficulty in applying every one.

Therefore, Department heads will have some latitude in formulating and implementing alternative methods, when necessary, as long as our total loss control objectives are not compromised.

V. Responsibilities

A. Department Heads

Department Heads have the full authority and total responsibility to develop, implement, and administer a safety program within their departments. Although exposure to hazards varies widely from department to department, it is expected that an unrelenting effort will be directed toward controlling injuries, collisions, liabilities, and waste of materials in each. Department Heads will therefore make every effort to:

1. Ensure that the policies and procedures set forth herein are complied with by all personnel under their direction;
2. Provide the leadership and positive direction essential in maintaining firm loss prevention policies as a prime consideration in all operations;
3. Devote a portion of staff meetings to a review of departmental losses (accidents) and to discuss plans to bring about more positive loss reduction. This will vary with the frequency and severity of losses and the degree of hazardous operations involved in each department;
4. Demonstrate a personal concern in departmental losses by interviewing directly, or through a responsible deputy, those workers and their Supervisors who have:
 - a. Lost work time from an industrial injury because of negligence;
 - b. Been involved in a vehicular collision because of failure to drive defensively or to comply with traffic laws;
5. Actively participate in City Safety Committee meetings when convened by the appropriate management level and disseminate the information to the Division Heads and staff members;
6. Ensure that all planning for facilities construction and remodeling fully implements appropriate refinements specified in Cal/OSHA standards;
7. Call upon Risk Management for any assistance needed in promoting aggressive and effective loss control;
8. Hold Division Heads fully accountable for an explanation of the preventable injuries,

collisions, and liabilities incurred by their employees. An excessive number is an indication that some management policies and practices need reevaluation; and (Definition: Accountable, Liable; to be called to account for the accomplishment, or lack thereof, of an assigned function or task according to designated performance standards.)

9. Discipline employees who do not comply with safety rules, policies, or procedures.

B. Managers

Managers are responsible for directing the safety effort of their divisions. This includes:

1. Enforcing the provisions of this manual and mandated safety orders;
2. Ensuring that employees receive adequate safety training; and
3. Ensuring action is taken to correct work place hazards.

C. Supervisors

Supervisors have full responsibility for the safe actions of their employees and the safe performance of machines and equipment within their operating area. Supervisors have full authority to enforce the provisions of this manual to keep losses at an absolute minimum.

D. Employees

As a condition of City service, employees are required to exercise due care in the course of their work to prevent injuries to themselves, their fellow workers, as well as the general public.

E. Risk Analyst and Risk Safety Coordinator

Under the direction of the Risk Manager, the Risk Analyst and Risk Safety Coordinator are responsible for directing and administering an aggressive Loss Prevention Program and shall take all actions deemed essential to produce a positive reduction in accidents and their causes. Specifically, the Risk Analyst and Risk Safety Coordinator shall:

1. Maintain this IIPP by incorporating current practices and philosophies adopted by safety professionals as the most effective in preventing injuries, occupational diseases, vehicular collisions, liabilities, and damage to equipment and materials;
2. Consult with all management personnel and employees on loss prevention matters, as appropriate, and provide all the guidance necessary to assure effective administration of this program;
3. Periodically attend department and division safety meetings to promote maximum understanding of the program objectives;
4. Periodically evaluate department compliance with the program via inspections of facilities for hazardous conditions and housekeeping, and frequent checks of field and shop areas to ensure worker compliance with Cal/OSHA and City work rules. The Risk Manager, Risk Analyst and Risk Safety Coordinator have full authority to stop hazardous jobs when prescribed safety precautions are not being enforced. Upon verbal notification of the violation, the Supervisor or lead worker in charge shall

stop the operation until the discrepancy is corrected. The Risk Analyst or Risk Safety Coordinator then shall submit a report to the Risk Manager;

5. Maintain an effective defensive driver training and licensing program for drivers of City vehicles;
6. Maintain complete records on City accidents in accordance with Cal/OSHA requirements and, at the direction of the Risk Manager, publicize information which will apprise Management and personnel of trends which call for strong corrective measures;
7. Administer the processing of Cal/OSHA citations received by the City, and, as an adjunct, monitor and log all responses that divisions submit to the Division of Occupational Safety and Health;
8. Review and recommend provisions for compliance with Cal/OSHA standards in plans and specifications for new construction, repairs, or modifications of City properties;
9. Approve type and source and recommend the use of safety equipment essential for hazardous operations;
10. Review and consider all department or division safety committee recommendations, and present all feasible ideas to the Risk Manager;
11. Fully utilize the assistance available from State and Federal agencies, insurance carriers, and safety organizations on matters pertaining to safety and health;
12. Ensure the thorough investigation of accidents resulting in lost time, hospitalization, death, and extensive property damage; and
13. Actively participate in the community efforts of safety professionals and citizen groups striving to promote accident prevention.

CHAPTER 2 MANAGEMENT PARTICIPATION

I. Organization of Safety Committees

The most effective accident prevention measures are those which have been formulated at each level of the organization, thoroughly discussed and coordinated by all concerned, and unreservedly supported by top management. The organization of safety committees within City operations maximizes the exchange of ideas between supervisory personnel. Moreover, it enhances greatly the immediate definition of policies covering hazards, problem areas, and loss prevention promotion. Safety Committees shall be a function of Management at all levels.

A. City Safety Committee

This committee was established by the City Administrator and consists of five Department Heads (Airport, Police, Fire, Parks & Recreation, and Public Works). This committee is deemed essential to assure productive discussion of problems encountered in high hazard area operations. The Risk Manager shall act as liaison at these meetings. Functions shall include, but not be limited to, the following:

1. Holding quarterly or more frequent meetings, preferably in conjunction with regular staff meetings, to review loss experience by department, cost analysis figures and to evaluate the progress of the City's injury and illness prevention efforts;
2. Overseeing City safety planning and policy formation;
3. Reviewing and recommending training programs;
4. Reviewing significant accidents, unsafe practices, and departmental loss reports; and
5. Reviewing and providing recommendations on matters submitted by individual Department Heads.

B. Departmental Safety Committee

At a minimum, all departments shall conduct safety meetings quarterly (although greater and more regular frequency is recommended). Chaired by the Department Head or designee, this group determines safety policies within the department, resolves divisional safety problems, and evaluates input agenda items for the City Safety Committee, according to their needs.

Functions of the committee may parallel those of the City Safety Committee with the focus on internal solutions to safety problems and active support of City Safety Committee decisions as the primary objectives. The Committee shall:

1. Review accident records and evaluate the progress of departmental loss prevention efforts;
2. Prepare those items which cannot be resolved at the departmental level, together

with safety promotion recommendations developed by employees within the department, for submission to the City Safety Committee;

3. Review safety suggestions presented by employees through the Employee Suggestion System for consideration and implementation; and
4. Record and file a copy of minutes of each meeting in the department office. A copy shall be furnished to each Division Head, Supervisor, and Risk Management.

C. Safety Communication

Departments shall provide time during normal work hours to communicate with all employees on matters relating to occupational safety and health. This is to be accomplished through a system promoting safe work practices by informing employees of City safety policies, procedures, and practices. Safety promotion may include, but not be limited to, creating divisional safety committees, posting of safety notices, encouraging employee feedback on safety concerns, reporting of work place hazards, or by implementing bi-weekly "Tailgate" safety talks.

CHAPTER 3

INVESTIGATION AND REPORTING OF INDUSTRIAL INJURIES AND ILLNESSES

Investigating each industrial injury or illness is a valuable tool for controlling losses. The City considers each industrial injury or illness a total loss until the Department objectively determines the true cause of the incident and corrects all contributing deficiencies. Reporting, investigating, recording and correcting the deficiencies that lead to an industrial injury or illness is an investment that pays compound benefits to our employees and the City.

Injured employees must report their injuries immediately or at the end of the current work shift. Notification must be given to the injured employee's Supervisor.

I. Definitions

Industrial Injury Personal injury sustained by an employee arising out of and in the course of his/her employment with the City of Santa Barbara.

Occupational Illness Disease or illness sustained by an employee resulting from exposure to certain hazardous conditions or materials in the course and scope of their employment with the City of Santa Barbara. A direct connection must exist where the exposure to the hazardous condition or material resulted from the work duties and this exposure caused the occupational disease or illness.

II. Reporting Industrial Injuries and Illnesses

A. Requirements Under California Law

California law requires that:

1. The employer shall file a complete report of every injury sustained by employees arising out of, or in the course of his/her employment with the Division of Labor Statistics and Research of the Department of Industrial Relations.
2. The employer shall use the Division of Labor Statistics and Research Form 5020, "Employer's Report of Occupational Injury or Illness" to report each industrial injury. (Note: Your Department or Division is not responsible for completing the 5020 form.)

B. City's Self-Insured Workers' Compensation Program

The City's self-insured Workers' Compensation program applies to City employees that are regular full time, part time, and hourly. The City's self-insured workers' compensation program does not cover any volunteer, commission member, or a person hired through a temporary service.

The City became legally self-insured for the purpose of providing Workers' Compensation benefits in 1977. This means that the City does not buy insurance to pay Workers' Compensation benefits. Instead, the City created an internal fund to pay these state mandated benefits to an injured employee.

AdminSure is currently under contract with the City of Santa Barbara to administer claims and pay benefits for the City's self-insured Workers' Compensation program. AdminSure performs a variety of tasks on behalf of the City. These tasks include paying disability payments to an injured employee, paying medical bills, scheduling doctor appointments, and coordinating litigation defense, to name a few.

Use the following address, telephone number, and fax number to contact AdminSure:

AdminSure, Inc.
3380 Shelby Street
Ontario, CA 91764-5566
Telephone: (909) 243-7296
Fax: (909) 860-3995

C. Workers' Compensation Injury Report Kit

The Workers' Compensation Report Kit is available electronically on the Risk Management SharePoint page and contains all the necessary forms that the Supervisor and injured employee must complete to report an industrial injury or illness. Click [here](#) to access the forms contained within the Workers' Compensation Report Kit.

The Supervisor and injured employee must accurately complete all sections of each form. The Supervisor must verify that each form contains the correct information about the employee, including wage data, home address, and social security number. Missing or incorrect information recorded on these forms can result in the injured employee receiving erroneous or delayed disability payments.

Risk Management will return any partially completed or illegible forms to the reporting department. The forms are not considered complete until each form is signed by the employee, the Supervisor and Department Head, or his/her designee. The Department shall deliver the completed forms to the Risk Management office at City Hall within forty-eight (48) hours of its knowledge of the injury or illness.

Each Workers' Compensation Injury Report Kit Contains:

1. Report of Occupational Injury or Illness

The injured employee completes and signs this form. This form contains the employee's version of the injury. **DO NOT HOLD THE *REPORT OF OCCUPATIONAL INJURY OR ILLNESS* FOR THE EMPLOYEE'S SIGNATURE OR WAIT FOR THE EMPLOYEE TO RETURN TO WORK BEFORE COMPLETING ANY OF THE FORMS.**

The Department that employs the injured employee shall be totally responsible for ensuring that the *Report of Occupational Injury or Illness* form is completed and sending copies as outlined below:

- a) Original to Risk Management;
- b) One copy to Department file; and

c) One copy to the Department Safety Committee.

2. Supervisor's Incident Investigation Report

The Supervisor of the injured employee is responsible for completing the *Supervisor's Incident Investigation Report*. This report contains the results of his/her investigation of the incident (**See Section III of this Chapter). The Supervisor and the Department Head must sign the *Supervisor's Incident Investigation Report* form after completion.

The Department that employs the injured employee shall be totally responsible for completing the *Supervisor's Incident Investigation Report* form and sending the copies as outlined below:

- a) Original to Risk Management;
- b) One copy to Department file; and
- c) One copy to the Department Safety Committee.

Risk Management will accept a LEGIBLE hand written report from the Supervisor. Risk Management shall return a *Supervisor's Incident Investigation Report* form to the Division Manager that:

- a) Is illegible;
- b) Lacks complete information about the injury or illness;
- c) Lacks any recommended action to prevent a recurrence of this type of injury; or
- d) Indicates a hasty and incomplete investigation of the facts about the injury.

3. Workers' Compensation Claim Form (DWC-1)

California law requires the Department to provide the *Workers' Compensation Claim Form* (DWC-1 form) to the injured employee within twenty-four (24) hours of when the employee reports an industrial injury. The employee completes lines 1 through 9 on the DWC-1 form. The Supervisor completes lines 10 through 19 on the DWC-1 form.

The Department that employs the injured employee shall be totally responsible for:

- a) Providing a *Workers' Compensation Claim Form* (DWC-1) to an employee within 24 hours of when s/he reports an industrial injury;
- b) Completing the *Workers' Compensation Claim Form* (DWC-1); and
- c) Distributing copies of the DWC-1 form as outlined below. Send the:
 - 1) Original to Risk Management;

- 2) One copy to Department file; and
- 3) One copy to the injured employee.

4. Medical Service Order

The *Medical Service Order* form fulfills two functions. First, the form containing the Supervisor's signature authorizes the named physician to provide medical treatment to the injured employee. Second, the completed form signed by the physician advises the supervisor of the injured employee's ability to return to work.

a) Supervisor's Tasks Before the Employee seeks Medical Treatment

The Supervisor completes the top portion of the *Medical Service Order* form. After completing the top portion, the Supervisor gives the *Medical Service Order* form to the employee and instructs the injured employee where s/he must go for medical treatment. The Supervisor may need to transport the injured employee to the medical facility depending on the type and severity of the injury. In the space provided, enter the following information:

- 1) Check the name and address of the authorized medical facility where the employee must go for medical treatment;
- 2) Name of the injured employee;
- 3) Date and time of the injury; and
- 4) Supervisor's signature and date.

b) Attending Physician's Tasks

The attending physician shall complete the bottom portion of the *Medical Service Order* form. The medical facility shall give a copy of the completed *Medical Service Order* form to the injured employee. The Supervisor shall instruct the injured employee to return to the Supervisor the completed *Medical Service Order* that s/he receives from the attending physician immediately after the medical examination. The Supervisor shall also instruct the employee that s/he must provide a similar written note from the attending physician after each return or follow up visit for medical treatment.

c) Supervisor's Tasks After Employee Receives Medical Treatment

The Supervisor shall send a copy of the completed *Medical Service Order* to Risk Management, along with any other supplemental medical information provided by the attending physician, upon receipt.

5. Facts for Injured Workers

State law requires all injured employees receive certain information related to the workers' compensation claims process, pursuant to Labor Code Section 5401. The

City has prepared a letter as part of the Workers' Compensation Report Kit to be given to the injured employee entitled *Workers' Comp Employee Information Letter*. The letter contains basic information regarding Workers' Compensation benefits. Any employee who needs additional or more specific information on Workers' Compensation benefits can contact the Risk Management office at (805) 564-5347 or office of the California Division of Workers Compensation by phone at 1-800-736-7401 or the local Santa Barbara satellite office at (805) 884-1032.

D. Fatality Reporting

Workplace fatalities must be reported to Cal-OSHA within eight (8) hours. The Supervisor shall call the Risk Management office at (805) 564-5347 to report the death of an employee resulting from an industrial injury immediately after the incident. The Supervisor in charge shall be responsible for making the call and providing as much initial information as possible. If the fatality occurs outside of normal business hours, the Supervisor must also contact the nearest Cal/OSHA enforcement office (Van Nuys) directly at (818) 901-5403.

The Supervisor must include the following information in their phone call to Cal/OSHA, if available:

1. Time and date of accident/event;
2. Employer's name, address and telephone number;
3. Name and job title of the person reporting the accident;
4. Address of accident/event site;
5. Name of person to contact at accident/event site;
6. Name and address of injured employee(s);
7. Nature of injuries;
8. Location where injured employee(s) was/were taken for medical treatment;
9. List and identity of other law enforcement agencies present at the accident/event site; and
10. Description of accident/event and whether the accident scene or instrumentality has been altered.

Whenever a local fire or police agency responds to an incident involving a person acting in the course of employment in which a serious injury, illness, or death occurs, the responding agency must notify the nearest office of the Division of Occupational Safety and Health. SBFD and SBPD can contact the nearest Cal/OSHA enforcement office (Van Nuys) directly at (818) 901-5403.

E. Sudden or Severe Injury or Illness Reporting

The Supervisor shall call the Risk Management office to report any sudden illness requiring emergency medical treatment that an employee sustains during a work shift. This includes reporting injuries or illness such as a possible heart attack, stroke, seizure, or fainting, to name a few. The Supervisor shall call the Risk Management office at (805) 564-5347 immediately after the incident, or at the beginning of the next business day.

F. Off-The-Job (OTJ) Injuries

An employee shall notify his/her Supervisor of any off-the-job injury that s/he sustains. An OTJ injury can prove costly to the employee and employer and continually present absenteeism problems to the City. It is important that the compilation of OTJ statistics be made available for the education of employees regarding off-the-job safety.

G. Unsatisfactory Report

A poorly designed tool, piece of equipment, or facility presents a hazard to the City. Employees are encouraged to report any poorly designed tool, piece of equipment, or facility. Management shall use information furnished by these unsatisfactory reports when future procurement of tools and equipment or construction of buildings is anticipated.

Tools and other equipment can frequently be modified to eliminate most of the undesired features recognized by an *Unsatisfactory Report*. The employee can use plain paper or a memo sheet referencing "Unsatisfactory Report" as the subject to report the deficiency. Send a copy of the *Unsatisfactory Report* to Risk Management.

The City shall share any recommendation to alter or modify a tool or piece of equipment with its manufacturer. The manufacturer of the tool or piece of equipment must submit a written authorization approving the change or alteration before the City modifies or alters the tool or piece of equipment.

III. Investigation Procedures for Industrial Injuries and Illnesses

Employers are required by State law to investigate all work-related injuries and illnesses. This responsibility has been delegated to operating Departments that have experienced an industrial injury or illness. The investigation shall determine what steps, if any, the department or division can implement to prevent a similar injury or illness from recurring.

This investigation shall also determine if the Manager, Supervisor, coworker(s), or injured employee could have prevented this injury from happening. Use the guidelines outlined in IIPP Appendix 15 (Preventability Determinations) to determine the preventability of an industrial injury.

The Department must review the investigation results with the injured employee, and any other employee exposed to the same hazard, as required by California law (SB-198). Use the following procedures to complete the investigation of each industrial injury or illness:

A. Check the Scene

1. Begin where the accident occurred. First, carefully examine the accident site.
2. Reconstruct the chain of events leading to the injury or illness. Attempt to determine the single event that caused the injury or illness it.
3. Draw a diagram and/or take a photograph of the location.

4. Sketch into the diagram or photograph:
 - a) Machinery;
 - b) Equipment;
 - c) Any other nearby physical objects; and
 - d) The location where each witness stood.

B. Write it Down

1. Make notes on all facts that may relate to the cause of the injury. As an example: "Employee complained of dizziness," or "Employee tripped over electrical cord," etc.
2. Note any unsafe conditions in the work area. For example, defective tools, faulty equipment, poor housekeeping, "Employee did not use proper equipment," etc.
3. Describe any procedures used or not used, misuse of equipment, or other contributing factors that did not comply with published work rules or safety policies.
4. Write down other items such as the time of your investigation, the lighting and weather conditions at the time of the injury. If pertinent, describe any supplementary evidence or conversations that may prove helpful.

a. Collect the Evidence

Inspect all tools, machinery, equipment, or structures as part of the investigation process. Collect and secure any evidence gathered from the inspection of these items.

An industrial injury or near miss resulting from the failure of a machine, structure, tool, or part requires a determination of what failed and why. Frequently, the Supervisor or Manager can complete this task. Sometimes a detailed study of the faulty tool, machine, equipment, or structure is required to determine the cause of the failure. When the Manager determines that a detailed study must be completed, then the Supervisor shall immediately collect and secure all items for the evaluation, including any parts or components.

D. Interview Witnesses

Immediately interview each witness at the scene. Make brief notes and identify who gave the information.

E. Interview the Injured Employee

Timing is important. Interview the injured employee as soon as possible after a minor injury. This can typically be done at the conclusion of the investigation of the scene.

After a serious injury, selecting the right time to interview the injured worker is a judgment call. The injured employee may be confused and inaccurate if interviewed too

soon after the incident. Waiting too long before beginning the interview may cause the injured employee to become cautious and evasive.

Let each employee tell the story as s/he wishes without actual interrogation. Encourage the employee to give a complete picture of the incident. The interview must be complete so it may be necessary to question the employee or a witness several times.

A. Weigh the Evidence

Eliminate any inconsistency in the testimony of the injured employee and/or witness, even if further questioning is required. When assembled, all facts should be reviewed for completeness before submitting the *Supervisor's Investigation Report* to Risk Management.

B. Disciplinary Action

The Supervisor's investigation shall either recommend for or against the use of disciplinary action for any injury determined preventable. The Manager and Department Head shall evaluate the use of disciplinary action against an employee who causes an industrial injury. Use the guidelines established by Human Resources to implement any disciplinary action.

CHAPTER 4
INDUSTRIAL INJURY LEAVE
HOW TO DIRECT, MANAGE, AND SUPERVISE AN INJURED EMPLOYEE

The City places a great value on each employee. This value does not change after an industrial injury. An employee who sustains an industrial injury remains a valued member of the department and division where s/he works. Communicating information to and from the injured employee and his/her department is a vital component to the recovery process.

An industrial injury increases the importance of regular communication between the injured employee and his/her supervisor and manager. Open lines of communication keep the injured employee apprised about the current activities and goals of the work unit; any changes in work practices or procedures; news or events involving coworkers and colleagues; maintains a connection between the injured worker and his/her work unit; helps department management schedule projects by staying abreast of the injured employee's recovery progress; and keeps the department informed about when the employee will return to work.

I. Responsibilities

The following procedures outline the minimum communication requirements for a Department Head, Manager, Supervisor, Injured Employee, and Risk Analyst.

A. The Department Head shall:

1. Establish firm internal requirements for all personnel under his/her direction to fully adhere to the policies established herein;
2. Perform frequent checks to verify compliance with these requirements;
3. Provide the leadership and positive direction essential in maintaining this policy as a prime consideration in all operations;
4. Demonstrate a personal concern about each industrial injury sustained by a member of his/her staff who losses work time from an industrial injury regardless of negligence. The Department Head can fulfill this task by directly, or through a responsible deputy, interviewing the injured worker and the Supervisor of the injured worker.
5. Hold each Manager fully accountable for an explanation of how the department will facilitate returning an injured employee to work on modified duty, or what the department and injured employee must complete before the injured employee can return to work.

B. The Manager shall:

1. Contact an injured employee whenever s/he uses industrial injury leave for more than one full pay period or its equivalent;
2. Visit an injured employee whenever s/he uses industrial injury leave for more than 30 calendar days, and every 30 calendar days thereafter until the injured employee returns to work;

3. Review any work restrictions imposed by the treating physician to determine the potential for a modified duty assignment as required by the Modified Duty Program (See Appendix 20 of this IIPP);
4. Check on the health and welfare of the injured employee.

C. The Supervisor shall:

1. Contact an injured employee whenever s/he uses industrial injury leave for more than one work shift or its equivalent;
2. Contact an injured employee every other day thereafter until the injured employee returns to work;
3. Obtain a written medical status report from the injured employee after each medical visit that outlines any current work restrictions and the date of the next medical appointment;
4. Require the injured employee to collect his/her paycheck or pay statement in person. The supervisor shall deliver the paycheck or pay statement to an injured employee when work restrictions or the use of prescription medication prevent the injured employee from traveling to the work place; and
5. Check on the health and welfare of the injured employee.

CI. The Injured Employee shall:

1. Contact his/her supervisor whenever s/he uses industrial injury leave for more than one work shift or its equivalent and every other day thereafter until s/he returns to work.;
2. Provide a written status report from his/her treating physician to the supervisor after each medical appointment;
3. Attend all medical appointments on the date and time scheduled. The injured employee must obtain the approval of the Risk Analyst before rescheduling or canceling a medical appointment; and
4. Notify the supervisor and Risk Analyst of the date and time of the next scheduled medical appointment.

CII. The Risk Analyst shall:

1. Contact the injured employee after an industrial injury;
2. Explain the workers' compensation process, including how to:
 - a) Contact AdminSure;

- b) Fill a prescription, and
 - c) Obtain authorization for medical treatment and referrals;
3. Inform the employee to keep all physical activity within the work restrictions outlined by the treating physician;
 4. Inform the employee that the Manager, Supervisor, and Risk Analyst will periodically check on the health and welfare of the employee;
 5. Require the employee to notify the supervisor and Risk Analyst of the next scheduled medical appointment;
 6. Inform the treating physician about the City's Modified Duty Program.

II. Employee Return to Work

Departments shall not allow an employee to return to work after an industrial injury or illness until the supervisor or manager receives a signed authorization from the employee's treating physician. The department shall send the original medical release and a memo verifying the date the employee did, in fact, return to work to Risk Management.

A. Modified Duty.

The manager shall evaluate any release to return to modified duty as required by the Modified Duty Program (See Appendix 20 of this IIPP). The manager shall notify Risk Management of what modified duty, if any, is available.

The supervisor shall notify Risk Management within 48 hours of any change in work status for the injured employee. A change in work status includes when the employee

1. Begins a modified duty assignment;
2. Ends a modified duty assignment; and
3. Works less than a full shift.

Information about a change in work status for an injured employee is very important. Any change in work status may alter the amount of a disability payment issued to the injured employee. Any delay in notifying Risk Management about the change in work status may cause an interruption in the cash flow an injured employee receives.

B. Recurrence of Disability from a Previous Injury

An injured employee shall immediately report to his/her Supervisor any continued or recurring symptoms from an industrial injury. Recurring or returning symptoms fall into two categories; symptoms that return following a new incident and symptoms that return without a new incident.

1. Symptoms That Return After A New Incident

Symptoms that return after a new incident require the supervisor and employee to complete a new injury packet. For example, an employee sustains an industrial back injury. Several days later, the employee moves a box of paper from one office to another office. After moving the box of paper, the employee experiences similar back pain. In this example the supervisor and employee must complete a new Workers' Compensation Injury Report Kit for the new incident, moving a box of paper.

2. Symptoms That Return Or Recur Without A New Incident

Symptoms that return or recur without a new incident do not require a new injury packet. The department shall immediately notify Risk Management in writing when an injured employee reports any recurring or returning symptoms without a new incident. The memo should indicate:

- a) The original date of injury;
- b) The date that the injured employee reported that the symptoms returned;
- c) The date that the injured employee sought medical treatment;
- d) The name of the physician treating the employee;
- e) Any work restrictions authorized by the physician; and
- f) The exact day(s) of temporary total disability that the physician authorized for the injured employee.

III. Disability Payments Issued to an Injured Employee

California law mandates that the City provide specific benefits to an employee who sustains an industrial injury or illness. Workers' Compensation benefits include medical treatment and wage replacement known as temporary total disability, or TTD.

A. Injury Compensation Time

A physician must authorize any period of TTD or temporary partial disability for an injured employee. An injured employee qualifies for industrial injury leave when AdminSure determines that a valid claim exists under California Workers' Compensation law.

Managers and supervisors are responsible for closely monitoring the amount of lost work time used by an injured employee. To complete this task, managers and supervisors shall:

1. Ensure that each injured employee provides a signed disability slip from his/her treating physician authorizing any period of TTD or temporary partial disability;
2. Check on the recovery progress of the injured employee. The manager and supervisor shall periodically visit and call the injured employee to inquire about the employee's recovery progress and well being;

3. Require that an injured employee return to work on the same date listed on the note from the physician. The City shall deem any disability claimed outside the date(s) authorized by the physician as unauthorized. The department shall record the unauthorized leave on the time sheet as vacation, comp time, or unpaid leave. The department shall not use sick leave for any unauthorized disability period used in conjunction with industrial injury leave;
4. Make every attempt to return the injured employee to modified duty when authorized by the treating physician. Modified duty is a temporary assignment that meets the restrictions imposed by the treating physician (**See Appendix 20, Modified Work Program); and
5. Inform Risk Management of any change in work status for an injured employee. The Supervisor or manager shall:
 - a) Provide a copy of each medical status report to Risk Management,
 - b) Notify Risk Management when an injured employee returns to modified duty or full duty, and
 - c) Seek clarification from the treating physician when questions arise regarding an injured employee's work status.

B. State Mandated Benefits (Labor Code §4650, §4652, §4653)

A physician must certify any period of TTD that results from an industrial injury. An employee who sustains an industrial injury shall receive TTD benefits mandated by California law when authorized by a physician. The TTD benefits paid to an injured employee come from City funds. AdminSure administers the TTD payments issued to an injured employee.

Payment of TTD benefits begins on the fourth day of authorized disability after an industrial injury. Payment of TTD benefits begins on the first day of authorized disability when the treatment for the industrial injury requires hospitalization or the disability period reaches or exceeds fourteen (14) or more days of TTD.

AdminSure shall issue TTD payments no less than every two-(2) weeks.

The TTD payment equals two-thirds (2/3) of the injured employee's average weekly earnings during the period of disability up to a maximum of \$490.00 per week (effective July 1, 1996). TTD benefits end when the physician releases the injured employee to return to work.

C. City Salary Continuation

The City may supplement the State mandated TTD benefits in the form of salary continuation. Temporary employees are not eligible for salary continuation. Temporary employees shall receive State mandated benefits only.

A permanent employee may qualify for salary continuation. Specific employee groups qualify for salary continuation according to the Memoranda of Understanding (MOU) between the City and each individual bargaining unit, the Municipal Code, and California Labor Code §4850. Labor Code §4850, the specific MOU, or the applicable Municipal Code defines who qualifies for salary continuation, the amount of the salary continuation, and the duration of the salary continuation.

The Finance Department Payroll Division shall issue a paycheck to a permanent employee who sustains an industrial injury during any period that s/he receives salary continuation. The Finance Department Payroll Division shall stop issuing a paycheck to an employee who sustains an industrial injury when:

1. The employee does not qualify for salary continuation; or
2. The employee remains disabled after the salary continuation period ends.

AdminSure issues a check to the injured employee for any compensable TTD period not covered by salary continuation.

D. Denied Claims

California law defines when the City must pay Workers' Compensation benefits to an injured employee. The City and AdminSure will investigate any claim for Workers' Compensation benefits that may not meet the legal requirements outlined by California law. The disabled employee may utilize sick leave, vacation, holiday, personal leave, or comp time benefits available in his/her leave banks while the City and AdminSure conducts this investigation.

Occasionally, the City will deny a claim for workers' compensation benefits based on the information gathered from the investigation. The City may deny a claim for Workers' Compensation benefits for a variety of reasons such as, questionable validity, improper reporting, or some other reason.

The employee may choose to contest the denial. The disabled employee may utilize sick leave, vacation, holiday, personal leave, or comp time benefits available in his/her leave banks until the case is resolved at the Workers' Compensation Appeals Board (WCAB).

The City shall change the pay status for the injured employee to reflect the findings provided by AdminSure. If the City accepts the claim or the WCAB rules in favor of the employee, the Payroll Division shall change the authorized TTD period to industrial injury leave. Payroll Division shall also reinstate the leave balances used during the TTD period upon notification from Risk Management that the City accepted the claim.

CHAPTER 5

MEDICAL TREATMENT OF INDUSTRIAL INJURIES & ILLNESSES

An industrial injury refers to a bodily injury by accident arising out of, and in the course of employment, and includes an injury caused by the willful act of a third person directed against employees because of their employment. Treatment for these injuries is outlined below and each department shall ensure compliance.

I. Emergency Medical Treatment

Life threatening injuries requiring immediate emergency treatment, such as profuse bleeding, unconsciousness, shock, etc. shall warrant emergency treatment. The injured person shall be transported to the nearest hospital.

Full emergency treatment may be obtained on a twenty-four (24) hour basis at the following hospitals:

Cottage Hospital
Pueblo at Bath Streets
Santa Barbara, CA
(805) 682-7111

Goleta Valley Hospital
351 S. Patterson Avenue
Goleta, CA
(805) 967-3411

The facility nearest the accident scene shall be used.

For all serious emergencies requiring immediate treatment, transportation, or both, dial 9-1-1.

If qualified, administer first aid as necessary until help arrives.

The injured person's supervisor or rescue personnel shall, when possible, advise the hospital emergency room personnel of the nature of injuries of the patient being sent to them. This can be done by telephone or, if possible, through City Communications Center by radio.

As previously noted in IIPP Chapter 3, workplace fatalities must be reported to Cal-OSHA within eight (8) hours. The supervisor shall call the Risk Management office at (805) 564-5347 to report the death or hospitalization of an employee resulting from an industrial injury immediately after the incident. The supervisor in charge shall be responsible for making the call and providing as much initial information as possible.

If the fatality occurs outside of normal business hours, the supervisor must also contact the nearest Cal/OSHA enforcement office (Van Nuys) directly at (818) 901-5403.

The supervisor must include the following information in their phone call to Cal/OSHA, if available:

1. Time and date of accident/event;
2. Employer's name, address and telephone number;
3. Name and job title of the person reporting the accident;
4. Address of accident/event site;
5. Name of person to contact at accident/event site;

6. Name and address of injured employee(s);
7. Nature of injuries;
8. Location where injured employee(s) was/were taken for medical treatment;
9. List and identity of other law enforcement agencies present at the accident/event site; and
10. Description of accident/event and whether the accident scene or instrumentality has been altered.

Whenever a local fire or police agency responds to an incident involving a person acting in the course of employment in which a serious injury, illness, or death occurs, the responding agency must notify the nearest office of the Division of Occupational Safety and Health. SBFD and SBPD can contact the nearest Cal/OSHA enforcement office (Van Nuys) directly at (818) 901-5403.

II. Injuries Not Constituting an Emergency but Requiring Medical Treatment

The injured employee's supervisor may authorize initial treatment by sending the employee to be examined by a physician at the Sansum Occupational Medicine Clinic, 101 S. Patterson Avenue, (805) 898-3311; or a MedCenter, 2954 State Street, (805) 682-7411 and 319 N. Milpas Street, (805) 965-3011. Sansum is the City's preferred occupational medicine clinic. An appropriate referral for treatment in other locales may be obtained by contacting Risk Management.

Upon notification that an employee has been injured on the job, the supervisor shall ensure that:

- A. First aid is administered, if qualified personnel are available; and
- B. If treatment by a medical doctor is required, furnish the employee with a Medical Service Order form.

Injuries appearing to be superficial, but extremely painful or showing any unusual symptoms shall be examined by the physician at the Sansum Occupational Medicine Clinic or the MedCenter.

If subsequent treatment is required and the employee prefers to be treated either by a family doctor or referred to a specialist, the change must be approved by AdminSure prior to obtaining treatment (There are no provisions for switching doctors without this approval).

The City may require the injured employee to submit to a medical examination by a physician chosen by the City.

III. Pre-Designation of Personal Physician

Employees may pre-designate a personal physician to provide medical treatment for an industrial injury. The personal physician designation must be made in writing prior to sustaining an industrial injury. Personal physician is defined as "the employee's regular physician and surgeon, who has previously directed the medical treatment of the employee, and who retains the employee's medical records, including his or her medical history, and agrees to be pre-designated." (Labor Code §4600)

An employee wishing to designate a personal physician must submit their request in writing. Forms for this purpose are available in Risk Management. The designation must contain:

- Name, address and telephone number of the physician;
- Physician's specialty; and
- Employee's signature and date

If an employee sustains an industrial injury requiring medical treatment, and has designated a personal physician, the employee may seek treatment from their personal physician, provided the injury is within the physician's area of expertise. For example, an internist would not be authorized to treat a bone fracture.

An employee can designate a chiropractor or acupuncturist as a personal physician. However, prior to seeking medical treatment from the designated chiropractor or acupuncturist, the employee ***must first seek medical treatment from the City-designated physician***. If, after obtaining medical treatment from Sansum or the MedCenter, the employee would prefer to be treated by their designated chiropractor or acupuncturist, the employee must submit a written request for the change of treating physician to AdminSure. AdminSure must then authorize the change of treating physician within five (5) days (Labor Code §4600).

IV. First Aid Treatment in the Field or Office

Superficial injuries such as minor cuts, bruises, small punctures, scratches, etc., shall be treated in the field or office when an employee qualified to administer first aid is present and a first aid kit is available. Such injuries shall be made a matter of record in the supervisor's file and shall be retained by the supervisor. Hospital emergency rooms, Sansum, or the MedCenter shall not be used for superficial injuries.

V. False Industrial Claims

Insurance Code §1871 states "Any person who makes or causes to be made any knowingly false or fraudulent material statement or material representation for the purpose of obtaining or denying Workers' Compensation benefits or payments is guilty of a felony". An employee injured while off duty who falsely files a claim pfor Workers' Compensation benefits, or an individual who corroborates a false claim for Workers' Compensation benefits, shall be subject to the full penalties provided by law.

VI. Medical Bills

Medical, surgical, chiropractic, and hospital treatment, including nursing, medicines, medical and surgical supplies, crutches and apparatus, including artificial body parts, which are reasonably required to cure or relieve from the effects of the injury, shall be provided by the employer (Labor Code §4600).

After treatment of an industrial injury, bills for medical treatment and medicines are to be sent to AdminSure for payment. However, sometimes bills are sent inadvertently to the employee for payment, or a pharmacy will not bill an account.

Employees have the responsibility to forward such bills to AdminSure for processing immediately upon receipt in order to avoid unpleasant and unnecessary complications.

VII. Establishing an Industrial Injury or Illness Claim

It is not necessary to have a physician treat an injury in order to validate an industrial claim. A minor injury such as a small cut, scratch or bruise should be treated in the field by someone qualified to administer First Aid from a kit. As long as the injury is reported to the supervisor and recorded, the employee will be fully covered for medical treatment should the need arise at a later date. If your department does not have a form to record these types of injuries, please contact Risk Management for assistance.

CHAPTER 6

INDUSTRIAL INJURY AND ILLNESS CONTROL

The effectiveness of industrial injury and illness control is directly related to three criteria: **1)** The quality of existing supervision; **2)** a thorough understanding of the hazardous jobs to be accomplished; and **3)** daily operations that consistently follow practices specified in published work rules.

I. Safety Orientation and Training

Employees shall be informed of the potential risk of injury they will face in a given job and the protective measures available to them. This is to be accomplished through orienting employees in general, safe work practices along with providing specialized safety training with regard to hazards unique to any job assignment. For this purpose, Risk Management has compiled a Safety Orientation Form (**See Appendix 1). This form should be adapted by each department or division to meet the needs of each work site. Each department or division shall provide safety orientation and training at the following intervals:

- a) When a new employee is added;
- b) Prior to a new job assignment or a change to an existing one;
- c) When a new substance, process, procedure, or equipment is introduced to the work place and represents a new hazard; or
- d) When the department receives notification of a new or previously unrecognized hazard.

II. Job Safety Analysis for Hazardous Work

It is mandatory that Supervisors thoroughly brief their workers on the hazards that exist and ensure that workers understand the methods of doing each job safely when such hazards cannot be eliminated.

You may be assured that relying on memory alone during the instruction of an employee will guarantee oversight of important items. Therefore, it is essential and required by the Construction Safety Orders, Section 1509 (b) and 1510 (a), that Supervisors use published work rules which define each hazardous task their employees are responsible for and define the correct work procedures for its safe accomplishment. To assist in this task, refer to Appendix 1 for a generic safety orientation checklist. This checklist should be modified to address the unique safety requirements of each division.

By providing employees with a copy of the work rules after instruction, they will have a ready reference for review at any time. Procedures for job safety analysis are as follows:

- A. After the steps are listed, each step is analyzed for hazards that could cause an accident. The purpose is to identify as many hazards as possible, whether produced by the environment or connected with the mechanics of the job procedure, so that each step of the entire job can be

done safely and efficiently.

- B. When the hazards and potential accidents associated with each step are identified and their causes understood, means of elimination shall be developed. There are four ways this can be handled:
- 1) Eliminate the process or operation, or provide a substitute action which can be done without the hazard; or
 - 2) Isolate the process or operation so as to eliminate or minimize the hazard; or
 - 3) Provide guards or automatic devices to eliminate or minimize the hazard; or
 - 4) Provide personal protective equipment (PPE) and enforce its use to eliminate the possibility of injury.
- C. Using the information gathered from the first three steps, the department or division work rules shall be written, disseminated among all employees, and maintained on file for periodic review.

III. Personal Protective Equipment (PPE)

The designation and use of protective equipment for all jobs, which have an inherent injury potential, shall be specified by the Supervisors involved. Detailed specifications for the design, purchase and use of all protective equipment shall be coordinated among the General Services Division (Purchasing), the Supervisors, and the users. Specialized protective equipment specified as mandatory on hazardous jobs shall be provided by the City, and employees shall be fully accountable for its use and condition.

A. Types of Equipment

- 1) Hard hats to protect the head against falling objects, head bumping situations or electrical conductors (**See Appendix 2, Personal Protection: Head)
- 2) Goggles, face shields, or safety glasses to guard against airborne debris, dust, particles, chips, chemicals, heat, or injurious rays (**See Appendix 2, Personal Protection: Eyes)
- 3) Earplugs or ear muffs to guard against prolonged exposure to noise exceeding sound tolerance levels defined by law (**See Appendix 14, Hearing Conservation Program).
- 4) Respirators, gas masks, airline respirators, hose masks, and self-contained breathing apparatus (SCBA) to protect employees against toxic or abnormal atmospheric conditions (**See Appendix 19, Respirator Protection Program).
- 5) Safety shoes to protect feet (**See Appendix 2, Personal Protection: Footwear).
- 6) Life jackets when working over water.
- 7) Reflective vests or bright articles to increase visibility while working in or around traffic lanes.
- 8) Protective clothing such as gloves, sleeves, aprons, leggings, and full suits to protect against wounds, abrasions, bumps, slag, heat or melted metals (**See Appendix 2,

Personal Protection: Clothing).

B. Mandatory Use of Protective Equipment

When the use of personal protective equipment has been specified for hazardous work, its use shall be mandatory as a condition of employment. Supervisors shall be held accountable for employees allowed to work without compliance. The review of injuries by Risk Management shall place emphasis on accidents that resulted from failure to use protective equipment.

City employees assigned to inspect or work at construction sites or other areas under the jurisdiction of other employers shall comply with the safety regulations established by those employers as long as they meet or exceed the City's established safety orders in this IIPP.

C. Procurement of Power Tools, Heavy Equipment, Safety and Protective Equipment, Vehicles

Detailed specifications for the design, purchase and use of these items shall be fully coordinated between Supervisors, the users, and the General Services Division (Purchasing). Emphasis shall be placed on the inherent safety considerations used in design, quality, durability and uniformity of each item. In the case of safety equipment, complete protection, worker acceptance, comfort and quality shall also be considered. In addition, all machines and equipment shall be in compliance with the standards specified in the Federal and State Occupational Safety and Health Acts.

CHAPTER 7

OCCUPATIONAL SAFETY AND HEALTH (OSHA) INSPECTIONS

Occupational Safety and Health Inspections of all City facilities and work sites shall be conducted periodically by all departments and Risk Management on a formal basis. A report will be sent to the Department Head for review and to facilitate correction of the hazards noted in said report. Informal inspections shall be accomplished at a frequency to assure that hazards are kept at a minimum and safe work practices are enforced. Unannounced formal inspections BY Cal/OSHA may be made at any time.

I. Formal Inspections

A. Departments

- 1) Departments will conduct a thorough self-inspection every two- (2) years (alternately from Risk Management) utilizing the Safety Inspection Checklist.
- 2) Emphasis shall be placed upon condition of facilities, equipment, and machines, as well as implementation of the overall safety program.
- 3) Inspection reports shall be kept in the department or division files on all inspections and shall show the following:
 - a) Date of inspection;
 - b) Inspector's name;
 - c) Written list of deficiencies discovered;
 - d) Recommendations for correction of deficiencies; and
 - e) Notation of corrective measures taken and date completed.
- 4) Copy of completed inspection report noting completed corrective measures shall be forwarded to Risk Management.

B. Risk Management

- 1) Risk Management inspections shall be performed every two- (2) years (alternately from the department's) on a schedule that will be convenient to the departments and their divisions.
- 2) Departments shall cooperate fully in the inspection to ensure that all areas are covered and all hazards are itemized.
- 3) Risk Management shall utilize checklists appropriate for each area being inspected, and emphasis shall be placed upon standards promulgated by Cal/OSHA.

A copy of all formal inspection reports shall be furnished to the following:

- Risk Management
- Department Head concerned
- Division Head concerned

Facilities and equipment noted to be unsafe for use shall be tagged on the spot by the inspector. Personnel who continue to use any item that has been so tagged or who willfully remove the tag before the unsafe condition is corrected are subject to suspension, or, in extreme cases, possible dismissal.

Deficiencies shall be posted for review by all employees and corrected as quickly as feasible. In the case of imminent danger hazards, satisfactory correction shall be completed before work is resumed in the hazard area.

Corrections requiring special monetary funds or those beyond the control of the department or division shall be presented to the Department Head for resolution with higher authority.

Department or Division Heads shall inform all employees of any unsafe conditions that cannot be corrected immediately and ensure that all necessary precautions are taken to prevent mishaps.

II. Informal Inspections

Informal inspections shall be conducted by Risk Management whenever the need arises. Department or Division Heads, Supervisors, or any employee may request inspections without fear of reprisal when an unsafe condition or practice is noticed. Risk Management shall make recommendations for corrective action(s) or consult with an appropriate Safety Engineer for guidance. A record of the visit and discrepancies shall be filed with Risk Management and follow-up action shall be taken to ensure that corrective measures are implemented.

III. Periodic Inspections

Supervisors shall conduct periodic safety inspections of the physical premises as well as identify unsafe work practices (**See Chapter 12, Section II).

The findings and recommendations shall be submitted to the Division Manager. Action taken to correct the defect and date of completion shall be documented and such records shall be made available upon request.

IV. Cal/OSHA Inspections

A. Unannounced Inspections by Cal/OSHA Compliance Officers

In order to ensure employer compliance with Cal/OSHA safety standards, compliance officers of Cal/OSHA will independently inspect the City of Santa Barbara periodically. In accordance with the law, these inspections will be made on a no-notice basis and during reasonable hours. Risk Management shall be notified at the earliest possible time of an inspection so that the Risk Analyst can accompany the compliance officer during the inspection. All personnel shall cooperate fully with the inspectors in order to make each visit as beneficial as possible.

Inspections will be made to determine compliance with standards as they pertain to written programs, condition of buildings and other facilities, equipment, operational practices, and record keeping procedures. Each Cal/OSHA inspector will begin with a request to view a copy of the City's:

- Injury and Illness Prevention Program (i.e. this manual and any other written departmental safety procedures), and
- OSHA 300 Injury/Illness Log (record of injuries sent to each Department Head every 45 days throughout the current year and annually on February 1 for the previous year).

1. Inspection of City Buildings and Facilities

The Risk Analyst shall:

- a. Accompany the Cal/OSHA compliance officer on the inspection tour when any City building or other related facility is being inspected;
- b. Record violations detected by the Cal/OSHA compliance officer for advanced planning purposes;
- c. Upon receipt of a citation, ensure that it is posted on a bulletin board nearest to the violation until it has been abated;
 - 1) If the violation is a minor housekeeping problem or something similar, the Risk Analyst will request (through channels) to have the area cleared or otherwise modified to comply with standards;
 - 2) If abatement of the citation will require more extensive work, coordinate with Public Works, Building Maintenance or the appropriate department representative to determine if the job can be done within the abatement period or if an extension of time will be needed;
- d. Ensure that when correction of a violation can be accomplished within the abatement period, it is done without delay;
- e. Notify the Department Head in writing when modification requires the expenditure of funds so that appropriate action can be taken with higher authority;
- f. Prepare any requests for needed extensions, indicating why the extension is required and how long the delay will be. The request shall be in memorandum form addressed to the Risk Manager, who shall forward it to the Division of Occupational Health and Safety before the abatement deadline;
- g. Prepare timely written requests for a variance or for a hearing when aggrieved by a questionable citation; and
- h. Upon actual completion of corrective action, certify by date and signature at the bottom of the citation form that each violation has been abated. The citation form shall be sent to the Risk Manager.

2. Inspection of Operational Practices, Equipment, and Record Keeping

Cal/OSHA Compliance Officers will concern themselves with safe work practices, use of prescribed protective equipment, adequacy of protective equipment, guarding of machines, use of shoring, equipment configuration with respect to operator protection, and the like. Violations of standards in this category will be cause for issuing citations. Department or Division Heads in receipt of a Cal/OSHA citation shall:

- a. Post each citation on a bulletin board as near the area of violation as possible until it has been abated;
- b. Correct the violation within the abatement period, if possible;
- c. If time required for corrective action will exceed the indicated abatement period, address a brief request letter to the Director of the Division of Occupational Safety and Health, Industrial Relations Department of California, for the signature of the Risk Manager, indicating why the extension is needed and approximately how long the delay will be. Send this request to the Risk Manager before the abatement deadline for further disposition; and
- d. Upon actual completion of corrective action, so certify by dating and signing their name at the bottom of the citation form and send the form to Risk Management before the abatement date.

3. Administration of Violation Citations

When a violation of a safety standard is documented and determined to be valid by a Cal/OSHA officer, a citation will then be issued against the City and served by registered mail. The Department or Division Head in receipt of the citation will promptly notify the Risk Manager of its contents. The Risk Analyst, at the direction of the Risk Manager, shall be responsible for:

- a. Maintaining current, complete records on citations from the time they are received until all required action is taken;
- b. Delivering citations to the Department or Division Heads concerned and accounting for the delivery by obtaining a signed receipt from each recipient. Citations are controlled legal documents and shall be handled accordingly;
- c. Advising the Risk Manager of citations which have been allowed to become delinquent which could result in Cal/OSHA action or financial penalties against the City;
- d. Making all abatements of violations, requests for variances, and protests of validity received from divisions and forwarding them to Cal/OSHA a matter of record; and
- e. Accompanying the compliance officer on all follow-up inspections and ensuring that the appropriate Department or Division Head is contacted for a pre-inspection briefing as soon as possible after notification that such inspection is to take place.

4. Appeal of Violation Citation

When a citation from a Cal/OSHA inspector is based on incorrect information and erroneously claims a violation, the Department or Division Head, in consultation with the Risk Manager, shall decide if a citation should be challenged. If an appeal of the citation is to be made, the Risk Analyst will be responsible for:

- a. Requesting an informal telephone conference with the Cal/OSHA Compliance Office District Manager to clarify if the citation issues are resolvable without proceeding to an appeal. Or, if the District Manager will not drop the citation(s), conferring with the affected Department or Division Head to decide whether to proceed to a written appeal of the citation.
 - b. Notifying the Department of Industrial Relations OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD of the City's decision to appeal and request the appeal forms to be mailed to the City within 15 days of receipt of a citation;
 - c. Completing the information and mailing to the OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD within 10 days of the receipt of the Appeal Form;
 - d. Collaborating with Department or Division Head upon receipt of the docketed Appeal Form(s) to notify all affected employees an appeal is pending and they have a right to participate in the hearing if they so choose;
 - e. Posting a copy of the docketed Appeal Form and the Participation Notice at or near the site of the violation(s), serving notice on any authorized employee representative and employee (or representative) seriously injured or killed in accident related to appealed violation;
 - f. Attending the pre-hearing telephone conference with the responsible Department or Division Head;
 - g. Attending formal appeal hearing with responsible Department or Division Head if compliance issues are not resolved by telephone conference;
 - h. Assisting Department or Division Head with achieving any corrections required after the hearing.
5. Consultation Services by Cal/OSHA

Should a Department or Division Head identify a work setting or program issue for which expert advice is needed, Cal/OSHA can provide a consultant at no charge. The Cal/OSHA consultant staff consists of those who specialize in construction safety and those who are industrial hygienists. The Cal/OSHA consultant is available to present training programs, give advice on setting up administrative controls, and inspect work sites and practices. When an employer requests a consultant, that employer is agreeing to correct any deficiencies or hazards noted by the Cal/OSHA consultant. If a serious violation of Cal/OSHA standards is found, the Cal/OSHA consultant may request immediate interim compliance.

In the event a Department or Division Head decides to invite a Cal/OSHA consultant to the work site, the Risk Manager will be asked to schedule an appropriate visit. The Risk Analyst

will accompany the Cal/OSHA consultant in the work place inspection in order to assist with any compliance issues or concerns, which cannot be addressed solely by the Department, or Division Head. As with the compliance procedures noted above, should a Cal/OSHA consultant issue a report requiring action, the Risk Analyst will assist with coordinating correction and response.

V. Casual Inspection of City Property

All City employees, regardless of occupation, can contribute immeasurably toward eliminating a costly penalty against the City of Santa Barbara by being alert to these deficiencies and reporting those noted directly to the department concerned and to Risk Management.

Since the City is charged with and is legally responsible for the proper maintenance of all City-owned property, it is of prime importance that oversights and negligence in carrying out such responsibility are eliminated.

Breaks in sidewalks, deep holes in streets, damaged or clogged drainage ditches, or hazards noted in buildings, parks, pools, etc., shall be corrected as soon as possible to prevent injuries and expensive damage claims that frequently result.

It is recommended that any City employee who notes a problem with City property and/or premises that their department is not equipped to remedy send a "Fix-It" form to Risk Management who will handle the matter. These forms are available through Central Stores.

VI. Posting & Tag Out Procedures

Formal Cal/OSHA inspections and informal inspections by City personnel may indicate that certain tools, equipment, machinery, or other property do not meet safety standards.

When a safety deficiency is noted, the defective item shall be clearly identified with a tag, posting, or other easily identifiable notice stating "Do Not Use" or "Unsafe". Any item identified as unsafe shall be repaired or replaced prior to use. If the deficiency was the result of a formal Cal/OSHA inspection, refer to section V.A.3. Administration of Violation Citations, above.

CHAPTER 8

OFF-THE-JOB INJURY CONTROL

Off-the-job injuries present many of the same problems to injured employees and management as industrial injuries. Since twice as many injuries occur off-the-job as occur at work, the need for efforts to control them is obvious. Yet, this is an area where the conventional approach to loss control is generally ignored or resented because of the perceived infringement upon the freedom of the individual to do as he pleases on his time off. Therefore, any attempt to control these injuries must be made by way of appeal to the better judgment of each individual rather than enforcing requirements.

Prevention of off-the-job injuries shall be made an integral part of the City's Injury and Illness Prevention Program. The impact of these injuries upon the efficient operation of City government is evidenced by the same costs and the same suffering. It is, therefore, equally important that all personnel promote a spirit of genuine concern for the well-being of each other whether on or off-the-job.

I. Supervisor's Responsibilities

Devote portions of some safety meetings for the promotion of off-the-job safety. Subjects appropriate for seasonal activities are:

- Proper Use and Handling of Firearms;
 - Boat and Water Safety;
 - Workshop Hazards;
 - Power Mower Safety;
 - Using Hearing Protection Off-The-Job;
 - Hazards of "Do-It-Yourself" Construction Projects;
 - Hazards of Making Home Repairs; or
- a) Consideration for Physical Limitations While Playing Games or Working, etc.

Discuss injuries that have resulted from these activities and encourage employees to submit ideas for the promotion of off-the-job safety.

CHAPTER 9

RECORD KEEPING REQUIREMENTS

Department Heads shall ensure that records of industrial injuries, industrial illnesses, vehicular collisions, safety inspections, safety training, and safety meeting minutes are kept up to date within their respective department. Police and Fire Departments may maintain records as specified in departmental directives, provided all Federal and Cal/OSHA requirements are met.

I. Industrial Injury Records

A. OSHA Log (OSHA Form 300)

Risk Management shall maintain a log of Occupational Injuries and Illnesses in accordance with Federal and Cal/OSHA regulations. This log shall be maintained on a daily basis, using information gleaned from the *DWC-1*, the *Report of Occupational Injury or Illness*, and the *Supervisor's Incident Investigation Report* submitted by the departments.

Accurate record keeping is an item of concern on all safety surveys, and failure to maintain records is cause for a citation and possible fine by Cal/OSHA compliance officers.

- Minor injuries requiring only first aid treatment need not be recorded on the log.
- Injuries requiring medical treatment by a doctor, lost time (one day or more), loss of consciousness, restriction of work or motion, or transfer to another job shall be recorded with required details on a calendar year basis.

B. Annual Summary (OSHA 300A)

On or before February 1st of each year, an Annual Summary (OSHA Form 300A) shall be prepared by Risk Management and electronically posted on the Risk Management SharePoint page from February 1st to April 30th of each year. A hard copy of the Annual Summary shall be posted in each department in a place accessible to all employees (preferably a bulletin board) from February 1st to April 30th of each year. The hard copy of the Annual Summary shall be retained by each department for five (5) years.

C. Supplemental Records

1. An updated OSHA Log (OSHA Form 300) shall be electronically posted by Risk Management to the Risk Management SharePoint page every 60 days. The OSHA Log may be downloaded from the Risk Management SharePoint page by the department for presentation to any Cal/OSHA representative who requests it.
2. A copy of the *Report of Occupational Injury or Illness* shall be retained on file within the department as a supplementary record for a minimum of five (5) years.
3. A copy of the *Supervisor's Incident Investigation Report* shall be retained by the division as a record of all injuries reported for a period of five (5) years.

4. A copy of the *DWC-1* shall be retained by the division as a record of all injuries reported for a period of five (5) years.

II. Vehicular Collision Records

A copy of the Vehicle Collision Report for each collision shall be retained in the department files as a permanent history of department collision experience. The driving record of each individual involved in a collision shall be in accordance with procedures set forth in Chapter 10.

III. Preventability Determination(s) & Record(s) of Action(s) Memorandum(s)

Preventability Determination(s) & Record(s) of Action(s) Memorandum(s) shall be maintained in the department or division files for a period of five (5) years.

IV. Safety Inspection Records

Inspection records shall be maintained in the department or division files for a period of five (5) years.

V. Safety Training Records

A log indicating employee's name, type of training, and date of training, is to be maintained by the department or division for the entire period of employment for each employee.

VI. Safety Meeting Records

Safety meeting minutes shall be maintained related to all safety committee meetings for a period of five (5) years.

CHAPTER 10
INVESTIGATION AND REPORTING OF VEHICLE OR EQUIPMENT COLLISIONS

I. Definitions

The definitions in this section are taken from several sources, including the California Vehicle Code and the National Safety Council.

City equipment	Rolling transportation stock owned by the city.
City vehicle	1) Vehicle owned by the city and operated by a city employee; or 2) Personal vehicle owned and operated by a city employee used for city business, requires a) departmental approval, and b) proof of insurance coverage that meets Risk Management criteria on file in department.
Collision	The act of coming together with a violent, direct impact, such as a vehicle striking another vehicle from behind.
Non-preventable collision	Employee does everything within reason to prevent collision, yet collision still occurs.
Preventable collision	Employee fails to do everything within reason to prevent collision.
Vehicle	A device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.

II. Investigation Procedures

Department Heads shall instruct their employees to report only the facts to the investigating police officer or other party. Department Heads shall instruct their employees that if they are at the scene of a vehicle collision:

- Do not take personal responsibility for damage or admit liability;
- Do not give an opinion of the City's liability;
- Do not give an opinion of the citizen's liability; and
- Do not tell a citizen that "the City will take care of it".

The employee shall inform the other party to contact Risk Management for further information.

Forms for reporting collisions are in the vehicle glove box.

Each vehicle collision shall be:

- Reported to the local police department;
- Fully investigated; and
- Reported to the employee's Supervisor as soon as possible, but no later than the end of the employee's shift.

The Supervisor shall submit a department Vehicle Collision Report to Risk Management within forty-eight (48) hours of occurrence. Using the Vehicle Collision Report as a checklist, the Supervisor shall determine as many facts as possible and submit a copy of their complete report to Risk Management. It is important to obtain the names, addresses, and telephone numbers of all parties involved as well as those of any witnesses.

If a camera is available, take photos of the damaged property, and the area of the incident.

III. Reporting Procedures

Employees involved in a collision while operating a City owned vehicle or equipment shall call the local police to the scene to conduct an investigation and file a report. It is the City's policy to call the local police to report every vehicle collision, no matter how small or seemingly insignificant, including collisions involving a City vehicle or equipment striking a fixed object.

The Supervisor and the employee shall also investigate the collision and complete the Vehicle Collision Kit (located in the glove compartment of every City vehicle). Submit the completed report to Risk Management within forty-eight (48) hours of the collision.

Investigation in this context does not include becoming involved in the police investigation, such as, drawing conclusions or making any statements. The Supervisor shall confine fact finding at the collision scene to obtaining:

- A. Name(s) of all parties;
- B. Addresses, home and/or business;
- C. Phone number(s);
- D. Insurance information including the company name, policy number, and company phone number; and
- E. Witness information listing the name(s), home and/or business addresses, and phone numbers.

REMEMBER:

Statements regarding liability are strictly forbidden.

IV. Vehicle Maintenance

Newly discovered damage (dents, windshield or mirror cracks, scratches) of unknown origin are to be reported as a vehicle collision. No matter how minor the damage is, a report must be

made to Risk Management and to Motor Pool within forty-eight (48) hours of discovery and investigated as a vehicle collision.

CHAPTER 11

MOTOR VEHICLE COLLISION CONTROL

The operation of vehicles is indispensable in conducting City business. And the productivity of each respective City department and division is impacted by these operations. When the aggregate of property damage, bodily injury, fatalities, and liability suits are considered, vehicle collisions are potentially the most costly losses the City can incur. Unless perfect driving is the rule, the cost resulting from vehicle collisions can mount to proportions that will adversely affect every department in its efforts to accomplish its mission and maintain good public relations.

I. Responsibilities

A. Department and Division Heads

Department and Division Heads shall:

1. Assume full responsibility for the driving record of their employees while they are on duty;
2. Establish firm internal requirements for personnel to fully adhere to the policies established herein and frequently check on their compliance;
3. Review the Department Safety Committee decisions on preventability of collisions and take all steps necessary to prevent a recurrence;
4. Review each preventable vehicle collision and unsafe driving report with the employees and their Supervisors to emphasize Management's intolerance of irresponsibility behind the wheel;
5. Establish firm policies regarding disciplinary action that will be taken against employees and their Supervisors who show a repeated disregard for safe driving practices, and ensure it is applied consistently. (Refer to the guidelines established by Human Resources for disciplinary action);
6. Insist that all assigned vehicles are maintained adequately for safe operation;
7. Annually verify each full time and part-time employees' drivers license information in accordance with each employee's job description;
8. Establish periodic inspection of assigned vehicles for safety discrepancies, malfunctions, signs of abuse, unreported damage and cleanliness. Have repairs made as soon as possible;
9. Fully support the City's Defensive Driving Training program to promote safe driving; and
10. Establish an aggressive campaign to enforce wearing of seat belts as required by state law.

B. Risk Analyst

The Risk Analyst shall:

1. Maintain and administer an aggressive program for City employees that will effectively reduce vehicle and equipment collisions;
2. Establish driver performance standards and ensure that all employees understand them;
3. Schedule Defensive Driving Courses for City employees and maintain records on their attendance and need for retraining;
4. Recommend safety equipment requirements and specifications for purchasing new vehicles;
5. Establish a City driver's license verification program for all operators of City vehicles;
6. Periodically spot check driver's qualifications and validity of their license;
7. Maintain complete records on City vehicle and equipment collisions, including property damage and liability claims.
8. Provide the City Administrator and staff with meaningful reports on the progress of this program; and
9. Periodically follow up on Safety Committee recommendations and corrective actions taken by divisions to ensure full application of collision prevention policies.

II. General Policies

A. Driver Selection

Selection of employees required to drive full or part-time shall be done with care. The activities and the professionalism of City employees are under public scrutiny every time a City vehicle is operated. It is also of paramount importance that only employees who have a healthy attitude toward their driving responsibilities be assigned to driving tasks.

Drivers of City vehicles shall be considered qualified when capable of meeting the following criteria:

1. Possess a valid California driver's license of the proper class;
2. Pass a medical examination when a question of fitness to drive arises because of a prolonged or serious illness. This medical examination may include:
 - a) physical examination, and/or
 - b) vision examination to determine visual acuity (near and far), vertical and lateral balance, fusion, depth perception, field of vision and color recognition;
3. Pass written tests on driving regulations, whenever required;
4. Successfully complete a periodic driving check ride administered by their Supervisor; and
5. Demonstrate familiarity with the type of vehicle or equipment assigned.

B. Verification of Employee Drivers' License Information

1. Policy

Some job classifications require the operation of vehicles and/or equipment. Each department will check the validity of a candidate's driver's license and DMV record before appointment to employment. The department will verify the employee's driver's license information annually thereafter. Appointment or continued employment for specific job classifications may be impacted by any or all of the following:

- a. Lack of a California Driver's License,
- b. Specific moving violation convictions,
- c. Multiple moving violation convictions, and/or
- d. One or more vehicle collisions.

2. Procedure

- a. Each department will maintain a master list noting the name of each employee and the

type(s) of license(s) (drivers', equipment, etc.) required for that employee's job classification.

- b. On or before December 1st of each year, the department shall appoint one individual to verify the validity of each employee's driver's license and note any requirements or restrictions, i.e., must wear corrective lenses when operating vehicle, etc.
- c. Submit the completed list to Risk Management by December 15th of each year.

C. Defensive Driving Courses

Full time and designated part-time employees driving City vehicles shall be required to attend Defensive Driving Courses and periodic refresher courses scheduled by Risk Management.

Assignments for classes shall be made by Division Supervisors. Assignments shall ensure class quotas are met while maintaining satisfactory work schedules.

Frequency of employee attendance in Defensive Driving Courses shall be determined when a review of records indicates a need for retraining.

New employees required to drive City vehicles shall complete the first Defensive Driving course offered after employment begins.

Any employee involved in a preventable collision or demonstrating questionable driving capabilities shall complete the next scheduled course in Defensive Driving. Employees that do not demonstrate any improvement in their driving skills shall be reassigned to non-driving duties, if available. Some job classifications may not permit assignment to non-driving status. This may result in other disciplinary action. Refer to the disciplinary action guidelines established by Human Resources.

D. Vehicle Collision Review by Department Safety Committee

Each department and/or large division responsible for fleet operations shall utilize the services of its Safety Committee to review vehicle and equipment collisions. This also applies to employees authorized to drive their personal vehicles on official City business. The Committee reviewing vehicle and equipment collisions is the same

Committee established to review industrial injuries. The functions of the Committee in reviewing vehicle and/or equipment collisions are as follows:

1. Review all collisions resulting in damage to one vehicle or piece of equipment in excess of \$50.00;
2. Objectively consider evidence presented by:
 - a. The employee concerned;
 - b. The employee's Supervisor; and
 - c. The Police department's traffic collision report;

3. Determine the validity of a claimed defect or malfunction of any vehicle component by:
 - a. Reviewing maintenance records;
 - b. Obtaining information from Intra-City Services, or from the mechanic involved in the post-crash repair or examination. If laboratory analysis of component failure is deemed essential, the Committee shall order the analysis and withhold judgment until the lab report is received;
4. Review the employee's past driving history;
5. Report the Committee findings regarding preventability and any corresponding recommendations for corrective action in writing to the Department or Division Head. Refer to Appendix 15 for guidelines on determining preventability of an Industrial Injury and/or Vehicle Collision. Committee findings shall be entered in the employee's Vehicle Operator's Record, and a copy of the report shall be forwarded to Risk Management; and
6. If, in the judgment of the Department or Division Head, the Committee failed to fulfill its responsibility, the Department Head should require the Committee to re-convene and re-evaluate the case. Committee findings and recommendations provide guidance for Management decisions on loss control policies. The importance of a thorough, objective examination of each collision cannot be overemphasized.
7. For additional information on determining the preventability of a vehicle collision, refer to Appendix 15.

E. Disciplinary Action

Disciplinary action against employees who irresponsibly cause vehicle and/or equipment collisions shall be administered in the same manner as for industrial injuries. Refer to the guidelines established by Human Resources for disciplinary action.

F. Vehicle Operator's Records

Each department with fleet operations shall maintain a record of vehicle operators documenting the driving capabilities. These records shall be an item of interest on periodic formal inspections. Information shall include:

1. Date employment began;
2. Drivers license number;
3. Drivers license expiration;
4. Date(s) of all completed driver training and refresher courses;
5. Date(s) of any medical examination(s) and a list of any physical limitations;
6. Collision history, showing:

- a. Date of collision,
- b. Description of collision,
- c. Preventability determination, and
- d. List of traffic or civil law violations.

CHAPTER 12

INVESTIGATION AND REPORTING OF PROPERTY DAMAGE AND PUBLIC ACCIDENTS ON PUBLIC PROPERTY

I. Definitions

Property damage to City property includes, but is not limited to: damage to City trees, fire hydrants, signs, traffic signals, buildings, parking lot fixtures, and street lights.

Public accidents occurring on public property are defined as accidents involving citizens on property owned or operated by the City. This may include, but is not limited to: public streets, sidewalks, harbor, parks, gymnasiums, recreational centers, libraries, and City buildings where the public conducts business. It does not include members of the public suffering an illness, such as a heart attack, on public property.

II. Investigation and Reporting of Property Damage

All departments shall establish communication with Risk Management when a citizen damages public property and City personnel are called to the scene, either for investigation, Fire or Police services, or repair of public property. Cost recovery is handled by Billing and Collection.

If one citizen damages another citizen's property or person while using City facilities, (example: golf ball breaking a car window; or one person accidentally tripping another while in the library), and it is reported to City personnel, the City employee shall obtain both parties' names, addresses, telephone numbers, etc. Under no circumstances shall the City personnel taking the report imply the City's liability for the incident. After the report is taken, these persons shall be directed to Risk Management if they have further questions.

All reports and investigations that involve damage to City property shall be sent to Risk Management.

III. Investigation and Reporting of Public Accidents on Public Property

Generally, the Police are called to all public accidents on public property and their investigative reports of these incidents shall be sent to Risk Management. Any additional information that other City employees at the scene can add should be written down and a copy sent to Risk Management on the Vehicle Collision form provided in each City vehicle.

All serious accidents or fatalities that occur on City owned or operated property shall be reported to Risk Management by telephone as soon as possible by the City department on the scene. The Supervisor in charge of the City property shall submit a Supervisor's report of accident within forty-eight (48) hours.

Risk Management shall be responsible for additional investigation, as required.

City personnel on the scene shall not give out information as to the City's liability. Injured persons shall be directed to Risk Management for further information.

IV. Incident Reports

Close calls or near accident information is frequently as valuable as accident reports in flagging hazardous procedures or conditions.

Supervisors shall encourage employees to report details on incidents either involving themselves or a citizen, which nearly produces an accident.

Information gained from such reports will then be disseminated to all who can benefit from the lesson. Use plain paper or a memo referencing "Near Miss" as the subject, and send details to Risk Management.

CHAPTER 13

PROPERTY DAMAGE/CITY LIABILITY CONTROL

Liability claims constitute a significant financial drain upon City capital. Said claims may result either directly from some action taken by a City employee or indirectly because of an unsafe condition of City property. While some liability potential is beyond control, a high percentage can be kept within reasonable limits when efforts are directed toward eliminating the causes. It shall be the responsibility of all employees to include such efforts as an integral part of their everyday duties.

I. City Field Facility Inspections

Department Heads responsible for maintenance of field facilities shall ensure that thorough inspections are conducted at a frequency determined to be adequate for controlling defects. Such inspections performed by divisions in their own respective areas of concern shall include, but not be limited to monitoring the following:

- Condition of all City streets, gutters and sidewalks with respect to holes, roughness, drainage, cracks, breaks, irregularities and excessive amounts of gravel or sand on pavements;
- Condition of main and branch sewer lines as well as their freedom from restrictions;
- Condition of public easements with respect to accumulated piles of trash, illegal fencing or structures that endanger City personnel working in easements, or those that constitute a fire hazard;
- Condition of alleys for obstructions to passage. Excessive holes, weeds and rough surfaces that could throw a vehicle out of control or cause injuries;
- Condition of recreation areas, parks, pools, golf courses, etc., with respect to glass, cans, and debris on the grounds and the presence of structural hazards which could cause cuts, tripping, bumping, or falling injuries;
- Condition of trees and shrub growth along streets and sidewalks which could damage vehicles, hurt people, present trip or slip and fall hazards (e.g. roots uplifting a sidewalk or tree fruit falling to the ground), or create blind areas at intersections;
- Condition of drainage ditches to ensure good flow of water;
- Proper guarding of street drains and drain ducting;
- Proper placement of speed limit and traffic regulatory signs; and
- Condition of pavement stripes and marked crosswalks.

II. City Building Inspections

Department or Division Heads shall make periodic inspections of buildings for which they have responsibility in order to mitigate hazardous conditions in both work areas and those areas used by the public. Such inspections shall include checking for:

1. Good housekeeping;
2. Condition of stair treads, floor tiles, and carpeting for tripping hazards;
3. Exposed floor electrical and telephone outlets for tripping hazards;
4. Loose stairway railings;
5. Windows with cracked glass;
6. Walls and door frames for protrusions;
7. Office furniture in need of repair;
8. Office machines in need of repair;
9. Proper storage of materials;
10. Adequate lighting and ventilation;
11. Freedom from insects and other pests;
12. Exit signs and emergency lights;
13. Fire extinguisher (current inspection) and First Aid kits;
 - a) Locks on security doors and gates in good condition and used; and
 - b) Posting of emergency telephone numbers.

III. Written Inspection Reports

Inspectors shall document the location and description of all discrepancies noted in a simple, written report. Copies of the report shall be sent to individuals responsible for correcting the hazards noted and a copy of the report shall be retained on file by the inspector together with a record of corrective action taken.

IV. Street and Excavation Barriers

All barriers, markers and lights shall be maintained in good repair, be clean, and brightly finished to ensure high visibility.

Placement of traffic cones, warning flags, barriers, and lights for street work shall be in accordance with Cal/OSHA regulations.

Work hours in heavy traffic areas shall be followed closely to minimize personnel exposure and disruption of traffic flow.

City agencies subcontracting any work or construction on City property or public right-of-way shall ensure that contracts specify the contractor's responsibility for strict adherence to all safety standards promulgated by State and Federal Occupational Safety and Health Laws (Cal/OSHA & Federal OSHA).

V. Display of Slow Moving Vehicle (SMV) Emblem

All slow-moving, special purpose vehicles using streets or roads shall prominently display the SMV emblem (orange triangle) on the rear.

CHAPTER 14

SAFETY AND HEALTH POLICIES AND PROCEDURES

I. Purpose

The purpose of developing written policies and procedures found in the following appendices is to provide City employees and supervisors with basic information and guidelines so that they may have a better knowledge of what is expected and required of them when confronted with various safety-related situations or issues.

II. Introduction

Providing safe and healthy working conditions is the responsibility of every City supervisor. Unsafe acts or conditions cause accidents, both of which are under the supervisor's control. Unsafe working conditions can be minimized by identifying hazards, correcting unsafe work practices, and using proper equipment.

Management selects qualified personnel, trains them to work in a safe manner, and provides supervision to ensure compliance. In each of these areas, management will maintain positive control toward prevention of unsafe acts by employees. If an accident occurs, the most important factor in accident investigation is to determine how to prevent a recurrence of the same accident.

III. Policies and Procedures

The following appendices are specific safety and health procedures that outline, among other things, City employees' responsibilities to mitigating safety hazards within their respective work sites.

IV. Deviation

Any deviation from the policies and procedures prescribed in the following appendices must be approved by the department and Risk Management.

V. Disciplinary Action

Failure to comply with the policies and procedures outlined in the following appendices may subject the violator to disciplinary action as prescribed by Human Resources.

APPENDIX 1:

SAFETY ORIENTATION FORM

Name: _____

Job Title: _____

Date of Hire: _____

REQUIRED	INITIALS	SAFETY TRAINING TOPIC
✓		Asbestos Awareness
✓		Disaster Preparedness/How to Use a Fire Extinguisher
✓		Emergency Medical Care/AED Basics & Using an AED
✓		Ergonomics
✓		Fleet Safety
✓		Hazard Communication
✓		Heat Illness Prevention
✓		Workplace Security
		Confined Space Awareness
		Lockout/Tagout
		Fall Protection
		Hearing Conservation
		Respiratory Fitness
		Infection Control
		Respirable Crystalline Silica
		Personal Protective Equipment
REQUIRED	INITIALS	WORKSITE SPECIFIC INFORMATION
✓		Introduction To and Location of City's Injury & Illness Prevention Program (IIPP) Manual
✓		Reporting Injuries, Hazards or Damage to Supervisor Immediately
✓		Tour of Facilities and Equipment
✓		First Aid: (1) Location of Available Equipment (First Aid Kit, Eye Wash Station, Etc.); (2) Location and Names of Employees Trained in First Aid and CPR.
✓		Potential Worksite Specific Hazards
✓		Emergency Evacuation Procedures
✓		Department Specific Safety Information/Programs

I, _____ (print), acknowledge completion of all safety training topics and receipt of worksite specific information listed and initialed above. I understand that as a

condition of my City service, I am required to exercise due care in the course of my work to prevent damage or injury to myself, my co-workers, as well as the general public.

Initial (if applicable):

_____ I understand that I will not be allowed to operate any Powered Industrial Truck(s) until I have completed the required safety training(s) and/or certification(s).

Signed:

Employee Signature Date Supervisor Signature Date

APPENDIX 2:

Personal Protection Equipment

Eyes

I. Scope

This section covers guidelines for eye protection devices and responsibilities for implementing and maintaining an Eye Protection Program.

II. Purpose

The purpose of this section is to establish operating guidelines for compliance with the Eye Protection Program.

III. Responsibilities

A. Managers

It is the responsibility of Managers to:

1. Ensure that their operations are in compliance with these standards; and
2. Arrange for the dispensing and fitting of safety glasses and attendant record keeping. Prescription safety glasses must be fitted and dispensed by a qualified person licensed for this purpose.

B. Supervisors

It is the responsibility of Supervisors to:

1. Make the work place as safe as possible by establishing and following practices which minimize accident potential;
2. Evaluate each operation in terms of potential eye hazards;
3. Eliminate the eye hazard or have eye protection requirements posted in each area;
4. Insure that employees are supplied with appropriate eye and face protection when required; and
5. Enforce the use of eye protection in areas so posted.

C. Employees

It is the responsibility of employees who are required to wear eye protection to do so according to this policy.

D. Risk Analyst

The Risk Analyst is responsible for assisting Managers and Supervisors in establishing which areas require eye protection, and evaluating and selecting eye protection equipment.

IV. Requirements

A. General

Approved eye protection devices will be provided and their use by personnel is required wherever the possibility of eye injury exists.

B. Approval

All eye protection devices issued to personnel must meet the requirements of ANSI ZS7.1.

C. Eye Protection Areas

Eye protection is mandatory in the following areas:

- All shop areas – including machining, grinding, sanding, welding, casting, molding, fabrication, soldering, sheet metal, etc.
- All wet process operations – including plating, dip cleaning, etching, spray coating, etc.
- Laboratories – including handling and transporting of cryogenic and other hazardous liquids, materials, chemicals, etc.
- Facilities maintenance – Such areas shall be conspicuously posted and visitor's eye protection shall be provided at main entry points. Personnel working in areas requiring eye protection shall wear eye protection devices.

D. Contact Lenses For Safety Reasons

Persons who wear contact lenses shall not be permitted to work where there is a potential exposure to chemical splashes or fumes or light flashes. A record shall be kept of any contact lens wearer who works in eye protection areas where contact lenses are allowed to be worn under safety glasses.

E. Tinted Glasses

Tinted safety glasses can, upon recommendation of a doctor and the supervisor, be issued to persons required to work where glare is a problem.

F. Visitors

Visitors entering eye protection areas or exposed to eye hazards must wear appropriate eye protection provided by the City. Escorts areas.

G. Contractors

Contractors are responsible for providing their guests with appropriate eye protection before entering eye protection areas. Contractors and their employees performing services on premises are required to provide any and all eye protection required specifically for their operations. Employees required to be exposed to the contractor's operations on property will be provided with appropriate eye protection by the City.

V. Eye Wash and Safety Showers

Emergency facilities for quick eye drenching shall be provided where there is a potential exposure to injurious materials.

Footwear:

I. Scope

This section covers requirements for the use of special footwear for protection against falling objects, slick surfaces, and chemicals.

II. Purpose

The purpose of this section is to establish minimum foot protection requirements for those employees involved in work activities where such protection is normally required.

III. Responsibilities

A. Managers

It is the responsibility of the Manager to provide protective footwear which meets the ANSI Z41-Safety Footwear standard (current issue), wherever needed.

B. Supervisors

It is the responsibility of supervisors to:

1. Evaluate each operation in terms of potential foot hazards;
2. Eliminate foot hazards by process design or instituting safe operating practices, whenever possible; and
3. Approve procurement of safety shoes and enforce use of the protective footwear as needed.

C. Employees

It is the responsibility of employees who are required to wear protective footwear to do so according to this policy.

D. Risk Analyst

It is the responsibility of the Risk Analyst to assist in evaluating need for and selection of appropriate footwear.

IV. Requirements

A. General

Sturdy shoes which are close-toed, with heel strap or closed heels, shall be worn by personnel engaged in the field. The heels should not elevate the shoe more than two inches, and the minimum sole thickness must be 1/8 inch. In areas where hazardous chemicals are used, shoes made of leather or other semi-waterproof type of material that completely enclose the foot are required.

B. Special Protective Footwear

Special protective footwear such as safety toe shoes and rubber boots shall be provided to employees who are exposed to hot and/or corrosive substances as well as falling objects. The Department shall determine appropriate protective footwear for a given area.

C. Approval

Safety toe shoes to be used for protection in operations must meet requirements of ANSI Z41, (current issue).

D. Application

Safety shoes are generally recommended for the personnel working in the following areas:

- Machine shops
- Warehousing
- Maintenance
- Work Crews

E. Procurement Policy

The City pays varying amounts (per MOU) towards the full price for standard safety shoes that are required for a given job. The Manager and Supervisor must authorize the employee to purchase them, and they become the personal property of the employee. Vouchers are available at the General Services Division. If an employee wishes to select a special type of safety shoe priced higher than a standard style, the employee will pay the extra cost, except in unusual circumstances. The City provides only one pair of safety shoes per employee, per year.

F. Rubber (Neoprene) Boots

Rubber boots are for use over shoes to prevent exposure of feet and lower legs to liquids. They shall be furnished to personnel working in wet operations such as plating, de-greasing and certain maintenance work. Such boots shall be constructed to provide resistance to the liquids involved and shall have sufficient leg height to assure adequate protection.

Clothing

I. Scope

This section covers the requirement for use of protective clothing.

II. Purpose

To require the use of an approved piece of personal protective clothing in those areas or operations where such equipment is necessary to protect employees from recognized hazards.

III. Responsibility

Each Department will be responsible for identifying areas and operations in which protective clothing is necessary, including the type of equipment required. Risk Management will assist whenever possible.

IV. Requirements

All employees working in areas or operations where the following personal protective equipment is required shall wear said equipment as long as the hazard is present or may be present.

A. Work Clothing

Appropriate clothing is provided or required when working for the City. Said clothing shall not interfere with the performance of an employee or expose him or her to unnecessary hazards. Long sleeve shirts may be required on certain operations.

Examples of Prohibited Attire:

- Open shirts exposing employee to sunburn, poisonous plants, insects, and/or flying debris.
- Loose shirts tails, sleeves which can get caught in moving machinery or power tools.
- Cutting off pant legs to make shorts. Wearing shorts which expose the employee to sunburn, poisonous plants, insects, and/or flying debris. (Supervisors, in consultation with their department, have discretion in approving who, where, and when short pants can be worn

B. Special Clothing

Special clothing may be required to protect an employee from impacts and dust, fire and heat, vapors, moisture and corrosive liquids as well as temperature changes.

C. Gloves

Appropriate gloves will be provided and their use required when an employee is working in an area where he or she is exposed to injury to the hands or fingers from material, machinery, heat, chemicals, electrical contact, and/or sharp objects.

Head:

I. Scope

This section covers requirements for use of protective headgear.

II. Purpose

To require the use of an approved safety hat or bump cap in those areas or operations where there are hazards of bumping one's head, having it struck, contacting high voltage equipment or having harmful materials precipitate on the head.

III. Responsibilities

Each Department is responsible for identifying those areas or operations wherein head protection is required.

IV. Requirements

A. General

All employees shall be provided with and required to wear an approved safety hat or cap when exposed to an area or operation where such equipment is necessary to protect the employee from identified hazards. Whenever entering any area marked with a sign stating "HARD HAT AREA" or similar wording which indicates head protection is required, said protection must be worn.

Upon being provided with head protection, all employees shall be required to wear same when working in areas or operations where there is a possible danger of impact from falling or flying objects, striking fixed objects, or from electrical contact.

Each supervisor shall be responsible for distribution and proper usage of said equipment.

Each employee provided with a safety hat or cap shall be responsible for its maintenance and proper use.

No modifications, decals, painting, etc., shall be permitted without prior approval of the supervisor.

B. Risk Management

Risk Management will assist in the identifying of hazardous areas when necessary.

C. Head Protection

Head Protection must meet ANSI Standards Z89.1-1969 and Z89.2-1971. (*GISO §3381*).

APPENDIX 3:

Lockout, Blockout and Tagout Program

I. Scope

This section establishes requirements, responsibilities and guidelines necessary for all employees operating, servicing or maintaining machines or equipment in which the unexpected energization or start up could cause injury. This standard establishes minimum performance requirements for the control of such hazardous energy.

II. Purpose

The purpose of this policy is to:

1. Instruct how to create a control system to protect employees from the unexpected movement of equipment and machinery and flow or release of energy, liquids, or gases in all City operations; and
2. Provide guidelines for compliance with federal and state regulations and mandates for a written Lockout, Blockout or Tagout System procedure.

III. Regulations

Federal and State regulatory agency rules governing this program include: OSHA 29 CFR §1910.147; Cal/OSHA, Title 8, Electrical Safety Orders §2320.4., §2320.5. and §2320.6; and General Industry Safety Orders §3314, §3318 and §6004.

IV. General

Affected employees must be protected from hazards of released energy. Such hazards exist any time: protective guards are removed from machinery; equipment or piping is put in unusual positions; moving machinery is adjusted; or during similar operations. Typical activities for such procedures are: erecting, installing, constructing, repairing, adjusting, inspecting, cleaning, operating or maintaining equipment. Energy sources involved could be: electrical, mechanical, hydraulic, pneumatic, chemical, radiation, thermal, compressed air, springs, or suspended parts (gravity).

The program steps for compliance with City policies are to:

1. Evaluate all work practices to identify where Lockout, Blockout, and Tagout apply.
2. Post written warnings and written procedures of the designated lockout, blockout, tagout systems.
3. Instruct all affected employees in the lockout, blockout, tagout systems.
4. Implement effective measures to prevent non-authorized employees from energizing machines or processes that are locked out.

5. Maintain an inspection program that is conforming to the Cal/OSHA regulations.

V. Definitions

Affected employee:	A City of Santa Barbara employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout, blockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
Authorized employee	A City of Santa Barbara employee who has received training in order to oversee implementation of a locking, blocking or tagging out procedure on machines or equipment to perform servicing or maintenance on that machine or equipment.
Blockout	Use of physical blocks to prevent movement on air-operated, gear-driven, hydraulically operated units, or suspended parts of a machine or equipment.
Capable of being locked out	An energy isolating device will be considered to be capable of being locked out either if it is designed with a hasp or other attachment or integral part to which, or through which, a lock can be affixed, or if it has a locking mechanism built into it or if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.
Energized	Connected to an energy source or containing residual or stored energy.
Energy isolating device	A mechanical device that physically prevents the transmission or release of energy, including but not limited to: a manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently; a slide gate; a slip blind; a line valve; a block; or any similar device used to block or isolate energy. The term does not include a push button, selector switch, and other control circuit type devices.
Energy source	Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.
Hot tap	A procedure used in repair, maintenance and service activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air gas, water, steam, and petrochemical distribution system.

Lockout	The placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.
Lockout device	A mechanism that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.
Normal production operations	The utilization of a machine or equipment to perform its intended production function.
Red danger tag	This is a personal danger Do Not Operate tag to be used by all employees over other white danger tags to signify the presence of someone inside or working on the equipment. These tags are for personal safety and can be removed only by the employee whose name is on the tag. (Under certain circumstances a supervisor is authorized to remove a red tag.)
Servicing and/or maintenance	Work place activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and repairing and/or preserving machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes where the employee may be exposed to the unexpected energization or start up of the equipment or release of hazardous energy.
Setting up	Any work performed to prepare a machine or equipment to perform its normal production operation.
Tagout	The placement of a Danger tag/sign on an energy-isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.
Tagout device	A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating apparatus in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.
White danger tags	To be marked "Danger, Do Not Operate/Valve Closed" or wording needed. This is a system or equipment "owner's" tag used to indicate the equipment valve or de-energized switch is not to be operated. Such tags can be removed only by a supervisor or designated employee who tagged the equipment.
Yellow caution tags	To be marked "Caution". This is used by employees to indicate a temporary or unusual operating condition. These tags are to show the name of the maintenance division, a description of the condition, the steps to take to return to a normal operating condition, and signed by the person who tagged the equipment. These tags can be

removed by the supervisor of the maintenance division responsible for the tagged equipment. The caution tag is a hazard warning and never is to be used as personal protection.

VI. Responsibilities

A. Department Heads

Department Heads are responsible for:

1. Establishing firm, internal requirements for all personnel to fully adhere to the policies established herein;
2. Frequently checking on compliance with this policy;
3. Holding Managers fully accountable for any deviation from this policy and procedure. "Fully accountable" is defined as being able to: explain why the deviation occurred; proffer recommendation(s) to prevent similar recurrences; and ensure the implementation of the prevention techniques;
4. Holding Managers fully accountable for preventable lockout, blockout, tagout injuries to either employees, contractors, or the public that occurs within their area. Accountability shall include an explanation of how the exposure occurred, why the exposure occurred, and what steps have been taken since the exposure to prevent recurrence;
5. Requiring contractors that provide services in or around energy sources to the City adhere to the policies established herein; and
6. Contacting Risk Management for any assistance needed to implement or maintain this program.

B. Managers

Managers are responsible for:

1. Ensuring that all employees within their division understand and adhere to this policy;
2. Enforcing compliance with this lockout, blockout, tagout program within their division. This includes both City employees and any contractors performing work for the City;
3. Establishing approved lockout, blockout, tagout protection measures in their areas;
4. Ensuring that employees covered by this policy receive annual training for work in or around any stored energy sources as outlined in section VII., below; and
5. Ensuring that contractors covered by this policy have trained their employees on performing work in or around equipment/processes with stored energy sources as outlined in section VII., below. Employee training must have taken place within twelve (12) months of commencement of contract work.

C. Supervisors

Supervisors are responsible for:

1. Making the work place as safe as possible for both employees and the public. This shall be accomplished by establishing and following practices that minimize accident potential;
2. Evaluating each operation in terms of potential exposure to the release of stored energy as defined in this policy;
3. Educating each employee regarding this policy;
4. Providing employees with all necessary equipment needed for practicing lockout, blockout, tagout procedures;
5. Identifying work areas where there is the potential for the release of stored energy; and providing a written procedure for lockout, blockout, tagout for identified areas.
6. Identifying any required safety equipment for work in or around equipment which has an energy release potential;
7. Providing and maintaining all required personal protective equipment (PPE) in clean, sanitary condition, and that locks, blocks and tags are operable;
8. Assigning an authorized employee to coordinate work in or around each machine, pipe or process where there is a potential for a stored energy release;
9. Ensuring that any person assigned to work in or around equipment for which there are lockout, blockout, tagout procedures is fully informed of the nature of the potential hazard(s) encountered;
10. Ensuring that any person assigned to work in or around equipment under lockout, blockout, tagout procedures has received proper training in the policy and steps for proper lockout, blockout, tagout operations from a qualified trainer. The training shall be performed at the following intervals:
 - a) prior to beginning work in or around a equipment, and,
 - b) annually thereafter.
11. Arranging for lockout, blockout, tagout equipment repair services as needed.

D. Authorized Employee:

The Authorized Employee is responsible for:

1. Determining if acceptable lockout, blockout, tagout conditions are present before work on or around equipment is planned;
2. Completing the lockout, blockout, tagout procedure as written and attaching appropriate tags at work site prior to any work is begun on equipment;
3. Authorizing and overseeing servicing or maintenance operations; and
4. Terminating procedure as outlined in Lockout, Blockout, Tagout Procedure (VIII., C. Restoring Machines or Equipment to Normal Production Operation).

E. Affected Employees

Employees that work on or around energized equipment, machines or pipes are responsible for:

1. Following the directions of the Authorized Employee *when performing tasks requiring lockout, blockout, tagout conditions and when training to become an Authorized Employee*;
2. Using all lockout, blockout, tagout devices issued in accordance with the Authorized Employee's directions, manufacturers' instructions and training procedures;
3. Reporting any malfunctioning lockout, blockout, tagout devices to their supervisor;
4. Using only undamaged and unaltered lockout, blockout, tagout equipment. Refraining from disassembling, or altering equipment other than to change keys or tags according to the written procedure and training.

F. Risk Analyst

The Risk Analyst is responsible for:

1. Providing guidance in identifying where lockout, blockout, tagout procedures are needed through the use of a Safety Consultant or Industrial Hygienist;
2. Assisting individual departments in the selection and procurement of lockout, blockout, tagout safety equipment, where appropriate;
3. Assisting the departments in evaluating work conditions or exposures that may require the use of specialized safety equipment; and
4. Periodic review of this program to verify the program meets all applicable federal and state regulations.

VII. Requirements

A. Identification

Departments shall survey their work sites to determine the existence of any tasks and locations in which employees require protection from the unexpected release of an energy source. In addition to surveying, the department must identify which work areas or tasks include serving and maintenance of machines, equipment, and processes where unexpected energization, start-up or release of stored energy could cause employee injury.

Normal operations are not regulated by this program unless an employee is required to remove or bypass a guard or other safety device or where an employee is required to place any part of his/her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operations.

If the work place contains tasks or locations that are covered under the lockout, blockout, tagout program, the department/division shall inform exposed employees by posting danger signs that note:

1. the existence and location of the equipment or machinery with the potential to release stored energy; and
2. the danger posed by the inadvertent release of stored energy.

B. Exceptions

The following are examples of exceptions to the lockout, blockout, tagout procedures:

- Repairing cords and plugs connected to electrical equipment where the cord and plug is the sole power source to the equipment. Moreover, the plug controlling the energy source must be under the sole and exclusive control of a qualified electrician performing the work.
- Hot tap operations involving transmission and distribution systems for gas, steam, water, or petroleum products when performed on pressurized lines when continuity of service is essential and shutdown of the system is impractical and employees are provided with an alternative type of protection that is equally effective.
- Replacing electrical bulbs without interrupting the electrical circuit when assigned tools, personal protection and process are used. Should a bulb disintegrate, break or become lodged in the equipment receptacle, predetermined procedures for lockout, blockout, tagout are to be immediately implemented.

VIII. Lockout, Blockout, Tagout Standard Operations

A. Training

Departments shall provide annual training for employees that perform maintenance in, on or around electrical, mechanical, hydraulic, pneumatic, chemical, or thermal or other transmissions of energy sources. The training shall be performed by qualified personnel, and cover the topics of: recognition of energy sources and hazard potentials, using written lockout, blockout, tagout procedures; identifying which "Affected Employees" and "Authorized Employees" work in or around potentially hazardous energy sources; surveillance; personal protective equipment (PPE); lockout, blockout, tagout equipment and techniques; and documentation or certifications for employees trained.

Supervisors of Affected Employees and Authorized Employees shall ensure that training outlining the purpose and function of the lockout, blockout, tagout energy control program has been transmitted and understood by employees. Moreover, s/he shall ensure Authorized Employees and Affected Employees possess the knowledge and skills required for the safe application, usage, and removal of energy controls. The training shall include the following:

Each Authorized Employee shall receive training in the recognition of potential hazardous release of energy sources, the type and magnitude of the energy available in the work place, and the methods and means necessary for energy isolation and control.

Each Affected Employee shall be instructed in the purpose and use of the lockout, blockout, tagout energy control procedures prior to beginning work in or around an energy source with the potential for a dangerous release. Follow-up instruction shall be given for each new exposure for a potential dangerous energy release and for each control procedure change. Training shall be given annually thereafter.

All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedures and about the prohibition relating to attempts to restart or re-energize machines or equipment which are locked/blocked/tagged out.

All contractors performing work in, on, or around hazardous energy sources on behalf of the City must train their employees in accordance with the criteria listed above. Departmental contract administrators are to request documentation of the contracted employees' training within twelve (12) months of commencement of contract work. The City contract administrator and/or supervisor in charge of the equipment or mechanical device being repaired or serviced shall instruct the contractor in the City's lockout, blockout, tagout written procedures in the City's work premises.

B. Inspections

At a minimum, the department/division shall conduct an annual inspection of the energy isolating and control procedures to ensure that requirements of this program are being followed:

The inspection shall be performed by a supervisor of Authorized Employee(s) utilizing the lockout, blockout, tagout systems.

The inspection shall be designed to correct any observed deviations or inadequacies.

Where lockout, blockout is used for energy management, the inspection shall include a review between the inspector and each Authorized Employee of the employee's responsibilities under the written procedure being analyzed.

Where tagout is used for energy isolation, the inspection shall include a review between the inspector and each Authorized Employee and Affected Employee of each employee's responsibilities under the energy control procedure being inspected.

The supervisor shall certify the inspections have been performed. The certification shall identify the machine or equipment on which the energy control procedure was used, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

C. Lockout, Blockout, Tagout Procedures

Lockout is the preferred method of isolating machines or equipment from energy sources. To assist employees in developing a procedure that meets the requirements of the program the following is applicable for when there are limited number or types of machines or equipment or a single power source. For more complex systems, a comprehensive procedure will need to be developed, documented and used.

LOCKOUT, BLOCKOUT, TAGOUT PROCEDURE

Purpose:

This procedure establishes the minimum requirements for the lockout, blockout, tagout of energy isolating devices. It shall be used to ensure that the machine or equipment is isolated from all potentially hazardous energy, and locked out, blocked, or tagged out before employees perform any servicing or maintenance activities where the unexpected energization, start-up or release of stored energy could cause injury.

Responsibility:

Appropriate employees shall be instructed in the safety significance of the lockout, blockout, tagout procedure. Each new or transferred Affected Employee, and other employees whose work operations are or may be in the area, shall be instructed in the purpose and use of the lockout, blockout, tagout procedures.

Preparation for Lockout, Blockout, Tagout:

A complete survey must be undertaken to locate and identify all isolating devices to be certain which switches, valves or other energy isolating devices apply to the equipment to be locked, blocked or tagged out. A description of more than one energy source in any equipment or devices must be included where applicable.

Sequence of Lockout, Blockout, Tagout System Procedure:

1. Notify all Affected Employees that a lockout, blockout or tagout system is going to be used and the reason for the procedure. All Authorized Employees shall know the type and magnitude of energy that the machine or equipment generates and shall understand the hazards of the release of this energy.
2. If the machine or equipment is operating, shut it down by the normal stopping procedure.
3. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy sources(s). Stored energy (springs, elevated machine parts, rotating flywheels,

hydraulic systems, and air, gas, steam, or water pressure) must be dissipated or restrained by methods such as repositioning, blocking, and/or bleeding down.

4. Lockout, blockout and/or tagout the energy isolating devices with assigned individual lock(s), block(s) and/or tag(s) and any other designated safety measures.
5. After ensuring that no employees or contractors are exposed, check the disconnection of the energy source(s) by engaging the operating controls to make sure the equipment will not energize. CAUTION: Return operating control(s) to neutral or off position after the test.
6. The equipment is now locked out, blocked out or tagged out.

Restoring Machines or Equipment to Normal Production Operations:

After the servicing and/or maintenance are complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.

After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout, blockout or tagout devices. Operate the energy isolating devices to restore energy to the machine or equipment.

Procedure Involving More Than One Person:

In the preceding steps, if more than one individual is required to lockout, blockout or tagout equipment, each shall place his/her own personal lockout, blockout or tagout device on the energy isolating device(s). When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout, blockout, or tagout device (hasp) may be used.

If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it.

Each employee will then use his/her own lock to secure the box or cabinet.

As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet of employees authorized for group lockout, blockout or tagout.

Basic Rules for Using Lockout, Blockout or Tagout System Procedure:

All equipment shall be locked, blocked, or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to employees or contractors personnel.

Do not attempt to operate any switch, valve, or other energy-isolating device where it is locked, blocked or tagged out.

Lockout stations:

shall be located in an area accessible to the machinery or equipment requiring maintenance, adjustment or repair. Locks are coded or identified for use by Authorized Employees. Lockout devices, when used, shall be affixed to each energy isolating device by the authorized person in such a manner as will hold the energy isolating devices in a safe or "off" position.

1. Use a chain to lock out valves.
2. Make all lockouts with a padlock, seal, or other positive method to ensure that power cannot be accidentally turned back on.

3. If other authorized locks are already in place, add one for each person who must work on machinery or equipment.
4. Test the control, switch or valve after applying the lockout device to make sure that it cannot be operated.
5. Attach a sign or tag informing others of the reason for the lock out and when the date and time the tag was put in place.

Blocking out:

is to prevent a machine's operating parts and other mechanical equipment from slipping accidentally:

- Physically block out air-operated, gear-driven, hydraulically operated or suspended parts or equipment to prevent movement.
- Bleed down steam, air or hydraulic cylinders.
- Block out gears, dies and other mechanisms.
- Put blocks under raised dies, lifts or any equipment that might descend, slide, fall or roll.
- Release coiled springs, spring-loaded devices and securing cams.
- Use blocks or special stands under raised vehicles, machines or equipment to prevent failure or slippage of the jack or elevating devices.

Tagout devices:

where used with energy isolating devices designed with the capability of being locked, are to be fastened at the same point at which the lock would have been attached.

- Energy isolating devices are to be labeled to indicate their function, unless located so the purpose is clear.
- Where the tag cannot be affixed directly to the energy-isolating device, the tag shall be located as closely as possible, in a position that will be immediately obvious to anyone attempting to operate the device.
- All tags are to show division, first and last name of the "tagger" and the date.

Application of Control:

The equipment "owner" clears the equipment and sees it is safe for repair. The "owner" signs a White Danger Tag and attaches the tag to the de-energized starter or disconnect switch and/or valves on pipelines under pressure. The "owner" is first to put on the tag and last to take it off.

The employee assigned to repair or service the tagged equipment will sign and date a Red Danger Tag and place it over the White Danger Tag before starting the repair. The immediate supervisor of the employee conducting the repair will monitor for compliance of the Lockout, Blockout, Tagout system. A multiple lock out device is used when more than one lock is placed on the energy isolating device(s).

The supervisor may delegate an individual to represent a group of employees. This individual will remove the lock and Danger Tag only as directed by the supervisor. The supervisor is to explain to the designated employee how the job is to be done safely and where to place personal Danger Tags. If the individual delegated by the supervisor is removed from the job, this person's tag is removed with the supervisor's approval and another individual is authorized to put on a personal tag.

While any Danger Tag is in place, the equipment cannot be restarted.

These tags can only be removed by the person authorized in the division.

1. Removal of the tags shall follow established guidelines.
2. Each employee must pull his/her personal lock and Danger Tag.
3. Upon removal, all tags are to be destroyed and put in a disposal container.
4. The tags may not be reused.

The supervisor may pull the tag only if the tagger is not in the work place. Prior to pulling the tag the supervisor must:

(1) Check to see if the employee has left the premises, and

(2) Inspect the equipment and surrounding area to make certain no one will be in danger if the equipment is allowed to operate.

The equipment owner is to be told when the work is complete and overall lockout, blockout, tagout has been cleared. Before equipment/process is energized, a visual inspection of the work area is done.

Make sure all personnel are in the clear, all non-essential items are removed, and components are operationally intact.

The lockout, blockout, tagout of electrical energy is to occur at the circuit disconnect switch. (Consider future engineering improvements where the circuit cannot be positively interrupted. Develop interim equivalent protection methods.)

Using electrical control circuitry in lieu of lockout, blockout, tagout is prohibited. (This does not offer protection in the event of electrical shorts, vibration or switch component failure, remote or interlocked switches.)

Locks purchased for lockout are to be designed so that they cannot be removed by other than normal means, i.e. by excessive force or unusual techniques. The locks are to have individual keying/combinations and to be identified by division. Shop locks keyed alike may be used only with division head approval.

Special Testing or Moving Equipment while Tagged:

1. Clear equipment/process of tools and materials.
2. Clear personnel.

3. Take off locks and tags according to procedure above.
4. Proceed with test or positioning of equipment.
5. De-energize, relock and tag the equipment to continue the work.
6. Operate the controls to verify energy isolation.

Electrical Testing or Trouble-Shooting:

The equipment "owner" authorizes the electrical workers to take over ownership. The electrical supervisor places White "Owners" Tags on all energy isolating devices. The electricians then place personal locks and tags as indicated above. All locks, blocks and tags are cleared from equipment before performing tests and work is started again.

Non-City Personnel:

Contractors and service representatives are to be instructed in the established lockout, blockout, tagout procedures. For major system overhauls that require group work, a lockout, blockout, tagout system, which provides the same level of protection as does a personal lockout, blockout, tagout, is required.

High Voltage Work:

Separate written procedures need to be established for lockout, blockout, tagout steps for circuits or equipment above 600 volts. Any other exceptions are to have prior approval of the division head. Copies of the procedures go to all personnel involved in the special procedures. Post a copy at appropriate safety center or near operation. Provide a copy to the departmental safety representative.

IX. Deviations

Deviations from the requirements of this program are not permitted, except where regulations are more stringent.

APPENDIX 4:

Fitness For Duty Program

I. Scope

This section establishes guidelines and responsibilities for determining when an employee can safely return to work. This policy guides managers and supervisors in obtaining medical information necessary to make informed decisions about an employee's physical and or mental fitness to safely perform the essential functions of his or her job. None of these guidelines supplant any workers' compensation mandates contained in the California Labor Code.

II. Purpose

The purpose of the Fitness for Duty policy is to promote a safe and healthy working environment. This Fitness for Duty policy outlines the circumstances under which the City may order an employee to submit to a fitness for duty examination.

III. General

Municipal Code 3.08.170, Memorandums of Understanding, and the City of Santa Barbara Benefits Policy manual outlines when and how an employee may use sick leave or other forms of leave of absence for medical reasons. Municipal Code §3.08.170 and city supervisory practices require an employee to provide medical evidence supporting his/her use of sick leave. City policy also requires an employee to provide a medical release stating s/he can return to work after an illness or injury. Upon return from sick leave or other leave of absence taken for medical reasons, a supervisor or manager may require an employee to provide a medical release to return to work if the manager or supervisor believes that the employee may be unable to safely perform the essential functions of his or her job.

An employee may be ordered to undergo a fitness for duty examination if the employee's manager or supervisor reasonably suspects that the employee is unable to safely perform the essential functions of his or her job. An order to an employee to submit to a fitness for duty examination shall be based upon specific evidence: 1) that the employee has difficulty performing one or more essential functions of his or her job; or 2) of other good cause for the Fitness for Duty examination, including but not limited to excessive absenteeism, low productivity, or safety violations.

Human Resources will evaluate any request for reasonable accommodation in accordance with the Americans with Disabilities Act and the Fair Employment & Housing Act.

IV. Regulations

A fitness for duty examination is permitted under the Americans with Disabilities Act (ADA), the California Fair Employment and Housing Act (FEHA), and California Government Code §§12940(f)(1) and 12940(f)(2). An employer may require an employee to undergo a medical examination (and/or inquiry) if it is job-related and consistent with a business necessity. 42 U.S.C. § 12112(d)(4); 29 C.F.R. § 1630.14 (c). This regulation permits employers to require a fitness for duty exam when there is a need to determine whether an employee is still able to perform the essential functions of his or her job. 29 C.F.R. Pt. 1630, App.

Managers and supervisors should be aware that, absent written authorization from an employee which complies with the California Confidentiality of Medical Information Act, the City is not entitled to know whether the employee is able to perform the essential functions of the job, and what limitations, if any, may exist. Moreover, managers and supervisors must be aware that employees have a constitutionally protected privacy interest in their medical records and related information. Therefore, this policy shall be administered consistent with and with sensitivity toward employees' right to privacy in their medical records and related information.

V. Definitions

fit for duty	employee released without restriction by treating physician or other medical examiner to perform full range of duties.
fitness for duty examination	any physical or psychological examination designed to determine whether an employee may safely perform the essential functions of his or her position with or without reasonable accommodation.
industrial injury	an injury or illness arising out of the course or scope of the employment. Industrial injury under this program only applies to a claim deemed compensable by the workers' compensation third party administrator or the WCAB.
medical authorization	written statement or form, signed by treating physician, excusing patient from work or specific tasks because of medical restrictions.
medical release	written statement or form signed by treating physician or other medical examiner allowing patient to return to work.
medical restrictions	specified physical limitations set by treating physician or other medical examiner precluding employee from performing certain job tasks involving exertion beyond employee's capabilities.
non-industrial injury	an injury or illness arising outside of the course and scope of the employment; not accepted as a compensable workers compensation claim.
sick leave	accrued benefit time off used for medically necessary absence from work.

VI. Responsibilities

A. Department Director

A department director must:

1. Establish a firm internal requirement that all staff fully adhere to this program.
2. Verify that staff routinely complies with this program.
3. Hold managers fully accountable for any deviation from this program.

4. Contact Risk Management when staff needs help implementing this program.

B. Manager

A manager must:

1. Ensure that each supervisor and employee understands the requirements of the fitness for duty program.
2. Enforce compliance with this program.
3. Request that Risk Management schedule a fitness for duty medical examination when needed.
4. Send a letter to the examining physician describing why you want this medical examination and the employee's job duties.

C. Supervisor

A supervisor must:

1. Explain this program to each employee.
2. Receive a written medical authorization for an employee to be off duty.
3. Receive a written medical release before allowing an employee to return to work after an injury or illness.
4. Receive a written medical release before allowing an employee to return to work when the supervisor reasonably believes that the employee may be unable to safely perform the essential functions of his or her job, or if there is good cause for the Fitness for Duty examination, as described in Section III, above.
5. Review each medical release for possible work restriction(s).
6. Match the employee's job tasks to the work restrictions outlined by the physician.
7. Ask the physician to clarify the restrictions when needed.
8. Request that Risk Management obtain medical clarification of any non-specific work restrictions when an employee returns to work after an injury or illness.
9. Request that Risk Management schedule a fitness for duty medical evaluation when you believe the employee cannot safely perform his/her work duties.

D. Employee

An employee must comply with this program by:

1. Notifying his/her supervisor or manager promptly of any illness or injury that may result in time off from work or restricted work duties.

2. Submitting a medical authorization to be off work when absent due to an industrial injury or illness or absent for more than 24 hours on sick leave.
3. Submitting a medical release to his/her supervisor before returning to work after an injury or illness.
4. Attending any workers' compensation medical evaluation or fitness for duty examination scheduled.

E. Risk Management

The Risk Analyst must:

1. Review the information gathered by the manager or supervisor about the employee.
2. Review the job description and any other documents that describe the essential functions of the job duties for the employee involved.
3. Evaluate the request from the supervisor or manager to use a fitness for duty examination.
4. Select the appropriate physician to use for the fitness for duty examination and schedule any necessary examination.
5. Review the letter written by the manager or supervisor to the examining physician before the letter is sent to the physician.
6. Notify the manager or supervisor of the results of the fitness for duty examination.

VII. Requirements

A. Medical Release

The supervisor may require an employee to supply the City with a medical release from the employee's treating physician authorizing the employee to return to work after an absence from work resulting from an injury or illness. The medical release submitted by an employee after an injury or illness must be clearly written and identify the employee by name. The employee shall provide the medical release to his/her supervisor or manager before returning to work. The supervisor or manager shall review the medical release before allowing the employee to begin his/her work duties.

An employee shall not be prohibited by his or her supervisor from returning to work on the sole basis that the medical authorization from the employee's physician imposes one or more work restrictions. The supervisor or manager shall review with the employee any work restrictions outlined by the treating physician. Consult the Modified Duty Program (Appendix 20 of this IIPP) for more information on the requirements for a modified work assignment.

B. Requesting Additional Information Regarding Work Restrictions

The medical release must clarify whether the employee can perform his/her full range of duties. The release should outline specific work restrictions if the employee cannot perform his/her full range of duties. If the written work restrictions are vague such as "light duty", "no heavy lifting",

or “desk work”, the supervisor or manager shall contact the physician to review the essential job functions with the physician. The physician must clarify what specific job tasks the employee should not do. Acceptable specific restrictions are instructions such as “no lifting over 25 pounds”, “no driving while taking medication”, “keep sutures clean and dry”. Make sure all restrictions have a determined end date or date of medical reassessment.

C. Requesting a Fitness for Duty Medical Evaluation

The department director or his/her designee shall refer all questions regarding an employee’s ability to perform his/her job duties because of a physical or psychological reason to Risk Management. Risk Management shall compare the available medical information with the employee’s job description and specific job tasks. Risk Management will confirm the treating physician has reviewed a current job analysis, when available.

If Risk Management finds more medical information is needed to determine if the employee’s condition may be endangering him/herself, co-workers, or the public, the employee may be required to undergo a medical examination at city expense. If the suspected impairment is not being treated under the city workers compensation program, Risk Management will schedule a Fitness for Duty examination. Such examinations are arranged with a licensed physician or other competent authority to determine the employee’s ability to safely work.

The employee shall not return to full duty until the city receives a medical report authorizing the employee to do so. In the event modified work cannot be provided, the employee may use his/her leave balances, according to city policy, during any period of absence from work while awaiting the requested medical information.

The examining physician may require the employee to sign a release of medical information authorization form. The medical release allows the examining physician to provide the medical examination findings to Risk Management. Medical information received by Risk Management shall remain confidential.

D. Fitness for Duty Medical Evaluation Results

Upon concluding the medical examination, the physician will issue a work status report recommending one of these options:

1. Return to full duty without work restrictions. The employee resumes normal work tasks.
2. Return to full duty with *temporary* work restrictions. The department shall decide if the employee can perform his/her full range of duties within the current work restrictions. Refer to the City’s Modified Duty Program (see Appendix 20 in the IIPP) for more information. If the manager decides the employee can safely perform his/her work duties or a vacant modified duty assignment exists, the employee shall return to work. If the manager decides the employee cannot safely perform his/her work duties or a modified duty assignment does not exist, the employee shall not return to work until the physician removes the temporary work restrictions.
3. Return to work with permanent work restrictions. The department head or his or her designee, and Human Resources shall decide if the permanent work restrictions allow the employee to perform his/her full range of duties. If an employee is unable to perform one or more essential functions of the job as a result of work restrictions, then the department head

or his or her designee, and Human Resources shall consider whether the employee is a qualified individual with a disability who may be entitled to reasonable accommodation.

If an employee may be entitled to reasonable accommodation, then the department head or his or her designee, in consultation with Human Resources and Risk Management, shall invite the employee to engage in an interactive process to identify reasonable accommodation. Examples of possible accommodations include, but are not limited to, job restructuring, modified work schedules, reassignment, paid leave, unpaid leave, or acquisition of equipment.

If, through the interactive process, it is determined that there are no reasonable accommodations which would permit the employee to safely perform the essential functions of his or her job, or if an employee is not a qualified disabled person who is entitled to accommodation, then the employee may be subject to termination from employment. If the employee has a property interest in his or her employment with the City, i.e., may only be terminated for cause, then the employee shall be entitled to appeal his or her discharge in accordance with City disciplinary policies.

4. Unable to work. If, following a fitness for duty evaluation, it is determined that an employee is unable to return to work, the department head or his or her designee, in consultation with Human Resources, shall determine whether the employee may be a qualified disabled person entitled to reasonable accommodation. If so, then the department head or his or her designee and Human Resources shall invite the employee to engage in an interactive process to identify reasonable accommodations which would enable the employee to return to work. One possible accommodation may be to allow the employee to continue to remain on leave, whether paid or unpaid status. As indicated above, if there are not reasonable accommodations which would permit the employee to return to work and the examining physician is unable to identify a reasonable period of time after which the employee will be able to return to work with or without reasonable accommodations, then the employee may be subject to termination from employment with the City. If the employee has a property interest in his or her employment, then he or she shall be entitled to appeal his or her termination pursuant to the City's disciplinary appeal process.

E. Disputes

An employee may dispute the Fitness for Duty medical evaluation findings. If the City's physician or other healthcare professional determines that the employee is unable to safely perform the essential functions of his or her job, i.e., is not fit for duty, the employee may choose to submit a second opinion by his or her own physician. The employee must pay for any costs or fees to obtain the second opinion.

The employee shall notify Risk Management of his or her intent to submit an opinion from his or her own physician within four (4) business days of the employee's receipt of the results of the City's fitness for duty examination. Thereafter, the employee shall have 30 calendar days to submit a second opinion from his or her own physician for consideration by the City. The employee shall remain off work until a resolution to the dispute is reached. The employee may use any available leave balances while awaiting the resolution of the dispute. Available leave balances may include sick leave, vacation, compensatory leave, personal leave, family medical leave, and leave without pay, to name a few.

If the employee's physician agrees with the assessment from the City's physician, then the City and employee shall follow the guidelines listed in Section D above, Fitness for Duty Medical Evaluation Results.

If the employee's physician disagrees with the assessment from the City's physician, then the Risk Manager in consultation with the department head and Human Resources shall evaluate the conflicting medical information. The Risk Manager shall consider, among other things, the area of expertise of each medical professional, the information provided by each professional, and whether the information provided is consistent with the City's observations of or knowledge about the employee. The Risk Manager's decision on which of the medical opinions to follow shall be final.

VIII. Deviations

This policy shall be interpreted and applied consistently with applicable federal, state, and local laws. Any section or sections of this policy which are determined to violate any federal, state, or local laws shall be considered void, but the remainder of the policy shall remain in effect.

APPENDIX 5:

Critical Incident Debriefing

I. Scope

This section establishes responsibilities for assisting employees during and after a critical incident.

II. Purpose

Responders or witnesses to serious injuries, destruction, or death may experience shock or stress related symptoms. The City recognizes a need to address these symptoms by establishing a Critical Incident Debriefing procedure. The purpose of this policy is to ensure a return to normal work performance and to reinstate employee morale after a critical incident by providing professional help to any employee in need.

III. General

Medical professionals have studied the effects traumatic events, such as serious injuries and fatalities, may have on those on scene. The studies reveal that a significant number of people experience temporary stress related symptoms following a critical incident. The resulting symptoms or reactions do not cause long term or permanent disability.

Some individuals may not experience any apparent symptoms or reactions at first. Later symptoms can surface. An employee may not recognize symptoms nor realize the need to seek professional help. It is not unusual for employees who have not sought help after a critical incident to experience declining work performance, deteriorating family relationships, or illness. The employee may not associate the problems with the traumatic event. Adhering to this critical incident debriefing policy will lead employees to the professional help needed to maintain a normal, healthy and productive life.

A. Definitions

Call out procedure	Pre-planned response to a serious catastrophe.
Critical incident	a violent or catastrophic event involving serious injury, destruction, or death; for example: loss of life of a victim following rescue efforts by city personnel, an assault, robbery, or shooting occurring at the workplace, a natural disaster, a serious illness, injury or death of a coworker.
Debriefing	group meeting held by licensed mental health professional with employee(s) exposed to critical incident.
Mental health professional	medical practitioner licensed by the State of California to provide mental health treatment or counseling.

IV. Responsibilities

A. Department Head

A department head must:

1. Establish a firm internal policy requiring every employee to fully adhere to the guidelines established herein.
2. Verify that staff routinely complies with this policy.
3. Hold managers fully accountable for any deviation from this policy.
4. Contact Risk Management if assistance in implementing this policy is needed.

B. Managers

1. A manager must:

2. Ensure that each supervisor and employee understands the requirements of the critical incident debriefing policy.
3. Enforce compliance with this policy.
4. Activate the debriefing process when needed.

C. Supervisors

A supervisor must:

1. Make the workplace as safe as possible by establishing and enforcing practices which minimize potential for injury or property damage.
2. Evaluate any incident or work task that may require critical incident debriefing.
3. Educate each employee regarding this policy.
4. Activate the debriefing process when needed.

D. Employees

An employee must:

1. Comply with this policy.
2. Notify his or her supervisor immediately of any event that may qualify as a critical incident.
3. Attend any debriefing session(s) scheduled by his/her supervisor or manager.

E. Risk Analyst

The risk analyst must:

1. Help managers and supervisors evaluate events that may qualify as a critical incident.

2. Help managers and supervisors begin the call out procedures.
3. Help employees obtain professional counseling when needed.

V. Requirements

1. Assessing the Critical Incident

It is normal for individuals to suffer adverse reactions to a critical incident exposure. The outcomes following exposure to a critical incident vary greatly. What may constitute a trauma for one person may not affect another. The person's experiences, age, work duties, and degree of exposure to the incident will affect how one deals with the incident. A single employee, the work group, a division or a whole department may feel the effects of any given critical incident.

Work duties or response to an incident that leave personnel with unusually strong emotions qualify for Critical Incident Debriefing. Critical incidents that require debriefing include but are not limited to:

- Serious injury or death of a coworker.
- Mass casualty incident in the workplace.
- Suicide of a coworker.
- Serious injury or death of a person caused by employment operations (for example, a collision with a city vehicle).
- Death or violence to a child in the workplace.
- Death of a victim following rescue efforts by city personnel.
- Work duties that attract inordinately critical news media or onlookers.
- Unusual, distressing or disturbing sensations (sights, smells, sounds) in the workplace that cause an extreme immediate or delayed emotional reaction.
- During or after a critical incident, the manager or supervisor shall decide if staff can benefit from a debriefing session. If so, the manager or supervisor activates a professional debriefing team to conduct the debriefing session(s) described in §VI. C. below.

2. Critical Incident Scene Management

The supervisor at the incident site can help minimize an employee's exposure to adverse stress. The supervisor shall consider rotating staff or removing first responders from the scene as soon as possible. When time and circumstances permit, the supervisor can ask a professional counseling team to meet with staff at the critical incident scene, in a neutral location such as the usual work site or an office. Employee attendance at the scheduled debriefing session(s) is mandatory. Only the debriefing team or the department head can excuse an employee from attending the mandatory debriefing session.

City Risk Management or Human Resources may call a professional debriefer to the scene to observe, support, and counsel staff during and after an incident involving multiple employees and departmental responsibilities.

3. Activating the Debriefing Process

Managers and supervisors are responsible for activating the debriefing process. Regardless of magnitude or number of personnel involved, managers and supervisors must promptly evaluate all incidents to determine if this policy applies. As soon as possible after a critical incident happens, the supervisor or manager on scene must request the City's Employee Assistance Program (EAP) provider to provide a professional debriefer. The debriefing team will evaluate the situation, determine the level and method of counseling required, and make follow-up recommendations to the manager or supervisor.

The supervisor or manager requests a professional debriefer or debriefing team to respond by calling:

**Magellan Behavioral Health Plans
City of Santa Barbara Employee Assistance Program (EAP)
(800) 468-5667**

anytime: 24 hours per day, 7 days per week

If the supervisory or managerial involvement in the critical incident precludes a direct call to the EAP provider, request a Police/Fire Communications Specialist (PFCS) in the Combined Communications Center to place the call for assistance.

When calling the EAP:

1. Confirm the manager or supervisor decided that staff needs professional debriefing.
2. Provide the following information:
3. Identification: Santa Barbara City (your department and division).
4. Name of requesting manager or supervisor.
5. Type of incident and description of traumatic exposure.
6. Location.
7. Your telephone number.
8. Number of individuals (estimate) requiring debriefing.
9. Where to report and directions of how to get there. Name of manager or supervisor in charge of the incident.

Ask the EAP provider to estimate when the debriefing team will arrive.

4. Activating the Debriefing Process as an Individual

Although trauma affects people differently, all may experience some common reactions or symptoms. Signs and symptoms may manifest immediately, or after a couple days or even weeks. Such reactions are normally to be expected. The distressful feelings are the result of experiencing an abnormal situation.

An individual employee who needs or wants to receive a confidential debriefing must begin the process. The City encourages employees to consult an EAP counselor or a medical practitioner for help. Any employee can request help by using one of the following sources:

- Ask your supervisor or manager for a debriefing referral.
- Call the Employee Assistance Program at (800) 468-5667.
- Call the Risk Management office at (805) 564-5347.

Seek help if your critical incident response becomes too intense or lasts too long. An employee and his/her family members can use the EAP to obtain help after a critical incident. The following chart describes some common reactions to a critical incident that many might experience.

Physical Reactions	Emotional Reactions	Effect on Productivity
Insomnia	Flashbacks	Inability to concentrate
Fatigue	Reliving the event	Increased errors
Hyperactivity	Easily startled	Lapses of memory
Neck or back pain	Feeling irritable or annoyed	Absenteeism
Headaches	Anger	Tendency to overwork
Heart palpitations, chest pain	Feeling anxious	Inattention
Dizzy spells	Feeling helpless	
Appetite changes	Feeling vulnerable	

Following a critical incident, signs and symptoms usually decrease with time. If you become concerned about your reaction(s), note the specific symptom(s) worrying you. For each reaction or symptom, note its duration and intensity. The duration and intensity of the symptom(s) are important because most reactions to a critical incident grow less intense with time and disappear within a few weeks. Seek professional help if the duration or intensity of the symptom or reaction interferes with your ability to lead a normal life.

5. Critical Incident Debriefings

Licensed mental health professionals lead the debriefing sessions. These professionals have degrees in behavioral disciplines such as psychology or psychiatry and experience dealing with traumatic events. These professional debriefers work under a contract with the City. The debriefers provide the employee with safe, confidential counseling related to the critical incident.

Critical incident debriefings are generally group meetings. The debriefing sessions include a detailed discussion of the incident, description of possible reactions or symptoms, and procedures on how to receive additional care. Each employee who participates in the debriefing session also learns how to cope with his or her reactions or symptoms.

The debriefing process may not resolve all the needs of each employee. A small percentage of employees exposed to a critical incident may require more counseling or treatment on an individual basis. The counseling process may involve the employee's spouse, family members, and other household members.

Risk Management shall administer obtaining any counseling an employee may need after the debriefing process ends. Occasionally, a critical incident may require an employee to file a workers' compensation claim. Risk Management shall help an employee file for workers' compensation benefits when needed. Refer to Chapters 3 and 4 of the City's IIPP for more information on how to file a workers' compensation claim or obtain medical treatment for an industrial injury.

6. Debriefing Protocol

Critical incident debriefings are not critiques of department operations. Performance issues are not discussed. The debriefing process provides an opportunity for an employee to discuss his or her feelings and reactions. The discussion helps reduce the duration and intensity of the reactions an employee could experience after a critical incident. All debriefings are confidential.

The type of debriefing will depend on the circumstances of the critical incident. For example, the debriefing session may consist of:

1. On Scene or Near Scene Debriefing: Refer to the section VI. B above titled "Critical Incident Scene Management". The manager or supervisor on site begins this process before the debriefing team arrives.
2. Initial Defusing: After the incident is over, the professional debriefer gives a review of expected reactions or symptoms, as well as, updates about the incident.
3. A group session: that begins shortly after the incident occurrence focuses primarily on incident information. Either by request or referral from debriefing team, a personal session may be provided following the group session.
4. Formal Debriefing: Conducted, if possible, within 72 hours of the incident. The session includes confidential discussion of each employee's involvement, thoughts, and feelings that result from the incident. The group also talks about any related symptoms or reactions that appear.
5. Follow-up Debriefing: Formal or informal sessions held weeks or months after the incident. The counselors aim to detect delayed or prolonged reactions or symptoms.
6. Individual Consultation: Refer to the above section VI. E. "Activating the Debriefing Process as an Individual" for more information. An employee can use this process to obtain individual counseling related to the incident by:
 7. Asking the appropriate supervisor or manager for a debriefing referral.
 8. Calling the Employee Assistance Program at (800) 468-5667.
 9. Calling the Risk Management office at (805) 564-5347.

VI. Ways to Assist Informally

A. Co-workers

All employees can help each other by talking about or reviewing their experiences after a critical incident. These discussions often diffuse lingering reactions as all share the same experiences and talk about feelings and perceptions. Coworkers can help each other informally after a critical incident in several ways. The following list identifies some ways all can help.

- Encourage survivors to talk about how s/he feels about the incident.
- Ask the survivor how s/he feels. This provides the opportunity for the survivor to tell you as much or as little as needed.
- Tell the survivor how you feel.
- Express your sorrow about the victim's pain or loss.
- Remind the survivor that his/her feelings of confusion are normal.
- Do not attempt to reassure the survivor that everything is okay.
- Do not attempt to explain why this has happened to the survivor.
- Avoid trying to tell the survivor you know how s/he feels. Often such attempts are really aimed at relieving your own anxiety about how you feel about the incident.
- Listen to the survivor. Just being there is often the biggest help.
- Encourage the survivor to seek counseling.
- Participate in the recovery process. For example, meet with investigators and insurance representatives or attend legal proceedings.

B. Relieving Personnel From Duty

Under some circumstances, the manager or supervisor may decide to relieve a group or an individual from duty at the critical incident scene. The debriefing team may also recommend reassigning or relieving staff from further duty. The manager or supervisor shall consider:

- Assigning an employee to a different location or work site for debriefing and not returning to the regular work site until later.
- Referring staff to a professional debriefing team for immediate evaluation.
- After the debriefing evaluation, an individual employee may request to return to work or to remain off work for the balance of the work shift.

C. Placing staff off duty for the remainder of the shift:

Relief from duty for the balance of the work shift requires approval from the manager or supervisor in charge.

The employee shall use his/her leave balances to cover any lost work time after a critical incident.

A physician must authorize an employee to remain off from work after an industrial injury. Refer to Chapter 3 of the IIPP, Investigating and Reporting Industrial Injury Claims, for more information on this topic. The manager or supervisor must complete the appropriate documentation before allowing an employee to leave work during or after a critical incident.

An employee may need additional medical care after completing the debriefing process. The employee and supervisor must complete the workers' compensation report forms and contact the Risk Management office for referral to a licensed mental health professional.

An employee may use Industrial Injury Leave to cover his/her lost work time only after the City's workers' compensation claims administrator has accepted the claim as a compensable work related injury or illness.

D. Critical Incident Recovery Tips

DO	DON'T
Expect the incident to bother you	Drink alcohol excessively.
Maintain a good diet and exercise program.	Use legal or illegal substances to numb your reactions.
Take time for leisure activities.	Withdraw from family, friends and coworkers.
Remind yourself that reactions and/or symptoms are normal.	Automatically stay away from work.
Learn as much as possible about how to cope with critical incident reactions.	Have unrealistic expectations for recovery.
Spend time with family, friends and coworkers	Look for easy answers to explain the reasons for the incident.
Get help when needed.	Think you are "crazy".

VII. Deviations

Deviating from any requirement of this standard is not permitted except where local regulations are more stringent.

APPENDIX 6: Working Alone

I. Scope

This section covers requirements for working alone.

II. Purpose

The purpose of this section is to establish operating guidelines to safeguard people working alone.

III. Responsibilities

A. Managers

Managers must survey their operations periodically and classify each of their work areas and locations; i.e., hazardous or non-hazardous.

B. Supervisor

It is the responsibility of the Supervisor to see that no person works alone in a hazardous area or location. The Supervisor shall also see that people working alone in non-hazardous environments are monitored regularly.

C. Employee

It is the responsibility of the Employee to make his/her presence known if intending to work alone in a non-hazardous area. It is the Employee's responsibility, after having been made aware of the safety requirements, not to work alone in a hazardous work area or location.

D. Risk Analyst and Safety Coordinator

It is the responsibility of the Risk Analyst and Safety Coordinator to assist Managers in evaluating and classifying hazardous and non-hazardous work areas.

IV. Definitions

Working Alone	When the Employee cannot be seen or heard by another individual.
Hazardous Work Area	Any area with a potential which involves exposure to live electrical circuits; flammable, explosive, toxic or corrosive chemicals; machine shop locations, and unprotected roofs, to name a few.
Confined Spaces / Hazardous Location	Isolated areas which include manholes, tanks, walk-in vaults, underground tunnels, and roofs.

**Non-hazardous
Location**

Areas such as offices, mailroom, hallways, to name a few.

V. Requirements

Employees should not work alone in hazardous locations or work areas. They shall be accompanied by someone sufficiently qualified to deactivate machinery, turn off power, or equipped to render appropriate help.

Employees working alone in non-hazardous locations shall be monitored by the person they report to; after hours to on-call supervisory or security personnel. The frequency of the checks will depend on the operation being performed.

VI. Emergency Training

Persons who work on potentially hazardous operations or in isolated locations must be properly trained for the job and be prepared to render emergency assistance including first aid and cardiopulmonary resuscitation (CPR).

VII. Periodic Evaluations

Periodic inspections of work areas and locations are to be conducted to verify hazardous or non-hazardous classification. Good judgment is required to ensure that no one is working alone where there should be two or more employees present.

APPENDIX 7:

First Aid and CPR

I. Scope

This section covers requirements and responsibilities for training people in first aid techniques and cardiopulmonary resuscitation (CPR).

II. Purpose

The intent is to develop and maintain a team of volunteer first aid providers qualified to give immediate help in an emergency situation.

III. Responsibilities

A. Managers

It is the responsibilities of Managers to see that:

1. Appropriate employees are trained to render first aid in an emergency situation.
2. Records are maintained of who are the employees trained in first aid.
3. Employees are recruited for training and re-training.
4. All injuries are investigated and medical treatment is provided.

B. Risk Analyst

It is the responsibility of the Risk Analyst to see that:

1. CPR and first aid training classes are organized, scheduled and taught by certified instructors.
2. Records of training courses and attendees are maintained.
3. All injuries are investigated and medical treatment is provided.

IV. Acceptable Courses

A. CPR (Cardiopulmonary Resuscitation)

1) Basic Life Support (BLS):

The American Heart Association's (AHA) course consists of Adult, one-person CPR and relief of foreign body airway obstruction. The course includes lecture, demonstration, video presentation and manipulative skills training that will not exceed four (4) hours to receive a completion card valid for two (2) years.

2) Emergency Medical System (EMS) CPR:

Course consists of up to four (4) hours of instruction on adult, child and infant CPR and foreign body airway obstruction. The course includes lectures on CPR, choking and stroke. Manual

demonstration and manipulative practice, video presentation, student manual and course completion card valid for two (2) years.

B. First Aid

Red Cross "Standard Multimedia First Aid Course":

This covers treatment of cuts, burns, choking, scalds, etc. It consists of 1 1/2 hours of training followed by a test, which, when passed, then warrants first aid certification, which is valid for three (3) years. When the certification period runs out the course must then be repeated.

Red Cross "Advanced First Aid and Personal Safety":

This consists of approximately twenty (20) hours of training.

EMS First Aid:

Course consists of up to four (4) hours of instruction on burns, bleeding, fractures, shock, heat and cold related emergencies, illness and injury assessments, diabetes, poisoning and allergic reactions. The course consists of lectures, demonstrations with class members, video presentation and includes manuals and course completion cards valid for two (2) years.

V. Instructor Qualifications

Instructors shall be certified by the Red Cross, EMS First Aid or the American Heart Association in the following skills:

1. First Aid/Red Cross "Standard First Aid and Personal Safety Instructor"; or
2. Red Cross "Standard Multimedia First Aid"; or
3. Red Cross "Advanced First Aid and Emergency Care Instructor"; or
4. Red Cross "CPR Basic Life Support Instructor"; or
5. American Heart Association "CPR Basic Life Instructor" (an instructor of "Advanced First Aid and Emergency Care" is also qualified to teach "Standard First Aid and Personal Safety."); or
6. EMS First Aid instructors must be an Emergency Medical Technician, Paramedic or Firefighter who has completed an eight (8) hour instructor course.

VI. Requirements

A. First Aid Team

It is required that every facility develop a team of key individuals who can render first aid in an emergency situation. Prime candidates to receive training are people who express desire and interest.

B. Minimum Training Requirements

CPR and Multimedia First Aid, Standard First Aid and Personal Safety or equivalent.

C. Retraining

CPR refresher courses shall be provided on an annual basis, regardless of certification period.

D. Training on City Time

Only EMS First Aid and CPR courses, CPR, the Red Cross, "Standard Multimedia First Aid Course," or "Standard First Aid and Personal Safety," may be taught on City time.

E. Attrition Rate of Trained First Aid Responders

Attrition factors must be planned for by training ten to twenty percent more people than the team requires. As soon as the excess starts to diminish, schedule more training.

F. Ration and Distribution of First Aid Responders

Judgment is needed regarding the ration and distribution of the first aid responders. Generally, the number of employees trained is a function of the hazards involved. Consider the following when calculating:

1. Type of equipment in work area, machine shop, electronic testing, welding, etc.;
2. Hazardous materials, such as toxic chemicals or gases;
3. Area in which handicapped or known heart patients work;
4. Distribution of hazards;
5. Number of shifts;
6. Building layout and travel distance between areas. Can every employee have first aid assistance within two minutes?
7. Remote job assignments where 9-1-1 emergency medical services are not available within thirty (30) minutes.

VII. Deviations

Deviation from the requirements of this standard are not permitted, except where local regulations are more stringent.

APPENDIX 8:

Walking Surfaces

I. Scope

This section covers requirements and responsibilities for the care and condition of walking surfaces.

II. Purpose

The purpose of this section is to establish procedures designed to minimize tripping, slipping and falling hazards.

III. Responsibilities

A. Managers

It is the responsibility of the Manager to see that floor obstructions and/or openings are appropriately guarded.

B. Supervisors

It is the responsibility of supervisors to maintain walking surfaces in accordance with the requirements of this section.

C. Building Maintenance

It is the responsibility of Building Maintenance² to monitor the conditions in each facility for compliance with these standards, and to assist departments in complying with the OSHA regulations.

D. Employees

Employees are responsible for exercising due care and watching where they're going at all times.

IV. Deviation

Deviation from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

² Enterprise Fund operations are responsible for monitoring the conditions in each of their facilities.

V. Requirements

A. General

1. All floors shall be kept clean.
2. Drains shall be maintained in wet areas, and false floors, platforms, or other dry standing places should be provided where possible.
3. Floors shall be kept free of protruding nails, splinters, holes, loose boards, and tripping or slipping hazards.

B. Guarding Floor Openings

Any hole in a floor through which tools can be dropped, or a person fall, shall be appropriately guarded.

Every skylight, floor opening and hole shall be guarded by a standard skylight screen or a fixed standard railing on all exposed sides.

Where operating conditions necessitate the feeding of material into any hatchway or chute opening, protection shall be provided to prevent a person from falling through the opening.

C. Protection of Open-Sided Floors and Platforms

Every open-sided floor or platform four (4) feet or more above adjacent floor or ground level shall be guarded by a standard railing and toe board on all open sides, except where there is entrance to a ramp, stairway or fixed ladder.

Loading Docks. For the purpose of this standard, loading docks shall be regarded as open platforms and shall be protected with toe boards and standard railings when not in use.

D. Stairway Railings and Guards

Every flight of stairs having four (4) or more steps shall be equipped with standard stair railings or handrails.

APPENDIX 9:
Portable Ladders

I. Scope

This section covers requirements and responsibilities for the procurement and use of portable ladders.

II. Purpose

The purpose of this section is to establish procedures and safe practices for the use and care of portable ladders.

III. Responsibilities

A. Managers

It is the responsibility of the Manager to see that all portable ladders procured for the area comply with OSHA standards, and to see that practices outlined in this section are followed.

B. Supervisors

It is the responsibility of the supervisors to see that ladders are maintained in good condition, stored correctly, and used in accordance with the requirements of this section.

C. Employees

It is the responsibility of the employee to report aging or dilapidated ladders to their supervisor, and to not use ladders that have been tagged out.

IV. Deviation

Deviation from the requirements of this Standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. General

Ladders shall be without structural defects, and in obviously good condition. For example, they shall be clean, moving parts shall operate freely, and permanently fixed parts shall be sound. Defective ladders shall be taken out of circulation, and tagged "DANGEROUS, DO NOT USE" until repairs are made. Irreparable ladders shall be destroyed.

B. Approval

All portable metal, wood and fiberglass ladders shall meet the requirements of the American National Standards Institute.

C. Safe Practice

1. Ladders shall be used only for the purpose for which they were designed. Their usage they shall not be modified.

2. Only wood and fiberglass ladders should be used for work on electrical apparatus.
3. Portable metal ladders shall be legibly marked with sign reading, "CAUTION, DO NOT USE AROUND ELECTRICAL EQUIPMENT".
4. Ladders shall not be placed in front of doors opening toward the ladder, unless the door is blocked open, locked, or guarded.
5. Ladders shall not be placed on unstable bases to obtain additional height.
6. Tops of ladders shall not be used as steps.
7. Face the ladder when climbing down.

D. Storage

1. Ladders shall be stored in such a way as to provide ease of access and safe withdrawal for use.
2. Ladders shall not be exposed to excessive stress, heat or dampness while being stored.

E. Care

1. Ladders shall be inspected frequently.
2. Ladders shall be free of oil and grease.
3. Wood ladders shall be coated with a clear spray varnish.
4. Wood ladders shall not be painted. (Paint conceals flaws.)
5. Ladders exposed to acids or alkalis should be well rinsed after exposure.
6. All ladders shall be fitted with non-skid feet.

APPENDIX 10:

Emergency Showers and Eye Wash Stations

I. Scope

This section establishes requirements for emergency showers and eye wash stations.

II. Purpose

The purpose of this section is to establish standards for the installation and maintenance of emergency showers and eye wash stations.

III. Responsibilities

A. Managers

It is the responsibility of Managers to see that all areas where injurious substances are handled are equipped with emergency showers for quick drenching of the body, and eye wash fountains for the eyes. Also, it is their responsibility to see that emergency showers and eyewashes are checked monthly, tagged, signed, and dated.

B. Supervisors

It is the responsibility of Supervisors to:

1. Familiarize everyone in the area with the shower and eye wash, and to emphasize the necessity of immediate use to avoid injury;
2. See that the water supplies to emergency showers and eye washes do not go through intermediate valves that may be closed when other equipment is being serviced;
3. See that auxiliary equipment is available if showers and eye washes are temporarily out of order; and
4. Check showers and eye washes monthly.

C. Employees

It is the responsibility of all employees to know where and how to use emergency showers and eyewashes.

IV. Deviation

Deviations from the requirements of this Standard are not permitted, except in cases where local regulations are more stringent.

A. Requirements

1. Emergency showers and eyewashes shall be installed where the eyes or body of any person may be exposed to injurious or corrosive materials.
2. Water supply discharge rate from an overhead shower shall be approximately 50 gallons a minute.
3. The distance between any given potential hazard to the shower and eyewash shall not exceed 25 feet.
4. Unobstructed access to emergency showers and eye wash fountains shall be maintained at all times.
5. A sign reading "EMERGENCY SHOWERS" and "EYE WASH" shall be conspicuously posted at the site.
6. Auxiliary washing facilities shall be provided for temporary use if permanent facilities need to be serviced.
7. All valves used on emergency shower and eye wash supply lines shall be an indicating type and locked open, and they shall be clearly identified as to the type of service they control.
8. Emergency showers and eye wash fountains shall be inspected weekly and operated monthly. They shall bear tags which will be dated and signed monthly by the inspector.
9. Eye wash fountains shall have twin water streams high enough to effectively flush both eyes.

APPENDIX 11:

Aisles and Exits

I. Scope

This section covers requirements for exits, exit routes and aisles.

II. Purpose

The purpose of this section is to establish safe practices for the maintenance of exits, exit routes and aisles.

III. Responsibilities

A. Managers

It is the responsibility of Managers to see that all exits and aisles in the building comply with these standards.

B. Supervisors

It is the responsibility of Supervisors to see that exit routes and aisles are unobstructed at all times, and also to see that exit signs are not obscured.

C. Building Maintenance

Building Maintenance³ shall be responsible for marking exit routes and aisles.

D. Employees

Employees are responsible for exercising due care and watching where they're going at all times.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. Means of Egress

1. No building or structure under construction shall be occupied until all exit facilities required for the occupied portion are completed and ready for use.
2. No existing building shall be occupied during repairs or alterations unless all existing exits and fire protection systems are maintained and functioning.

B. Exit Signs

³ Enterprise Fund operations are responsible for monitoring the conditions in each of their facilities.

1. An exit sign shall be provided at every required exit doorway and wherever it is necessary to clearly indicate the direction of egress.
2. Doors, passages, or stairways that can be reasonably mistaken for an exit shall be identified with appropriate signs indicating their actual character. For example, "BASEMENT", "STOREROOM", "UTILITY", "NOT AN EXIT", and the like.
3. A sign reading "EXIT" with an arrow indicating the direction shall be placed in every location where the direction of travel to the nearest exit is not immediately apparent.
4. Every exit sign shall be suitably illuminated at all times.
5. Every exit sign shall have the word "EXIT" in legible letters not less than 6" high and at least 3/4" wide.

C. Distance to Exits

No point in a non-sprinklered building shall be more than 150 feet (actual travel distance) from an exterior exit door.

In a building equipped with an automatic sprinkler system, the actual travel distance may be increased to 200 feet.

D. Access to Exits

1. Exits shall be located and arranged so that they are readily accessible at all times.
2. Exits shall be so arranged that it will not be necessary to travel toward any high hazard area in order to reach the nearest exit, unless the path of travel is effectively shielded from the hazard.

E. Number of Exits

Exits shall be sufficient in number, appropriately located, and designed with due regard to occupancy so as to permit the prompt escape of occupants in case of emergency.

F. Exit Width

1. The minimum width of any exit shall be no less than 28 inches.
2. The aggregate width of all exits in feet shall not be less than the total occupant loaded served, divided by 50. Such width of exits shall be divided approximately equally among the separate exits.

G. Exit Doors

1. Every door required to serve as an exit shall be so designed and constructed that the way of exit travel is obvious and direct.
2. Exit doors shall be not less than 6'8" in height, and not less than 28 inches in width.
3. A door from a room to an exit shall swing in the direction of travel when the room is occupied by more than 50 persons or used for a high hazard occupancy.

4. Revolving, sliding and overhead doors shall not be used as required exits.
5. Exit doors shall be capable of being opened from the direction of exit travel without the use of a key or any special knowledge or effort whenever the building is occupied.
6. All exit doors shall be equipped with panic hardware. Panic hardware is a bar which extends not less than one-half the width of each door leaf, not less than 30, nor more than 44, inches above the floor, which will unlatch the door when a force to the bar not to exceed 15 pounds is applied in the direction of exit travel.

H. Requirements for High Hazard Occupancies

High hazard occupancies are areas which have high hazard contents such as materials which, in the event of fire, are liable to burn with extreme rapidity or from which poisonous or corrosive fumes may ensue, or explosion may occur.

1. Areas which are classified as high hazard having 200 or more square feet of area shall have at least two separate exits.
2. The travel distance from a high hazard area to a place outside the building, or to a place of safety, shall not be over 75 feet.
3. Means of egress shall be so arranged that there are no dead-end corridors, hallways, etc.

I. Aisles

1. Permanent aisles linking exits shall be delineated with walls, partitions, barriers or other contrasting floor markings.
2. Permanent aisles shall be kept free of obstructions.
3. Every aisle shall not be less than 36" wide if serving only one side, and not less than 42" wide if serving both sides. This aisle space is to be independent of working and storage space.

APPENDIX 12: Housekeeping

I. Scope

This section covers housekeeping requirements.

II. Purpose

The purpose of this section is to promote order and cleanliness.

III. Responsibilities

A. Managers

It is the responsibility of Managers to make periodic area inspections to ensure compliance with these requirements.

B. Supervisors

It is the responsibility of Supervisors to see that areas under their direction be kept clean and safe at all times.

C. Employees

It is the responsibility of employees to practice good housekeeping and keep order in their areas.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Good Housekeeping Practices

Good Housekeeping Practices consist of the following:

1. Orderly, uniform arrangements of desks, cabinets, benches, skids, containers, and equipment.
2. Tops of cabinets are to be kept free of materials.
3. Desktop bookcases shall be secured to prevent tipping.
4. Drawers to desks, file cabinets, etc. shall be closed promptly to prevent injury from falls and bodily contact.
5. Heavy materials stored on low shelves.
6. Aisles and passageways shall remain unobstructed.

7. Floors free of potential slip or trip hazards.
8. Electrical cords, conduits, cables, etc. shall not present a trip hazard. Cable ramps should be used where possible.
9. Rest rooms shall have daily maintenance sufficient to ensure cleanliness during all shifts.
10. Eating areas and coffee stands shall have daily maintenance so as to ensure cleanliness during all shifts.
11. Combustible or flammable material is not to be placed, stored or kept in any portion of an exit way, elevator, bottom of stairway, or fire escape.
12. Cleaning rags and materials are to be kept in proper containers.
13. Chemicals shall be stored in safe and compatible locations in approved containers.
14. Building equipment rooms are to be free of trash or combustible storage.
15. Leaks from piping or machinery shall be reported to the maintenance department promptly.
16. All exits, stairways, ramps and aisles shall be kept clear of all obstructions. Adequate illumination, including emergency lighting, shall be maintained.
17. Exit doors are to be kept free of snow and ice, and shall be properly painted and maintained in a safe operating condition at all times.

APPENDIX 13:

Asbestos Exposure Prevention Program

I. Scope

This section establishes guidelines and outlines responsibilities for identifying, monitoring, maintaining, encapsulating, and abating asbestos or asbestos containing building material (ACBM) in City owned facilities.

II. Purpose

The purpose of this section is to protect against exposures from friable asbestos and ACBM by bringing the City into compliance with federal and state regulatory agency mandates and rules.

III. General

The presence of asbestos in a building does not mean that the health of building occupants is necessarily endangered. As long as ACBM remains in good condition and is not disturbed, exposure is unlikely. When building maintenance, repair, renovation or other activities disturb ACBM, or if it is damaged, asbestos fibers are released creating a potential hazard to building occupants.⁴

ACBM in buildings is found in three forms:

- Sprayed or troweled on ceilings or walls (surfacing material);
- In insulation around hot or cold pipes, ducts, boilers and tanks (pipe and boiler insulation); or
- In a variety of other products such as ceiling and floor tiles and wall boards (miscellaneous materials).

In general, ACBM in the first two categories is of greatest concern, especially if it is friable. "Friable" refers to material which can be crumbled, pulverized, or reduced to powder by hand pressure.⁵

IV. Regulations

Federal and state regulatory agency mandates and rules include those promulgated by the California Occupational Safety and Health Administration (Cal/OSHA), the Environmental Protection Agency (EPA), and California Assembly Bill 3713.

V. Responsibilities

A. Department Heads

4 U.S. Environmental Protection Agency, Guidance for Controlling Asbestos-Containing Materials in Buildings, 1985, p.S-1.

5 IBID, p. S-1.

Department Heads are responsible for:

1. Establishing firm internal requirements for all personnel to fully adhere to, as well as to the policies established herein;
2. Frequently checking on compliance with this policy;
3. Holding Managers fully accountable for preventable exposure to asbestos or ACBM occurring within their area by their employees, contractors, or the public. "Fully accountable" is defined as being able to: explain why the deviation occurred; proffer recommendation(s) to prevent similar recurrences; and ensure the implementation of the prevention techniques; and
4. Contacting Risk Management for any assistance needed to implement this program.

B. Managers

Managers are responsible for:

1. Ensuring that all planning for either construction or remodeling of facilities fully implements this policy and the appropriate standards specified by Cal/OSHA and the California Health and Safety Code; and
2. Enforcing compliance with the asbestos policy.

C. Supervisors

Supervisors are responsible for:

1. Making the work place as safe as possible by establishing and following practices which minimize accident potential;
2. Evaluating each operation in terms of potential asbestos exposure; and
3. Educating each employee regarding this policy.

D. Employees

Employees that work in areas where asbestos or ACBM may be located are required to comply with this policy. Employees that suspect asbestos may be in the work area, or are aware of asbestos or ACBM that has been disturbed, are to bring the matter to the attention of their supervisor immediately.

E. Public Works - Building Maintenance

Public Works - Building Maintenance is responsible for:

1. Maintaining an updated list of all City owned or maintained buildings known (or suspected) to contain asbestos containing construction materials. This list shall be made available for review by employees during normal business hours. The comprehensive list shall be located in the Facilities Maintenance office. Additionally, a list will be maintained at each facility known or suspected to contain ACBM. The list shall include:
 - a) Any survey information identifying specific buildings where asbestos or ACBM are present;

- b) Specific locations within each building identified by survey or known by any other means to have asbestos or ACBM in any quantity;
 - c) Results of any bulk sample analysis or air monitoring;
 - 2. Mailing copies of all notices regarding asbestos to each tenant of any City owned building known to have asbestos or ACBM;
 - 3. Posting warning notices prior to any construction, maintenance, or remodeling that has a potential for the release, disturbance or employee contact with asbestos or ACBM. (Refer to warning notice specifications outlined in Health and Safety Code §25916 for mandatory language and size of notices.); and
 - 4. Maintaining an updated list of licensed contractors to be utilized for any needed abatement, removal, encapsulation, or disposal of asbestos or ACBM. The contractors on this list should meet the following criteria:
 - a) Be licensed to perform asbestos work in California;
 - b) Meet the insurance requirements outlined by the City; and
 - c) Comply with all relevant State & Federal regulations and Safety Orders.
- F. Enterprise Fund Operations

Enterprise Fund Operations are responsible for either:

 - 1. Establishing their own departmental Asbestos Exposure Prevention Program, utilizing this policy and procedure as a guideline; or
 - 2. Adopting this policy & procedure.
- G. Risk Management

Risk Management is responsible for:

 - 1. Distributing annual written notices to employees identifying the potential health risks or impacts that may result from exposure to asbestos or ACBM.
 - 2. Periodic review of this program to verify that the program meets all applicable state and federal regulations.

VI. Requirements

- A. Employees and contractors working in areas known to contain asbestos or ACBM shall be advised in writing of the existence and location of the asbestos or ACBM upon commencing work at the location and annually thereafter.
- B. Prior to beginning any construction or remodeling, departments, or their contractors, must contact Building Maintenance (Public Works) to verify if the area in question contains any asbestos or ACBM.

If Building Maintenance verifies the existence of asbestos or ACBM in the work area, then:

1. Building Maintenance will recommend either abatement or encapsulation of the asbestos prior to commencement or continuation of the project. This recommendation must comply with the Cal/OSHA and California Health & Safety Code guidelines.
 2. All workers in the area, both City employees and contractor employees, must adhere to the mandated safety practices including but not limited to: protective clothing, air monitoring, clean up, and disposal.
 3. Any known or suspected release of asbestos or ACBM fibers is to be immediately reported to the supervisor in charge of the facility. The supervisor must then:
 4. Request Building Maintenance evaluate the location to determine if asbestos or ACBM is present.
 5. If necessary, Building Maintenance will request a licensed contractor evaluate the location.
- C. The results of any evaluation for potential asbestos or ACBM will be made available to all employees working in affect area.
- D. If asbestos or ACBM is found to be present in any City facility, Building Maintenance will make a recommendation regarding encapsulation or abatement.

VII. Deviations

Deviation from the requirements of this standard are not permitted, except where local regulations are more stringent.

APPENDIX 14:

Hearing Conservation Program

I. Introduction

Sound can be defined as that which is or can be heard. The sensation of hearing results from the stimulation of auditory nerves by vibrations carried in air, water, or other media having properties of mass and elasticity. Noise is typically defined in the industry as any discordant, disagreeable or unwanted sound(s).

Experiments specifically designed to establish the relationship between sound intensity levels and human speech/hearing response have been developed. The following table shows the generally accepted human response to varying sound intensity levels (in decibels):

Sound Intensity Levels and Human Speech / Hearing Response

Sound Intensity Level (dBA)⁶	Human Speech / Hearing Response
140	Threshold of pain
130	Approaching pain
120	Average threshold of discomfort
110	Loud shout at one foot distance
100	Discomfort for speech
90	
80	Loud speech
70	
60	Average speech at conversational level
50	
40	Faint speech at three foot distance
30	Whisper
20	Very faint whisper
10	
0	Threshold of hearing (young adult)

In response to these factors, Cal/OSHA implemented the Occupational Noise Standard found in Title 8, California Code of Regulations, Article 105 (T8, CCR, Article 105). The purpose of this standard was, in part, to establish specific requirements for controlling occupational exposures to noise, which included defining permissible exposure limits (PELs), designing and administering an effective hearing conservation program, establishing an audiometric testing program, providing guidelines for the evaluation of hearing protection and instituting a training program for all affected employees.

⁶ dBA: sound intensity levels in decibels, A-weighted scale. Studies have shown that elevated occupational noise exposure levels may lead to an increase in employee accident rates, stress, absenteeism, and the incidence of hearing loss. Noise of varying degrees of sound frequency and intensity can cause hearing loss. Such noise induced hearing losses are most commonly linked with noise exposures which have any one or a combination of the following characteristics: (1) high intensity; (2) high frequency; (3) prolonged exposure; (4) continuous exposure; and (5) impulse or impact exposure.

Briefly, the standard mandates that protection from the effects of noise exposure be provided when the sound levels exceed those shown in Section VI of this program. When employees are subjected to sound levels exceeding those listed, Cal/OSHA requires that feasible administrative or engineering controls be investigated and implemented. If those controls fail to reduce sound levels within the levels described in Section VII, E, of this program, then personal protective equipment shall be provided and used.

For those employees where noise exposures equal or exceed an 8-hour time weighted average (TWA) sound level of 85 decibels (dBA), a continuing, effective hearing conservation program must be in place. The details of the hearing conservation program implemented by the City of Santa Barbara to comply with this standard are outlined in the following text.

II. Purpose

In compliance with Title 8, California Code of Regulations, Article 105, (T8, CCR, Article 105), the City of Santa Barbara (hereinafter referred to as the "City") has established a Hearing Conservation Program. The purpose of this program is to define the permissible noise exposures, the methods of determining these noise exposures, and the specific criteria for initiating a continuing, effective hearing conservation program.

III. Scope

This Hearing Conservation Program applies to all City personnel and affected contractors who are exposed to continuous noise levels at or greater than an 8-hour time weighted average of 85 dBA.

IV. Responsibilities

A. Director

Directors have the ultimate responsibility to ensure that the City's Hearing Conservation Program is established in their department and shall, with other administrators, provide continuing support for this program throughout City facilities.

B. Manager

It is the responsibility of each Division Manager to ensure that an effective hearing conservation program is maintained in their respective areas.

C. Supervisor

It is the responsibility of the Supervisors to ensure that all employees included in its Hearing Conservation Program are adequately informed of the effects of noise on hearing. It is also the responsibility of the Supervisors to ensure that those employees required to wear hearing protection are supplied with the appropriate hearing protection, and the use of such hearing protection is enforced.

D. Employees

All city employees are responsible for compliance with the requirements outlined in this Hearing Conservation Program. It is the responsibility of those employees required to wear hearing protection that said protection is worn in accordance with the manufacturer's instructions.

E. Risk Analyst

The Risk Analyst has the responsibility to maintain a continuing, effective hearing conservation program in compliance with current Cal/OSHA regulations. Specifically, these requirements include:

1. Monitoring all affected areas with properly calibrated sound measuring instruments whenever there is a change or addition in production, process, equipment or controls which can potentially increase noise exposures to the extent that additional employees may be exposed at or above the action level, or when evaluating the attenuation provided by hearing protection;
2. Maintaining all records of noise exposure measurements made throughout City facilities;
3. Notifying department management of all work areas where noise levels exceed an 8-hour time weighted average of 85 dBA;
4. Coordinating audiometric examinations for those affected personnel;
5. Developing and coordinating hearing conservation training;
6. Selecting and recommending appropriate hearing protection for affected areas; and
7. Coordinating the evaluation and feasibility of noise controls for equipment that produces noise levels in excess of 85 dBA in conjunction with experts and individual departments.

V. Definitions

Action level	An 8-hour time-weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.
Administrative control	Any procedure which limits exposure by adjustment of the work schedule.
Audiogram	A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold level as a function of the frequency.
Audiologist	A professional specializing in the study and rehabilitation of hearing who is certified by the American Speech, Hearing and Language Association or licensed by a state board of examiners.
Baseline audiogram	The audiogram against which future audiograms are compared.
Decibel (dB)	Unit of measurement of sound level.
DBA (Decibels, A-Weighted)	A unit of measurement of sound level corrected to the A-weighted scale, as defined in the ANSI S1.4-1971 (R1976), using a reference level of 0.00002 Newton per square meter (20 micropascals).

Engineering control	Method of controlling occupational exposure to noise by engineering means including, but not limited to, process modification, or by isolation or enclosure of noise production operations or machinery.
Hertz (Hz)	Unit of measurement of frequency, numerically equal to cycles per second.
Personal protective equipment	The safeguarding obtained by means of safety devices and safeguards of the proper type for the exposure and of such design, strength, and quality as to eliminate, preclude or mitigate the hazard.
otolaryngologist	A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat.
Representative exposure	Measurements of an employee's noise dose or 8-hour time-weighted average sound level that the employer deems to be representative of exposures of other employees in the work place.
Sound level	Ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of 0.00002 Newton per square meter (20 micropascals). Unit decibels (dB). For use with this regulation, SLOW time response, in accordance with ANSI S1.4-1971 (R1976), is required.
Sound level meter	An instrument for the measurement of sound level.

VI. Exposure Limits

A. Cal/OSHA

The State of California, Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) has established permissible noise exposures for persons in occupational environments. These permissible exposure limits (PEL) are based on maintaining an 8-hour time-weighted average (TWA) below 90 decibels (dBA). A table comparing average noise levels and permissible exposure duration is provided in the following table on the next page:

<u>CAL\OSHA Permissible Noise Exposures</u>	
Sound Intensity Level (dBA)	Allowable exposure per day (hours)
90	8.00
91	6.96
92	6.06
93	5.28
94	4.60
95	4.00
96	3.48
97	3.03
98	2.63
99	2.30
100	2.00
101	1.72
102	1.52
103	1.32
104	1.15
105	1.00
106	.86
107	.76
108	.66
109	.56
110	.50
111	.43
112	.38
113	.33
114	.28
115	.25

VII. Regulatory Requirements

A. Monitoring

If an employee's noise exposure may potentially equal or exceed the 8-hour TWA level of 85 dBA, then the City shall obtain measurements in a manner that will accurately identify such exposures. These determinations shall be made incorporating all continuous, intermittent, and impulsive sound levels from 80 dB to 130 dB during typical work situations. Employees and/or their representatives are entitled to observe monitoring procedures and they shall be notified of

7dBA: Sound intensities in decibels, A-scale slow response.

the results of the exposure monitoring of their work areas. The method used to notify employees is left to the discretion of the City.

B. Controls

When employees are subjected to sound levels exceeding the 8-hour TWA of 90 dBA, feasible administrative or engineering controls shall be utilized in order to reduce noise exposures. If such controls are not feasible or fail to reduce noise exposure levels at or below these limits, then personal protective equipment (i.e. plugs, muffs) shall be used by affected personnel.

C. Audiometric Testing

Audiometric testing shall be made available to all employees having an 8-hour TWA of 85 dBA, the Cal/OSHA "action level". Such tests shall be performed by or under the direction of a licensed or certified audiologist, otolaryngologist, or other qualified physician. The City shall establish for each exposed employee a valid baseline audiogram against which subsequent audiograms shall be compared. Annual audiograms shall be routinely compared to baseline audiograms in order to identify hearing losses which, if present, will appear as a standard threshold shift (STS). STS is defined in the regulation as an average shift in hearing threshold of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

D. Training

Employees exposed to an 8-hour TWA noise level at or exceeding the action level of 85 dBA shall be involved in a hearing conservation training program. Program topics shall include: the effects of noise; the purpose, advantages, and disadvantages of various types of hearing protectors; the selection, fitting and care of protectors; and the purpose and procedures of audiometric testing. The training program may be structured in varying formats, provided all pertinent information is presented. The various topics may be presented by different individuals and at varying presentation times. The City shall make a copy of Article 105 available to affected employees or their representatives, and shall post a copy in the work place.

E. Hearing Protection

The City shall make hearing protectors available to all workers exposed to 8-hour TWA noise levels of 85 dBA or above. Such protective equipment shall be provided at no cost to the employee and shall be replaced as deemed necessary. This requirement ensures that employees have access to protectors before they experience a loss in hearing.

The City shall ensure the use of hearing protectors by all employees whose 8-hour TWA noise exposure exceeds 90 dBA, and by those employees who have experienced a standard threshold shift and who are exposed to an 8-hour TWA noise exposure at or exceeding 85 dBA. In addition, those employees for which a baseline audiogram has not been established must wear hearing protectors if exposed above 85 dBA.

The hearing protectors provided to affected employees shall attenuate 8-hour TWA noise exposures at least to 90 dBA, except in instances when employees have experienced standard threshold shifts, at which time the hearing protectors shall attenuate 8-hour TWA noise exposures to at least 85 dBA.

F. Record Keeping

The City shall maintain an accurate record of all affected employee noise exposure measurements, audiometric tests and related information. Noise exposure measurement records shall be kept by the City for (a minimum of) two years as prescribed by Section 5100 within Title 8, California Code of Regulations, Article 105. Records of audiometric test results

must be maintained for the duration of employment of the affected employee. If the employer ceases to do business, the employer shall transfer to the successor employer all records required by the Cal/OSHA regulation.

APPENDIX 15:
Preventability Determinations: Industrial Injuries and Vehicle Collisions

I. Purpose

The purpose of this policy is to:

- A. Establish a Citywide policy for determining preventability or non-preventability of motor vehicle collisions, equipment collisions, and industrial injuries involving City employees; and
- B. Ensure uniformity in determinations of preventability including any necessary disciplinary action.

II. Definitions

The definitions in this section are taken from several sources including the California Vehicle Code and the National Safety Council.

City Equipment	Rolling transportation stock owned by the City.
City Vehicle	A device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.
Collision	The act of coming together with a violent, direct impact, such as a vehicle striking another vehicle from behind.
Non-Preventable Collision	Employee does everything within reason to prevent collision, yet collision still occurs.
Preventable Collision	Employee fails to do everything within reason to prevent collision.
Safety Committee	Chaired by the Department Head or their designee, this group determines safety policies within the department, resolves divisional safety problems, evaluates input agenda items for the City Safety Committee, and determines preventability of collisions and industrial injuries.

III. Policy

Each City vehicle collision and/or industrial injury shall be reviewed by the Department or Division Safety Committee of the employee involved. The Department or Division Safety Committee shall review all the facts surrounding the collision and/or industrial injury and ascertain:

- A. The cause of the collision and/or industrial injury;

- B. Preventability on the part of the City employee and/or other City staff, including any recommended measures implemented to prevent recurrence of a similar collision and/or industrial injury; and
- C. Any recommendations on preventing a recurrence of a collision and/or industrial injury of a similar type should be forwarded to the Department Head.

The determination of preventability or non-preventability shall be indicated on the Vehicle Collision Report (vehicle or equipment) or Supervisor's Incident Investigation Report (industrial injuries) and submitted to Risk Management, in accordance with this Policy.

IV. Procedure

The Department or Division Safety Committee shall review all pertinent information regarding the collision and/or industrial injury, including the employee's City vehicle or equipment driving record, the supervisor's investigative report, and any police report. A Preventability Determination form will be completed and sent to the appropriate department director for review and any necessary action. (A sample of this form follows after the narrative.)

If the Department Head disagrees with the determination of the Safety Committee, s/he may contact Risk Management and request the review of the collision or industrial injury be reopened. Risk Management shall evaluate the safety committee results and determine the need for re-opening the incident review process. Risk Management shall convene a Review Committee if re-opening of the review process is necessary.

A. Review Committee

The Review Committee shall consist of the Department Head requesting the review, a representative of the Safety Committee and a representative from Risk Management.

The Review Committee shall examine all available information. The determination of preventability of the collision or industrial injury shall be made by a simple majority vote. The action(s) of the Review Committee shall be binding. If the collision and/or industrial injury in question is determined preventable, the Preventability Determination form shall be completed and returned to Risk Management for filing and any necessary follow up as outlined above.

B. Disciplinary Action

If warranted, the department shall take any and all necessary disciplinary action to prevent a recurrence of the collision and/or industrial injury. The standards for disciplinary should be determined by the employee's department and Human Resources.

The affected employee shall have the same rights of appeal under this policy as s/he would have regarding any other disciplinary action.

C. CITY OF SANTA BARBARA MEMORANDUM (See the following two pages.)



City of Santa Barbara
Department - Division

Memorandum

DATE: Date of memorandum
TO: Risk Management
FROM: Supervisor
SUBJECT: CONFIDENTIAL PERSONNEL INFORMATION
Industrial Injury Preventability Determination & Record of Action

On Date of Injury, Employee's Name (First + Last) was involved in a work-related injury. Upon review of all available information, it has been determined that Employee's Name (First + Last) did or did not exercise every reasonable precaution to prevent this work-related injury from occurring. Thus, Employee's Name (First + Last)'s work-related injury is classified as preventable / not preventable.

The following action is recommended:¹

- This work-related injury is deemed Non-preventable and no further action is required.
- This work-related injury is deemed Preventable and a counseling meeting was held with the employee. Measures implemented to prevent recurrence of similar industrial injury(s) include: measures implemented
- This work-related injury is deemed Preventable and disciplinary action has been taken. Other (non-disciplinary) measures implemented to prevent recurrence of similar industrial injury(s) include: non-disciplinary measures implemented

c/: Manager
Human Resources

¹ A documented counseling session is to occur between the supervisor and the employee when a work-related injury is deemed preventable. When determining whether to impose discipline other than counseling the totality of circumstances, including the severity of the preventable injury and any safety order infractions involved, is to be taken into consideration. However, a supervisor should consider more action than counseling when more than one preventable injury has occurred.



City of Santa Barbara
Department - Division

Memorandum

DATE: Date of memorandum
TO: Risk Management
FROM: Supervisor
SUBJECT: CONFIDENTIAL PERSONNEL INFORMATION
Collision Preventability Determination & Record of Action

On Date of Collision, Employee's Name (First + Last) was involved in a collision while operating a City vehicle.

Upon review of all available information, it has been determined that Employee's Name (First + Last) did or did not exercise every reasonable precaution to prevent this collision from occurring. Thus, Employee's Name (First + Last)'s participation in this collision is classified as preventable / not preventable.

This employee has had # of collisions other collision(s) in the last twenty-four months; of which # preventable collisions were determined to be Preventable.

The following action is recommended:²

- This collision is deemed Non-preventable and no further action is required.
- This collision is deemed Preventable and a counseling meeting was held with the employee. Measures implemented to prevent recurrence of similar collision(s) include: measures implemented
- This collision is deemed Preventable and disciplinary action has been taken. Other (non-disciplinary) measures implemented to prevent recurrence of similar collision(s) include: non-disciplinary measures implemented

c/: Manager
Human Resources

² A documented counseling session is to occur between the supervisor and the employee when a collision is deemed preventable. When determining whether to impose discipline other than counseling the totality of circumstances, including the severity of the preventable collision and any legal infractions involved, is to be taken into consideration. However, a supervisor should consider more action than counseling when more than one preventable collision has occurred in any twenty-four month period.

APPENDIX 16:
Hazard Communication Program

I. Introduction

The City of Santa Barbara implements this Hazard Communication Program to ensure that information about the dangers of all hazardous chemicals used by the City of Santa Barbara are known by all affected employees. This program applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency. All work areas that involve potential exposure to chemicals are part of the Hazard Communication Program. Copies of the Hazard Communication Program are available for review by any interested employee on the City's SharePoint Page. A printed copy of the City's Hazard Communication Program is available by contacting your supervisor or Risk Management: (805) 564-5347.

II. Scope

This section establishes requirements, responsibilities, and guidelines necessary for all employees using hazardous substances as defined by the State of California, FED/OSHA, Cal/OSHA, and all other regulatory agencies.

III. Purpose

The purpose of this section is to:

1. Ensure that information related to the use, handling storage, and labeling of hazardous substances is provided to all employees with a potential for exposure to specific hazardous substance(s);
2. Inform employees of the requirements of the OSHA Hazard Communication Standard, the operations where exposure to hazardous chemicals occur, and how employees can access this program; and
3. Comply with federal and state regulations and mandates that require a written Hazard Communication Program.

IV. Regulations

Federal and state regulatory agency mandates and rules governing this program including the federal OSHA Hazard Communication Standard 29 CFR 1910.1200 and Cal/OSHA Title 8, California Code of Regulations, Article 109, §5194.

V. General

This written plan includes guidelines on identification and evaluation of hazardous substances and the preparation and proper use of container labels and other types of warning devices. The procedures contained herein establish the essential ingredients for implementation of a Hazard Communication Program in each City department.

The City shall provide a work place that is free of contamination from hazardous substances. This shall be accomplished by accepted engineering controls (as far as practicable), such as use of alternative non-hazardous substances. When engineering controls are not feasible, administrative controls and personal protective equipment shall be utilized when working with hazardous substances in accordance with the guidelines outlined in this program. The program is divided into the following parts, each outlined in the Requirements section below:

- Hazardous Substance Inventory
- Purchasing Procedures
- Container Labeling
- Safety Data Sheets (SDSs)
- Information and Training
- Hazards of Non-Routine Tasks
- Chemicals in Unlabeled Pipes
- Informing Other Employers/Contractors
- Program Availability

VI. Responsibilities

A. Department Heads

Department Heads are responsible for:

1. Establishing firm internal requirements for all personnel to fully adhere to the policies established herein;
2. Ensuring that all employees in their departments who handle or may be exposed to hazardous substances are cognizant of the City's Hazard Communication Program;
3. Frequently checking on compliance with this program;
4. Ensuring that supervisors inform employees of possible exposure to hazardous substances that may arise from any work task;
5. Developing a procedure by which employees are informed of the possible exposure to hazardous substances that may arise from any work task, and incorporating this procedure into this written Hazard Communication Program;

6. Holding managers fully accountable for preventable exposures to hazardous substances that occur within their area to either a City employee, an employee of a City contractor, or the public. "Fully accountable" is defined as being able to: explain why the deviation occurred; proffer recommendation(s) to prevent a similar recurrence; and ensure the implementation of the prevention techniques; and
7. Contacting Risk Management for any assistance needed to implement this program.

B. Managers

Managers are responsible for:

1. Establishing approved hazard communication measures in their areas;
2. Enforcing compliance with the Hazard Communication Program;
3. Ensuring that employees covered by this policy receive training in the safe use of any hazardous substances.
4. Maintaining an inventory of all hazardous substances in their area in accordance with Section VII, A below.

A. Supervisors

Supervisors are responsible for:

1. Identifying hazardous substances used by employees in their areas;
2. Identifying appropriate personal protective equipment required for use when handling hazardous substances;
3. Providing and maintaining all required Safety Data Sheets (SDS) for hazardous substances used by employees or contractors in their area;
4. Reviewing the SDSs received for safety and health implications, and initiating any needed changes in workplace practices.
5. Assigning only those persons who have received prior hazardous materials training to perform tasks requiring the use of hazardous substances;
6. Ensuring that any person assigned to use a hazardous substance is fully informed of the nature of the hazard(s) involved;

7. Ensuring that employees assigned to perform work task(s) that involve possible exposure to or use of hazardous substances are familiar with, and know how to interpret and use the information on the container labels and the appropriate SDS;
8. Informing employees of the various requirements of the Hazard Communication Program and provide training in the safe use of any hazardous substances at the following intervals:
 - a. Prior to beginning work utilizing a hazardous substance;
 - b. Prior to introduction of a new or different hazardous substance into the operation(s);
 - c. Within 30 days of receipt of new information regarding the use of an existing hazardous substance; and
9. Annual Hazard Communication Program refresher training; and
10. Ensuring that program elements are implemented in their area. This includes the existence of SDS, labeling requirements, and the need to adhere to the recommended work practices.

D. Employees

Employees who are required to use, or may be exposed to hazardous substances are responsible for:

1. Adhering to the procedures outlined in this program;
2. Utilizing and adhering to all required safety procedures;
3. Utilizing all required personal protective equipment;
4. Informing their supervisor of any personal health problem that could be aggravated by the use of, or exposure to specific hazardous substance(s);
5. Advising their supervisor of any ill effects or potentially hazardous conditions which are experienced or observed; and
6. Following safe work practices.

E. Risk Analyst and Safety Coordinator

The Risk Analyst and Safety Coordinator are responsible for:

1. Assisting the departments in evaluating work conditions that may require the use of hazardous substances;
2. Assisting individual departments in the selection and procurement of personal protective equipment, where appropriate; and
3. Periodic review of this program to verify the program meets all applicable federal and state regulations.

VII. Requirements

A. Hazardous Substance Inventory

All hazardous substances used either by City employees, or persons performing work for the City must be tracked by each department. Tracking shall be accomplished by utilizing a Hazardous Substance Inventory. Inventory records of work place hazardous substances must be maintained either for the overall facility or for individual work areas. These records must be kept current.

The format for the Hazardous Substance Inventory record shall be a log noting both usage (depletion) and additions as new stock is required. The record shall show:

1. Name of substance;
2. Chemical name(s);
3. Quantity on hand;
4. Quantity used or added;
5. Type and size of container(s);
6. Exact location where the hazardous substance may be found;
7. Storage requirements and/or quantity limitations;
8. Safety Data Sheet (SDS) number;
9. Name and address of the supplier;
10. Name of person ordering substance; and
11. Date of record entry.

B. Purchasing Procedures

The General Services Division purchases hazardous substances for citywide use. Departments may also purchase hazardous substances directly from a supplier. When departments choose to purchase hazardous substances directly from a supplier, the department shall complete the duties on behalf of the General Services Division as outlined below.

Purchase orders for hazardous substances shall require the vendor or supplier to provide:

1. A Safety Data Sheet (SDS) upon delivery; and
2. Container(s) bearing required identification and warning labels.

The General Services Division shall verify that all containers received for use is clearly labeled in accordance with the requirements of HazCom 2012, including a product identifier, pictogram, hazard statement, signal word, and precautionary statements, as well as the supplier's contact information (name and address).

The SDS shall be screened by the General Services Division for completeness of information. A SDS which is incomplete or which has items left blank shall be returned to the vendor for updating. Items on the SDS that do not apply for that substance shall be listed as *Not Applicable*. This process shall be accomplished prior to taking receipt of the product.

A master list of hazardous substances shall be maintained by the General Services Division - Central Stores. Central Stores shall provide current SDSs to Departments upon request. Departments are responsible for maintaining their own Hazardous Substance Inventory, SDS Catalog, and posting and labeling where appropriate.

C. Container Labeling

All containers, both original and secondary, must be labeled in accordance with the requirements of HazCom 2012. The General Services Division shall request a copy of the label or reasonable facsimile from vendors on purchase orders or in bid specifications.

Departments shall ensure that all secondary containers are labeled with the original supplier's label or with an alternative workplace label. Departments may use an alternative workplace label, as long as the label meets the requirements of OSHA's Hazard Communication Standard.

Alternative labeling systems include the National Fire Protection Association (NFPA) 704 Hazard Rating system and the Hazardous Material Information System (HMIS). However, these labels must have the information required by the OSHA Hazard Communication Standard, and there may not be any conflicting hazard warnings or pictograms.

Container labels shall not be removed unless they will be replaced immediately with in-house labels.

Labels on original containers must include:

- Product identifier;
- Signal word;

- Hazard statement(s);
- Pictogram(s);
- Precautionary statements; and
- Name, address and phone number of the responsible party.

The signal word, hazard statement(s), pictogram(s), and precautionary statement(s) are the label elements that comprise the primary information about hazards and protective measures on the label.

1. Product Identifier

The product identifier is any chemical, common, or trade name or designation that the chemical manufacturer or importer chooses to use on the label. The term must also appear on the SDS.

2. Signal Word

A signal word is a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in the standard are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe hazards.

It is important to be aware of the way signal words convey a difference in the severity of the hazard. While the product is hazardous wherever a signal word is indicated, the signal word chosen can give a preliminary idea of the relative significance of the effect.

3. Hazard Statement

A hazard statement is a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard. Example: “Fatal if swallowed.”

The hazard statement(s) for a hazardous chemical describe the hazard(s) in text, in a simple, direct manner. There is a hazard statement for each hazard category of a hazard class, and it will vary depending on the degree of hazard. As with the signal words, this information conveys the relative severity of the hazard, which impacts how it is handled and controlled.

4. Pictogram

Nine pictograms are designated under HazCom 2012 for application to a hazard category. Pictograms are black symbols, on a white background, with a red diamond border. They include: Flammable, Compressed Gas, Oxidizing, Corrosive, Explosive, Health Hazard, Skin Irritant, Toxic, and Environmental Hazard (which is optional).



5. Precautionary Statement

A precautionary statement is a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling. Example: "Do not eat, drink, or smoke when using this product."

6. Name, Address and Phone Number of the Responsible Party

Container labels must contain the supplier's contact information, including the name, address and phone number of the responsible party. The responsible party is often the manufacturer of the hazardous product, but could also be the distributor.

Labeling is also applicable to containers into which the user has transferred material from bulk containers to smaller-sized, or secondary containers. The only exception to this rule is if the user transfers the material into a portable container and utilizes all the material immediately. Such portable containers must be approved for the intended use, for example, safety cans for flammable materials. Any unused product must be either returned to its original container, or disposed of following proper disposal methods as labeled. Under no circumstances will hazardous substances be stored in an unlabeled container. Labeling of secondary containers is necessary so employees can cross-check safety information on the SDS.

D. Safety Data Sheet (SDS)

Safety Data Sheets (SDSs) must be maintained in current status. SDSs shall be readily accessible to employees for reference at each affected work area. All employees who work with, or are exposed to hazardous substances shall be advised of the location of the SDSs by the Supervisor. SDSs must be complete.

The SDS requirements in HazCom 2012 are based on an internationally agreed upon 16-section SDS. The sixteen sections are as follows, with the non-mandatory sections indicated in *italics* and mandatory sections indicated in **bold**.

NOTE: Even though the italicized sections are not considered mandatory by OSHA, the headings are still required to be present on the SDS. Any category for which no relevant information is found must indicate "no applicable information".

- 1. Identification**
- 2. Hazard(s) identification**
- 3. Composition/information on ingredients**
- 4. First-aid measures**
- 5. Firefighting measures**
- 6. Accidental release measures**
- 7. Handling and storage**
- 8. Exposure control/personal protection**
- 9. Physical and chemical properties**
- 10. Stability and reactivity**
- 11. Toxicological information**
- 12. Ecological information*
- 13. Disposal considerations*
- 14. Transport information*
- 15. Regulatory information*
- 16. Other information**

E. Information and Training

1. Employees shall to be informed about and receive training on these topics:
 - a) The general requirements of the Hazard Communication Standard;
 - b) Where the hazardous chemicals are located in the work areas of the department (operations where exposure may occur);
 - c) The City's Hazard Communication Program: where and how employees can access the program;

- d) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work areas of the department (such as monitoring conducted by the department, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
 - e) The physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work areas of the department;
 - f) The measures employees can take to protect themselves from these hazards, including specific procedures the department has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
 - g) The details of the City's Hazard Communication Program, including an explanation of the labels received on shipped containers and the workplace labeling system used by the department; the SDS, including the format of the SDS (where each type of information is located) and how employees can obtain and use the appropriate hazard information.
2. Training will take place at the following intervals:
- a) initial assignment;
 - b) whenever a new hazardous substance is introduced into the work area;
 - c) when an employee moves to a new area where different hazardous substances are used; and
 - d) refresher training provided on an annual basis.
3. Training of new employees shall commence at the time of initial assignment to work with a hazardous substance.
4. All employees attending safety training must personally sign a class roster. Supervisors shall maintain the original class roster to document employee training and a copy of the completed roster shall be sent to Risk Management.

F. Hazards of Non-Routine Tasks

Periodically, workers are required to perform non-routine tasks that are hazardous. Examples of non-routine tasks are confined space entry and tank cleaning.

In such instances, the supervisor must ensure that affected employees are familiar with the specific chemical hazards and know how to interpret and use the information on container labels and the appropriate SDS, protective and safety measures the employee should use and steps the City is taking to reduce the hazards, including ventilation, respirators, the presence of other employees (buddy systems), and emergency procedures.

G. Chemicals in Unlabeled Pipes

Work activities may be performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee shall be informed by the supervisor about the identity and hazards of the chemicals in the pipe, as well as required precautionary measures required to be followed.

H. Informing Other Employers/Contractors

1. Contractors who work in areas covered by this Hazard Communication Program must be informed of any potential hazardous substances they may encounter while working in the City facility and suggested precautions for workers. Hazardous substance information shall include:
 - a) A copy of the Hazardous Substance Inventory for the area(s) where contract work is performed;
 - b) Copies of appropriate SDSs;
 - c) Any additional information or materials to aid in the hazard communication training of contractors' employees;
 - d) Any necessary precautionary measures to protect contractors' employees exposed to operations performed at City facilities; and
 - e) The alternative hazard labels used by the department. The department shall provide information to the contractor to understand the alternative labels used and any alternative workplace labeling systems.
2. Contractors and their employees must comply with federal and state regulatory agency mandates and rules governing hazard communication. Recommended instructions for contractors are:
 - a) Contractors must provide copies of the SDSs to the City for all hazardous substances brought into the work place prior to commencement of work.
 - b) Contractors shall only use products approved by the City.

- c) Contractor's employees shall comply with all City safety requirements including use of personal protective equipment.
 - d) Contractor's employees shall confine their activities to the specific job area.
 - e) Contractor must demonstrate they are in compliance with federal and state regulatory agency mandates and rules governing the hazard communication standard and this Hazardous Communication Program.
- I. Program Availability

A copy of this Hazard Communication Program will be made available upon request to employees, their designated representatives, and OSHA or Cal/OSHA.

APPENDIX 17:
Infection Control Program

I. Background

Both federal and state Occupational Health and Safety Administrations (OSHA) require employers to implement a Bloodborne Pathogens Infection Control Plan. These regulations resulted from concerns about workers exposed to HIV (human immunodeficiency virus; the virus that causes AIDS) and Hepatitis B and C (HBV) viruses through contact with blood or other potentially infectious material in a liquid or semi-liquid state.

For purposes of this document, the State of California safety order vernacular will be used e.g., "exposure" control program rather than "infection" control program.

Two major requirements of these safety orders directly impact City departments and some of their employees. The first requirement of the standard is for employers to perform a needs assessment of all employees to determine those at "substantial risk" of exposure to hepatitis B virus (HBV). The need for vaccination is dependent upon the employees exposure to blood and/or bodily fluids from a population at risk of being infected with the hepatitis B virus.

The second requirement of the standard affecting our employees will be mandatory training for each employee on symptoms of HBV and HIV. Training will also include explaining our exposure control program, selection of personal protective equipment, information on HBV vaccine, and what procedures to follow when and employee is inadvertently exposed to blood.

II. Hepatitis B (HBV)

Hepatitis B is an infection of the liver caused by the hepatitis B virus (HBV). HBV is spread by direct contact with blood or other bodily fluids contaminated with HBV. Wound drainage may contain HBV; open wound contact can spread the virus. Infection can also occur in settings of continued close contact (such as in households or among residents in group settings), probably due to unnoticed contact of infected bodily fluids with skin lesions or mucosal surfaces.

Acute hepatitis usually begins with mild symptoms that may or may not become severe, including loss of appetite, a vague sick feeling, extreme fatigue, nausea, vomiting, stomach pain, dark urine and jaundice (yellow eyes and skin). Skin rashes and joint pain may also occur. It may be incapacitating for weeks or months and may lead to serious complications.

The risk of getting hepatitis B is higher in certain groups of people because of their occupation, lifestyle or environment. Because of the risk of serious problems associated with hepatitis B infection, immunization with hepatitis B vaccine is recommended to help prevent infection in those City employees at risk of occupational exposure to blood infected with HBV.

III Definitions

Blood	Human blood, human blood components, and products made from human blood.
Bloodborne pathogens	Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
Contaminated	The presence or the reasonable anticipated presence of blood or other potentially infectious materials on an item or surface.
Contaminated laundry	Laundry which has been soiled with blood or other potentially infectious materials on an item or surface.
Contaminated sharps	Any contaminated object that can penetrate the skin including, but not limited to, needles, and broken glass.
Decontamination	The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particle and the surface or item is rendered safe for handling, use or disposal.
Engineering controls	Controls (e.g. sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the work place.
Exposure incident	A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
Hand washing facilities	A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.
HBV	The Hepatitis B virus.
HIV	Human immunodeficiency virus.
Occupational exposure	Reasonable anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.
other potentially infectious materials aka bodily fluids (OPIM)	Include the following human bodily fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, bodily fluid that is visibly contaminated with blood, and all bodily fluids in situations where it is difficult or impossible to differentiate between bodily fluids.

parenteral	Piercing mucous membranes or the skin barrier through such events as needles, sticks, human bites, cuts and abrasions.
personal protective equipment (PPE)	Specialized clothing or equipment worn by an employee for protection against a hazard.
Regulated waste	Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of release of these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.
Source individual	Any individual living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes.
Universal precautions	An infection control approach. According to the concept of Universal Precautions, all human blood and certain human bodily fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.
Work practice controls	Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g. prohibiting recapping of needles by a two-handed technique).

IV. Exposure Control Program (ECP) Components

A. Introduction

Employees incur risk of infection and subsequent illness each time they are exposed to blood or other potentially infectious materials. Therefore, the City of Santa Barbara, in accordance with the Cal/OSHA Bloodborne Pathogens Standard (CCR, Title 8 §5193) has established this exposure control program (ECP) as the core element used to reduce employee risk by minimizing or eliminating employee exposure incidents to bloodborne pathogens. The ECP is the City's written policy for implementation of procedures relating to the control of infectious disease hazards. This policy is part of the City's Injury and Illness Prevention Program, and is to be accessible to all employees and Cal/OSHA. The ECP is to be reviewed and updated annually, wherever necessary, to: reflect new or modified tasks and procedures which affect occupational exposure; reflect new or revised employee positions with occupational exposure; and review the exposure incidents which occurred since the previous update.

B. Exposure Determination

An employee's risk of exposure to infected blood is determined by evaluating: 1) the employee's risk of contacting blood, based on occupation group without regard to the use of personal protective equipment; and 2) the presence of the public likely to be infected with HBV.

1. Occupational Groups

Employees whose job tasks expose them to blood or other bodily fluids are at risk for hepatitis B infection. An example of occupational groups considered at risk are Police Officers, Fire Fighters, and Waste Water Treatment Operators. Individual job duties must be considered when determining those employees at risk.

2. Population Groups

Serologic surveys demonstrate that HBV infection is prevalent in certain groups. These groups include, but are not limited to, immigrants/refugees from areas of high HBV rates and their descendants¹⁰, clients in institutions for the developmentally disabled, and users of illicit parenteral drugs.

3. Recommended Employee Groups

The following is a list of city jobs which might place an employee at risk of exposure to hepatitis B:

- a) Police Officer, Fire Fighters, and Harbor Patrol
- b) Lifeguards
- c) Some Maintenance/Custodial Personnel
- d) Waste Water Treatment Personnel

4. Non-Recommended Employee Groups

Employees required or trained in first aid and CPR who do not provide emergency care as a primary job responsibility are not bound by this policy. However, any employee, regardless of their employee group, that is exposed while on-the-job shall report the incident before the end of the shift and appropriate treatment shall be provided as soon as possible and no later than 24 hours after assistance was provided where blood was present.

C. Compliance Methods

1. Universal Precautions

- a. The term "universal precautions" refers to a method of infection control in which all human blood and other potentially infectious materials are treated as if known to be infectious for HIV and HBV. Universal precautions do not apply to feces, nasal secretions, sputum, sweat, tears, urine or vomitus unless they contain visible blood.

¹⁰China, Southeast Asia, most of Africa, parts of the Middle East and the Amazon Basin.

- b. Universal precautions require the use of protective barriers. "Protective barriers" reduce the risk of exposure. Examples include gloves, gowns, masks, protective eye wear, mouthpieces and resuscitation devices.
- c. Universal precautions are intended to supplement rather than replace recommendations for routine infection control, such as hand washing and using gloves to prevent contamination of hands as described in the sections that follow.

2. Work Practice Controls

- a. The City of Santa Barbara shall provide hand washing facilities which are readily accessible to employees.
- b. When provision of a hand washing facility is not feasible, employees shall be provided with either an appropriate antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as possible.
- c. All employees must wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment (PPE).
- d. Unanticipated skin contact with bodily fluids may occur in a situation where gloves may be immediately unavailable (e.g., when applying pressure to a bleeding injury). First aid for a bleeding injury must not be delayed to secure gloves. In these instances hands and other affected skin areas of all exposed persons should be immediately washed with soap and water after direct contact with blood or bodily fluids has ceased. Proper hand washing requires the use of soap and water and vigorous washing under a stream of warm water for approximately 10 seconds.
- e. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

3. Personal Protective Equipment

- a. The City of Santa Barbara shall provide and make accessible at no cost appropriate personal protective equipment (PPE) such as gloves, face shields, masks, eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Appropriate PPE will not permit blood or other potentially infectious materials to pass through or to reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal conditions of use.
- b. All employees shall use appropriate PPE. An employee can temporarily and briefly decline to use PPE when, under rare circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of a co-worker or the employee. When this occurs, the circumstances shall be investigated and documented by the immediate supervisor in order to prevent recurrences. The City of Santa Barbara shall encourage employees to report all such instances without fear of reprisal in accordance with the City's Injury and Illness Prevention Program.

- c. When possible, direct skin contact with blood or other potentially infectious materials (OPIM) should be avoided. Disposable gloves shall be worn when it is reasonably anticipated that the employee may have hand contact with blood or OPIM, mucous membranes, and non-intact skin, and when handling or touching contaminated items or surfaces.
 - d. Unbroken skin is an excellent barrier to infectious agents. Staff with sores or cuts on their hands (non-intact skin) having potential contact with blood or OPIM should always wear gloves.
 - e. Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced when they become contaminated, or if they are torn, punctured, or when their ability to function as a barrier has been compromised.
 - f. Utility gloves may be decontaminated for re-use provided that the integrity of the gloves is not compromised. Utility gloves shall be discarded if they are cracked, peeling, torn, punctured, exhibit other signs of deterioration, or when their ability to function as a barrier has been compromised.
 - g. Masks, in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated and eye, nose, or mouth contamination can be anticipated.
 - h. All contaminated gloves, or other types of PPE, should be placed in a plastic bag or lined trash can, secured, and disposed of daily. The handling, storage, treatment and disposal of all regulated waste shall be in accordance with Health and Safety Code Chapter 6.1 and all other applicable regulations (**See Appendix 22, Infectious Waste Disposal).
 - i. All garments, and/or PPE, which are penetrated by blood shall be removed immediately or as soon as feasible. All PPE shall be removed prior to leaving the work area. When PPE is removed, it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.
4. Housekeeping Practices
- a. Supervisors shall assure that the work site is maintained in a clean and sanitary condition.
 - b. Supervisors shall determine and implement an appropriate cleaning schedule for rooms where bodily fluids are present. Schedules shall be as frequent as necessary depending on the work site, the type of surface to be cleaned, and the amount and type of contamination present.
 - c. Supervisors shall ensure that maintenance/custodial workers wear appropriate personal protective equipment including general-purpose utility gloves during all cleaning of blood or other potentially infectious materials (OPIM).

- d. Initial clean-up of blood or OPIM shall be followed with the use of an approved hospital disinfectant chemical germicide that is tuberculocidal or a solution of 5.25% sodium hypochlorite (household bleach) diluted between 1:10 and 1:100 with water. The disinfectants should be registered by the U.S. Environmental Protection Agency (EPA) for use as a disinfectant in medical facilities and hospitals.
- e. Equipment contaminated with blood or OPIM shall be checked routinely and, if possible, decontaminated prior to servicing or shipping.
- f. Double-bagging prior to handling and/or storing shall take place with materials contaminated with blood or OPIM.
- g. All reusable bins, pails, cans and similar receptacles which may likely become contaminated must be inspected and decontaminated on a regularly scheduled basis. Any receptacles that become visibly contaminated will be cleaned and decontaminated as soon as possible.

5. Cleaning Equipment

- a. Mops should be soaked in the disinfectant after use and rinsed thoroughly or washed in a hot water cycle before rinse.
- b. Disposable cleaning equipment and water should be placed in a toilet or plastic bag as appropriate. Non-disposable cleaning equipment (buckets) should be thoroughly rinsed in the disinfectant. The disinfectant solution should be promptly disposed down a drain pipe. Remove glasses and discard in appropriate receptacles. Always wash hands thoroughly after cleaning equipment.

D. HBV Vaccination

1. Requirements

- a. The HBV vaccination shall be offered, at no cost, and at a reasonable time and place, to all employees whose jobs involve the risk of directly contacting blood or OPIM. See section on Exposure Determination for a complete list. Designated First Aid responders who respond only as collateral duty will be eligible for the HBV vaccination. After responding to an incident where blood/OPIM was present, regardless of whether an actual exposure incident had occurred, the HBV vaccine shall be made available as soon as possible, or within 24 hours to all unvaccinated first aid providers.

HBV vaccinations shall be given by, or under the direction of, a licensed physician, or, by or under the supervision of another licensed health-care professional according to recommendations of the U.S. Public Health Service. The vaccination is a series of three injections at zero, one, and six months. Field trials of the vaccines have shown 80-90 percent efficiency in preventing infections. To obtain the vaccination employees in the recommended City positions must first complete the Bloodborne Pathogen Program training requirements and complete the **EXHIBIT I: Hepatitis B Vaccine Program Consent / Waiver Form.**

Sansum-Santa Barbara Medical Foundation Clinic Occupational Medicine provides employees not previously vaccinated with the HBV vaccination. These employees need

only call the Occupational Medicine Clinic and schedule an appointment approved by the appropriate supervisors. Vaccinations may be received during their regular work shift and is compensable.

- b. HBV vaccination shall be made available after the employee has received the required training and within 10 working days of initial assignment to all employees who have occupational exposure unless:
 - 1) the employee has previously received the complete HBV vaccination series, or,
 - 2) antibody testing has revealed that the employee is immune, or,
 - 3) the vaccine is contraindicated for medical reasons.

If a routine booster dose of HBV vaccine is recommended by the U.S. Public Health Service at a future date, such booster doses shall be made available.

- c. Testing for immunity after vaccination is not recommended routinely, but is advised for persons whom a sub-optimal response may be anticipated, such as those who have received vaccine in the buttocks, persons 50+ years of age, and persons known to have HIV infection. Post-vaccination testing should also be considered for persons at occupational risk who may have needle stick exposures necessitating post-exposure prophylaxis. When necessary, post-vaccination testing should be done between 1 and 6 months after completion of the vaccine series to provide definitive information on response to the vaccine.
- d. Each employee's personnel file should contain an Immunization Record which includes documentation regarding hepatitis B immunization status. A consent form or refusal pertaining to receiving HBV vaccine must be signed by every employee determined to be at risk. A sample form is attached. Employees should be given copies of their own Immunization Records each time the records are updated. The Immunization Records are not considered confidential and may be disposed of once an employee terminates or retires.

2. Employees Exempt from Vaccinations

Employees who have already completed the HBV vaccination series are exempt from the HBV vaccination program. Employees for whom antibody testing has revealed an immunity to HBV, or for whom vaccination is contraindicated for medical reasons, are also exempt from the vaccination requirements.

3. Employees Who Decline Vaccinations

- a. Employees may decline the HBV vaccination. When an employee elects not to participate in the HBV vaccination program, the employee declining treatment must sign a Mandatory Hepatitis B Vaccination Declination Statement (see Exhibit I).
- b. Those who decline the HBV vaccination may elect to receive the vaccination series at a later date. These vaccinations will be provided at no cost to the employee at that time. These vaccinations will also be provided by, or under the supervision of a licensed physician (or another licensed health care professional).

E. Post Exposure Evaluation and Follow-Up

All first aid incidents involving the presence of blood or OPIM shall be reported to the appropriate supervisor before the end of the work shift during which the first aid incident occurred. The exposure report must include the names of all first aid providers who rendered assistance (regardless of the use of PPE), time, date, description of the incident, and a determination of whether or not an exposure incident occurred. This report shall be made available to all employees and shall be provided to Cal/OSHA upon request.

All exposure incidents shall be reported, investigated and documented. When an exposure incident occurs, it shall be reported to Risk Management.

Following a report of an exposure incident, the exposed employee shall immediately receive a confidential medical evaluation and follow-up, including at least the following elements:

- 1) Documentation of the routes of exposure and exposure incident circumstances.
- 2) Identification and documentation of the source individual (unless that identification is infeasible or prohibited by law):
 - a. The source individual's blood shall be tested as soon as feasible after consent is obtained to determine HBV and HIV infection status, and results documented.
 - b. When source individual is already known to be infected with HBV or HIV, the blood testing need not be repeated.
 - c. The results of the source individual's blood testing shall be made available to the exposed employee, as well as any applicable laws and regulations regarding disclosure of identity and infection status of source individual.
- 3) Collection and testing of blood for HBV and HIV serological status will comply with the following:
 - a. The exposed employee's blood shall be collected as soon as feasible, after consent is obtained, and tested.
 - b. If employee consents to collection of the baseline blood sample, but does not consent to HIV serologic testing, the sample shall be preserved for 90 days. HIV serologic testing is to be performed as soon as feasible, if consent is given.
 - c. Additional collection and testing shall be made available in accordance with USPHS recommendations.
- 4) Post-exposure prophylaxis, when medically indicated, as recommended by the USPHS.
- 5) Counseling.
- 6) Evaluation of reported illnesses.

F. Information Provided to the Health-care Professional

The City of Santa Barbara shall provide a copy of this regulation to the health-care provider responsible for the employee's HBV vaccination.

- 1) After an exposure incident, the health-care professional evaluating the employee will be given:
- 2) A copy of the Bloodborne Pathogens regulation;
- 3) A description of the exposed employee's duties as they relate to the exposure incident;
- 4) Documentation of the routes of exposure and exposure incident circumstances;
- 5) Results of the source individual's blood testing, if available; and
- 6) All medical records relevant to the appropriate medical treatment, including vaccination status (which employer is responsible to maintain).

G. Health-care Professional's Written Opinion

The employee shall be provided with a copy of the evaluating health-care professional's written opinion within 15 days of the completion of the evaluation. The health-care professional's written opinion for HBV vaccination and post-exposure follow-up shall be limited to the following:

- 1) Whether the HBV B vaccination is indicated, and if employee has received such vaccination;
- 2) Employee has been informed of results of evaluation;
- 3) Employee has been told about any medical conditions resulting from exposure to blood or OPIM which require further evaluation or treatment; and
- 4) All other findings or diagnoses shall remain confidential and shall not be included in the written report.

H. Training and Education of Employees

All employees with exposure to blood or OPIM are required to participate in a training and education program. Material appropriate in content and vocabulary to educational level, literacy, and language background of employees shall be used.

- 1) The training program shall contain the following elements:
- 2) An accessible copy of the standard and an explanation of its contents.
- 3) A general explanation of the epidemiology and symptoms of HBV and HIV.
- 4) An explanation of the modes of transmission of HBV and HIV.

- 5) An explanation of the employer's exposure control program.

The recognition of tasks that may involve exposure.

- 1) An explanation of the use and limitations of methods of control that may prevent or reduce exposure; including universal precautions, engineering controls, work practices, and personal protective equipment (PPE).
- 2) An explanation of the basis for selection of PPE (primarily gloves). The use, location, removal, handling, decontamination and disposal of PPE.
- 3) Information on the appropriate actions to take, and persons to contact in an emergency involving blood or OPIM.

Employees who have received training on Bloodborne Pathogens in the 12 months preceding the effective date of this policy will only receive training in provisions of the policy that were not covered.

Additional training shall be provided to employees when there are any changes of tasks or procedures affecting the employees' occupational exposure.

I. Record Keeping

1. *Medical Records*

An accurate record shall be established and maintained for each employee with occupational exposure to bloodborne pathogens in accordance with Title 8, CCR, §3204 - Access to Employee Exposure and Medical Records. This record shall include the following information:

- a. Name and social security number of employee;
- b. Copy of the employee's Hepatitis B vaccination status, including dates of vaccinations and any medical records regarding the employee's ability to receive vaccinations in accordance with the employer's Exposure Control Plan;
- c. Copies of results of medical examinations, medical testing, and follow-up procedures;
- d. A copy of the health-care professional's written opinion; and,
- e. A copy of the information required to be furnished to the health-care professional.

Employee medical records shall be kept confidential and not disclosed or reported without the employee's express written consent to any person within or outside the work place, except as required by the record keeping requirements of the regulation.

All such records shall be kept for at least the duration of employment plus 30 years.

2. *Training Records*

Training Records shall be kept for three (3) years from the date of training and shall include the following information:

- a) Date(s) of training sessions;
- b) Contents or summary of training session;
- c) Names and qualifications of persons conducting the training; and,
- d) Names and job titles of all persons attending the training.

3. *Availability of Records*

These training records must be available to Cal/OSHA and NIOSH (National Institute for Occupational Safety and Health), as well as to employees, their representatives.

Medical records must be made available to the subject employee, anyone having written consent of the employee, Cal/OSHA, and NIOSH

4. *Transfer of Records*

- a) The employer shall comply with records transfer requirements of Title 8, CCR, §3204 - Access to Employee Exposure and Medical Records.
- b) If the employer ceases to do business and there is no successor employer to receive the records, the employer shall notify NIOSH at least 3 months prior to their disposal and transmit them to NIOSH, if required.

EXHIBIT I: Hepatitis B Vaccine Program Consent / Waiver Form follows:

**Hepatitis B Vaccine Program
Consent/Waiver Form**

I, _____, acknowledge that on _____ I attended an education and training class wherein I was informed of the City of Santa Barbara's *Infection Control Program* including the Hepatitis B Vaccine requirement. I understand this program is to prevent the contracting of Hepatitis B virus in the course of my employment. I understand this program is offered to me at no cost. I acknowledge that my participation in this program is optional and my decision will not affect my job status.

If you elect to PARTICIPATE Complete Parts A & C

If you elect to NOT PARTICIPATE Complete Parts A, B, & C

Part A:

After evaluating the advantages and disadvantages of the vaccination program, based on the education and training provided, I elect to *participate/not participate* in the City of Santa Barbara Hepatitis B Vaccine program. I understand a series of three injection of hepatitis B vaccine is needed to become protected. (Occasionally, more vaccine is needed if the first series does not result in immunity.)

I have previously completed the Hepatitis B Vaccine Program on _____, 20__.

OR

I have previously begun the HBV program on _____, but did not complete it.

Part B

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

Part C

DATED: This ___ day of _____, 20__

SIGNED: _____

WITNESSED: _____

APPENDIX 18:

Video Display Work Station Safety Program

I. Scope

To prescribe guidelines for implementing a comprehensive ergonomic safety and health program to address hazards presented by ergonomic risk factors associated with operations of video display terminals (VDTs) and other types of computer terminals.

II. Purpose

To minimize the effect of repetitive motion strain on VDT operators by providing maximum flexibility in the ergonomic design of VDT work stations.

III. Responsibilities

A. Managers

It is the responsibility of Managers to see that all office equipment and VDT equipment procured conforms to the requirements of this section before approving any expenditure.

B. Supervisors

It is the responsibility of the Supervisor to see that all workstations conform to the requirements of this section, and to ensure that employees are trained in the proper use and care.

C. Employees

It is the responsibility of all employees to report any difficulty experienced at their workstation to their supervisor, and to use office furniture and VDT equipment in accordance with the requirements of this section.

D. Risk Management

It is the responsibility of Risk Management to review industry safety standards and update this policy with any appropriate changes.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. Work Station Design

1. Seating

- a) Work station seating shall conform to ANSI Standard HFS-100, 1988, §8.7, or satisfy all of the following conditions:
- b) Seat pans and backrests must be upholstered with moisture absorbing material. Such material to be compressible at least 0.5" to 1".
- c) Seat pans must have adjustable height and angle. Chair seat pan adjustments shall be done while seated, and backrest adjustments shall be easy to operate.
- d) Backrests must be adjustable for height and to position behind and forward of the vertical position.
- e) The user must be able to swivel the chair.

2. Adjustments

- a) Terminal display support adjustable such that top of the screen is no higher than the operator's eye level, and the bottom no more than sixty degrees below eye level.
- b) The keyboard, in combination with seating and work surface, shall be adjustable so that arms, wrists, and hands are about parallel to floor.
- c) Work surface height such that adequate clearance is provided under the work surface for operator's legs.

3. Lighting

- a) Work station illumination levels must be between 200-300 lux, and arranged so as to avoid glare and discomfort.
- b) Task lighting shall be provided upon request.
- c) Glare may be eliminated by window shades, blinds, curtains, positioning terminals at right angle to windows, hood covers or anti-glare screens, and non-reflecting keyboards.
- d) Video screens that are clean, clear and without flicker perceptible to the operator.

4. Noise

- a) Cover or isolate impact printers to reduce direct noise.

B. Other Equipment

1) *Arm rests, Wrist Rests, and Foot Rests*

These items are to be provided if the user requests them. Arm rests on chairs shall be of an adjustable nature. Wrist rests shall be provided for a neutral wrist position and be padded with no sharp edges. Foot rests shall be adjustable in height and angle and be portable.

2) *Computer Keyboards*

Keyboards shall be of the detachable type.

3) *Document Holders*

When needed, document holders shall be provided and be adjustable for height and angle.

VI. Training

VDT operators and supervisors shall receive necessary information and training on:

- Health effects of musculoskeletal strain, cumulative trauma disorders, carpal tunnel syndrome, reproductive effects and psychological stress;
- Effect of poorly designed work stations, physical immobility, poorly adjusted furniture, awkward posture, poor visual correction, inappropriate levels of lighting, excessive glare and excessive or continuous keyboard activity; and
- Protective measures, including ergonomic intervention, regular breaks, glare-free illumination, instructions for display adjustment, visual exams, furniture instruction and eye and body exercises.
- Departments shall maintain a record of training in accordance with this Injury and Illness Prevention Program.

VII. Equipment Purchase

A. *General*

Purchase only ergonomically correct office furniture and VDT equipment, such as adjustable machine stands, adjustable chairs with arm rests that adapt to the operator's height, detachable keyboards that enable the operator to control the distance between eyes and screen and adjustable screens with contrast and brightness controls.

B. *General Services*

General Services is charged with ensuring uniformity in purchasing office furniture by maintaining a catalogue of pre-qualified manufactures of ergonomically correct office equipment.

C. *Data Processing*

Data Processing is charged with ensuring uniformity in purchasing computer and VDT hardware by providing General Services with a catalogue of pre-qualified manufacturers of ergonomically correct VDT equipment.

APPENDIX 19:

Respiratory Protection Program

I. Scope

This section establishes requirements, responsibilities, and guidelines necessary for all users of respiratory protection devices.

II. Purpose

The purpose of this section is to bring the City into compliance with federal and state regulations and mandates that require a written Respiratory Protection Program for users of respiratory protection devices.

III. General

The City shall provide a work place atmosphere that is free of contamination by harmful dusts, fogs, fumes, gases, mists, smokes, sprays or vapors. This shall be accomplished by accepted engineering controls (as far as practicable), such as general and local ventilation or enclosure. When engineering controls are not feasible, or during the period that the engineering controls are being instituted, appropriate respirators shall be provided to employees working in the hazardous area.

IV. Regulations

Federal and state regulations and mandates governing this program include: Federal Occupational Safety and Health Administration (FED/OSHA) 29 CFR 1910.134, Respiratory Protection; California Occupational Safety and Health Administration (Cal/OSHA) - Title 8, California Code of Regulations, Article 107, § 3409 and § 5144; National Institute for Occupational Safety and Health (NIOSH) - 30 CFR Part II; American National Standards Institute (ANSI) - ANSI Z88.2-1980 & ANSI Z88.5-1981; and all other applicable code sections governing Respiratory Protection.

V. Definitions

Aerosol	A system consisting of particles, solid, or liquid, suspended in air.
Air-regulating valve	An adjustable valve used to regulate, but which cannot completely shut off, the airflow to the face piece, helmet, hood, or suit of an airline respirator.
Air-purifying respirator	A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
Air-supply device	A hand or motor-operated blower for the hose mask, or a compressor or other source of respirable air for the air-line respirator.

Assigned protection factor (APF)	The minimum anticipated protection provided by a properly functioning respirator or class of respirators to a given percentage of properly fitted and trained users.
Breathing tube	A tube through which air or oxygen flows to the face piece, mouthpiece, helmet, hood, or suit.
Canister (air-purifying)	A container with a filter, sorbent, or catalyst, or any combination thereof, which removes specific contaminants from the air drawn through it.
Canister (oxygen-generating)	A container filled with a chemical which generates oxygen by chemical reaction.
Cartridge (air-purifying)	A small canister.
Ceiling concentration	The concentration of an airborne substance that shall not be exceeded.
Confined space	An enclosure - such as a storage tank, process vessel, silo, pipeline, tube, duct, sewer, utility vault, tunnel or pit - that is large enough and so configured that an employee can bodily enter it and perform assigned work; has limited or restricted means for entry or exit; and is not designed for continuous occupancy.
contaminant	A harmful, irritating, or nuisance material that is foreign to the normal atmosphere.
Corrective lens	A lens ground to the individual wearer's corrective prescription to permit normal visual acuity.
Demand respirator	an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.
Detachable coupling	A device which permits the respirator wearer, without using hand tools, to detach the air supply line from that part of the respirator worn on the person.
dust	A solid, mechanically produced particle with sizes varying from submicroscopic to visible to macroscopic.
Emergency situation	Any occurrence such as, but not limited to , equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.
Employee exposure	Hazardous exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End-of-service-life indicator (ESLI)	A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.
Escape-only respirator	A respirator intended to be used only for emergency exit.
Exhalation valve	A device that allows exhaled air to leave a respirator and prevents outside air from entering through the valve.
Eyepiece	A gas-tight, transparent window(s) in a full face piece, helmet, hood, or suit, through which the wearer may see.
Face piece	That portion of a respirator that covers the wearer's nose and mouth in a quarter-mask (above the chin) or half-mask (under the chin) face piece or that covers the nose, mouth, and eyes in a full face piece. It is designed to make a gas-tight or particle-tight fit with the face and includes headbands, exhalation valve(s), and connections for an air-purifying device, or respirable gas source, or both.
Face shield	A device worn in front of the eyes and a portion of, or all of, the face, whose predominant function is protection of the eyes and the face.
Filter or air purifying element	A media component used in respirators to remove solid or liquid aerosols from the inspired air.
Filtering facepiece (dust mask)	A media component used in respirators to remove solid or liquid aerosols from the inspired air.
Fit factor	A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ration of the concentration of a substance in ambient air to its concentration inside the respirator when worn.
Fit test	The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also qualitative fit test QLFT and quantitative fit test QNFT)
Fog	A mist of sufficient concentration to perceptively obscure vision.
Fume	A solid condensation particle of extremely small size, generally les than one micrometer in diameter.
Gas	An aeriform fluid which is in the gaseous state at ordinary temperature and pressure.
Hazardous atmosphere	Any atmosphere, either immediately or not immediately dangerous to life or health, which is oxygen deficient or which contains a toxic or disease-producing contaminant exceeding the legally established permissible exposure limit (PEL) or, where applicable, the threshold limit value (TLV) established by the

American Conference of Governmental Industrial Hygienists (ACGIH).

Helmet	A rigid respiratory inlet covering that also provides head protection against impact and penetration.
High efficiency particulate air (HEPA) filter	A filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.
Hood	That portion of the respirator which completely covers the head, neck, and portions of the shoulders and may also cover portions of the shoulders and torso.
Immediately dangerous to life or health (IDLH)	Any atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.
Inhalation valve	A device that allows respirable air to enter a respirator and prevents exhaled air from leaving the respirator through the valve.
Interior structural firefighting	The physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures, which are involved in a fire situation beyond the incipient stage. (See CFR 1910.155.)
Loose-fitting facepiece	Respiratory inlet covering that is designed to form a partial seal with the face.
Maximum use limit of filter, cartridge, or canister	The maximum concentration of a contaminant for which an air-purifying filter, cartridge, or canister is approved for use.
Mist	A liquid condensation particle with sizes ranging from submicroscopic to visible to macroscopic.
Mouthpiece	That portion of a respirator which is held in the wearer's mouth and is connected to an air-purifying device or respirable gas source, or both. It is designed to make a gas-tight or particle-tight fit with the mouth.
Negative pressure respirator (tight fitting)	A respirator in which the air pressure inside the facepiece is negative during inhalation in relation with respect to the ambient air pressure outside the respirator.
Not immediately dangerous to life or health	Any hazardous atmosphere which may produce physical discomfort immediately, chronic poisoning after repeated exposure, or acute adverse physiological symptoms after prolonged exposure.
Odor threshold limit	The lowest concentration of a contaminant in air that can be

	detected by the olfactory sense.
Oxygen deficiency – immediately dangerous to life or health	An atmosphere which causes an oxygen partial pressure of 100 millimeters of mercury column or less in the freshly inspired air in the upper portion of the lungs which is saturated with water vapor.
Oxygen deficiency – not immediately dangerous to life or health	An atmosphere having an oxygen concentration below the minimum legal requirement (19.5% by volume at sea-level), but above that which is immediately dangerous to life or health.
Particulate matter	A suspension of fine solid or liquid particles in air, such as: dust, fog, mist, smoke, or spray. Particulate matter suspended in air is commonly known as an aerosol.
Permissible exposure limit (PEL)	The legally established time-weighted average (TWA) concentration or ceiling concentration of a contaminant that shall not be exceeded.
Physician or other licensed health care professional (PLHCP)	An individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required.
Pneumoconiosis-producing dust	Dust which, when inhaled, deposited, and retained in the lungs, may produce signs, symptoms, and findings of pulmonary disease.
Positive-pressure respirator	A respirator in which the air pressure inside the respiratory-inlet covering is positive in relation to the air pressure of the outside atmosphere during exhalation and inhalation.
Powered air-purifying respirator (PAPR)	An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.
Pressure demand respirator	A positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.
Qualitative fit test (QLFT)	A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.
Quantitative fit test (QNFT)	An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.
Protection factor	The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
Rescue respirator use	Wearing a respirator for entry into a hazardous atmosphere to

	rescue a person(s) in the hazardous atmosphere.
Resistance	Opposition to the flow of air, as through a canister, cartridge, particulate filter, orifice, valve, or hose.
Respirable	Suitable for breathing.
Respirator	A device designed to protect the wearer from the inhalation of harmful atmospheres.
Respiratory-inlet covering	That portion of a respirator that forms the protective barrier between the user's respiratory tract and an air -purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or mouthpiece with nose clamp.
Respiratory protection program	This written protection program and the work-site specific written program administered by a suitably trained administrator.
Routine respirator use	Wearing a respirator as a normal procedure when carrying out a regular and frequently repeated task.
Sanitization	The removal of dirt and the inhibiting of the action of agents that cause infection or disease.
Self-contained breathing apparatus (SCBA)	An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
Service life	The period of time that a respirator provides adequate protection to the wearer: For example, the period of time that an air-purifying device is effective for removing a harmful substance from inspired air.
Simulated workplace protection factor (SWPF)	A surrogate measure of the workplace protection provided by a respirator.
Smoke	A system which includes the products of combustion, pyrolysis, or chemical reaction of substances in the form of visible and invisible solid and liquid particles and gaseous products in the air. Smoke is usually of sufficient concentration to perceptibly obscure vision.
Sorbent	A material which is contained in a cartridge or canister and which removes toxic gases and vapors from the inhaled air.
Spray	A liquid, mechanically produced particle with sizes generally in the visible or macroscopic range.
Supplied-air respirator (SAR) or airline respirator	An atmosphere-supplying respirator for which the source of breathing air is not designated to be carried by the user.
Supplied-air suit	A suit that is impermeable to most particulate and gaseous

	contaminants and that is provided with an adequate supply of respirable air.
Time-weighted average (TWA)	The average concentration of a contaminant in air during a specific time period.
Tight-fitting facepiece	A respiratory inlet covering that forms a complete seal with the face.
User seal check	An action conducted by the respirator user to determine if the respirator is properly seated to the face.
Valve (air or oxygen)	A device which controls the pressure, direction, or rate of flow of air or oxygen.
Vapor	The gaseous state of a substance that is solid or liquid at ordinary temperature and pressure.
Welding helmet	A device designed to provide protection for the eyes and face against intense radiant energy and molten metal splatter encountered in the welding and cutting of metals.
Window indicator	A device on a cartridge or canister that visually denotes the service life of the cartridge or canister.
Workplace protection factor (WPF)	A measure of the protection provided in the workplace by a properly functioning respirator when correctly worn and used.

VI. Responsibilities

A. Department Heads

Department Heads are responsible for:

1. Establishing firm internal requirements for all personnel to fully adhere to the policies established herein;
2. Assigning suitably trained Respiratory Protection program administrators to write and direct programs with worksite-specific procedures in compliance with this policy;
3. Holding managers fully accountable for preventable exposures to contaminated atmosphere that occurs within their area to either employees, contractors, or the public. "Fully accountable" is defined as being able to: explain why the deviation occurred; proffer recommendation(s) to prevent similar recurrences; and ensure the implementation of the prevention techniques; and
4. Contacting Risk Management for any assistance needed to implement or maintain this program.

B. Managers

Managers are responsible for:

1. Establishing written respiratory protection program with work-site specific procedures and approved respiratory protection measures in their areas;
2. Enforcing compliance with this respirator protection policy; and
3. Ensuring that employees covered by this policy receive an annual fit testing, training and medical screening for use of a respirator as outlined in this policy.

C Supervisors

Supervisors are responsible for:

1. Identifying areas and tasks to be investigated for potential air contaminants;
2. Assisting the Risk Analyst or Respiratory Protection program administrator in completing the investigation of air contaminants;
3. Identifying persons who may need respiratory protection and provide medical screening;
4. Providing the examining physician with complete information to make a determination on physical ability to work using a respirator. This information shall be provided to the examining physician in the form of a request for medical clearance for respirator use. The information shall:

- a) Identify and describe the types of respirators used by the employee(s) in the course of their work;
 - b) Describe the physical demands of each employee required to use a respirator;
 - 1. Level of effort should be indicated as:
 - a. light - no work performed. Used for escape purposes only,
 - b. moderate - used less than one (1) hour per day,
 - c. heavy - used less than two (2) hours per day, or,
 - d. strenuous and sustained effort - used more than two (2) hours per day.
 - 2. The extent of effort should be indicated as:
 - a. daily (state actual number of hours),
 - b. occasionally, or,
 - c. rarely (emergency only).
 - c) State any special responsibilities of the employee using a respirator. Such as, physical demands of rescue workers, fire fighters, or security personnel.;
- 5. Assigning only those persons who are physically able to perform tasks requiring the use of respirators;
 - 6. Providing instructions to employees on the proper fitting and use of respirators;
 - 7. Ensuring that any person assigned to use a respirator is fully informed of the nature of the hazard;
 - 8. Ensuring that any person assigned to use a respirator is instructed in the proper selection, use and care of the device by a qualified trainer
 - 9. Providing and maintaining all required respiratory devices in clean, sanitary condition; and
 - 10. Arranging for respirator repair services or replacement as needed.
 - 11. Evaluate the respiratory protection program by regular inspections.

D. Employees

Employees who are required to wear respirators are responsible for:

- 1) Using the respirator issued in accordance with the manufacturer's instructions and training procedures;
- 2) Informing their supervisor of any personal health problem(s) that could be aggravated by the use of respirators;

- 3) Only use respirators that are clean, in good condition, and which contain fresh filters of the appropriate type for the anticipated hazard;
- 4) Reporting any malfunctioning respirator to their supervisor; and
- 5) Utilizing respirators that have not been altered or damaged. Refrain from disassembling or altering a respirator other than to change cartridges.

E. Risk Analyst

The Risk Analyst is responsible for:

- 1) Providing air sampling expertise for atmosphere evaluation through the use of a Safety Consultant or Industrial Hygienist;
- 2) Assisting individual departments in the selection and procurement of respirators, where appropriate;
- 3) Assisting the departments in evaluating work conditions or exposures that may require the use of respirators; and
- 4) Periodic review of this program to verify the program meets all applicable federal and state regulations.
- 5) Providing periodic training so that qualified program administrators remain up to date on respirator selection, fit testing, use, care, change-out, documentation, and any other requirements in GISO §5144.

VII. Requirements For Written Work Site Specific Procedures

A. Approved Respirators

- 1) Select respirator(s) based on the respiratory hazard(s) to which the worker is exposed according to the guidance of American National Standard Practices for Respiratory Protection (ANZI): Z88.2-1969. Consider workplace and user factors that affect respirator performance and reliability. Only respirators certified by the National Institute for Occupational Safety & Health (NIOSH) shall be used. The correct respirator and filter element shall be specified by the Department for each application.
 - a. Respirators provided for immediately dangerous to life or health (IDLH) atmospheres
 - b. A full facepiece pressure demand SCBA for a minimum service life of thirty minutes, or
 - c. A combination full facepiece pressure demand supplied-air respirator (SA) with auxiliary self-contained air supply. Respirators provided only for escape for IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used. All oxygen-deficient atmospheres shall be considered IDLH; an atmosphere-supplying respirator cannot be used unless oxygen concentrations can be maintained within 16.0 - 19.5%.
- 2) Respirators for atmospheres that are not IDLH

- a. Adequate to protect the health of the employee and ensure compliance with reasonably foreseeable emergency situations.
 - b. Appropriate for chemical state and physical form of the contaminant.
 - c. For protection against gases and vapors, the department shall provide: An atmosphere-supplying respirator; or an air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11-a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under CFR part 84; or for contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.
- 3) Respiratory Protection for M. Tuberculosis{tc \l 3 "3. Respiratory Protection for M. Tuberculosis"}
 - a. To be worn in emergency situations where occasional and/or brief exposure.
 - b. Only NIOSH approved equipment to be used.
 - c. Employees shall be instructed and trained in the need use, sanitary care, and limitations of the assigned equipment. All inspections and fit testing discussed below apply.
- 4) Change Out and Maintenance Policy
 - a. Labeling Gas Mask Canisters with name of atmospheric contaminant and the volume of contaminant in which respiratory protection can be used.
 - b. The respiratory program administrator or training specialist will calculate and record the use of respirators and canisters to determine when the life of the protection is expired and replacement is needed.
 - c. The respiratory program administrator will oversee the required inspections, maintenance, and repair of supplied air respirators.

B. Assignment

A person shall **not** be assigned to a task requiring the use of a respirator until:

- 1) a medical doctor confirms that person is physically able to perform the work while using the required equipment;
- 2) the prospective user of a respirator is advised of the nature of the contaminants and the potential exposure;
- 3) the prospective user must be instructed on the proper use and the limitations of the respirator prior to commencing work; and,
- 4) the respirator user must be fit tested to determine that an effective face seal is possible.

C. Medical Screening

Wearing a respirator imposes some physiological burden on the wearer. Most types of respirators resist inhalation and/or exhalation capabilities of the wearer. The added weight of the respirator can be significant. Any or all of these factors significantly increase the workload. If the employee's cardiovascular or pulmonary function is significantly impaired, wearing a respirator could constitute an unacceptable risk. Other physical conditions that commonly limit or prevent the use of a respirator include: diabetes, epilepsy, chemical sensitivity, facial scars, facial hair, perforated eardrum, denture wear, and contact lens wear.

Psychological conditions may also prevent an employee from using a respirator. For example, employees who experience claustrophobia or anxiety when confined in a small space, should **not** be assigned to jobs requiring the use of a respirator.

Cal/OSHA regulations require that a licensed physician determine if an employee can use a respirator and perform work safely. This determination is to be made prior to the employee beginning work requiring the use of a respirator, and at least annually thereafter, unless the examining physician states otherwise.

To fulfill this requirement, periodic medical screening will be conducted along with a "physical condition" test.

The Periodic Medical Screening shall include:

- Completion of a health history questionnaire;
- Review of the type(s) of respirator(s) used by the employee;
- Review of the relevant exposure data specific to the tasks requiring the employee to use a respirator;
- Review of the employee's "physical condition" test results;
- Review of the employee's spirometry results; and
- City physician's recommendation on the employee's medical ability to perform the task requiring the use of a respirator.

If an employee fails any of the screening criteria, then the City physician, in consultation with the employee's personal physician, shall perform clinical, biochemical, or special medical tests necessary to determine an employee's ability to work while wearing a respirator.

If, as a result of a physician's exam, an employee is found medically unable to safely use a respirator, the department should treat the employee's condition as temporarily disabling. (See Appendix 20 "Modified Work Program" for determining whether the employee's restrictions can be temporarily accommodated while the employee is in treatment for the disabling condition.) The disabled employee may claim a work injury for the medical condition resulting in being restricted from using a respirator. When a work injury claim is found to be compensable for workers' compensation benefits, the employee's illness and time off the job will be handled in

accordance with Chapter 3 of the City's Injury and Illness Prevention Program, "Investigation and Reporting of Industrial Injuries and Illnesses".

Medical Records

Medical records created in compliance with this program are confidential and will be kept on file with the City's physician. Employees have access to these records by request. Contact the City's medical director or Risk Management to obtain a copy of the requested records.

Physical Condition Test

The physical condition test component of the medical screening process requires each employee to complete a physical task while wearing the respirator. The physical task will depend on the setting and the individual's physical condition. The object of the physical test is to obtain a working heart rate that simulates the load on the heart when working with a respirator. The physical test consists of:

- 1) taking the employee's resting pulse and blood pressure;
- 2) the employee dons the respirator;
- 3) the employee walks, goes up a prescribed flight(s) of stairs, or runs until the pulse rate is between 100-120 beats per minute;
- 4) removing the respirator and taking the employee's pulse rate immediately after completion of the physical task;
- 5) the employee sits and rests for two minutes; and
- 6) the employee's recovery pulse rate is recorded. If the pulse rate is not within 10 of the original resting heart rate, the employee must continue to rest and have the recovery pulse taken after an additional minute.

Written Medical Recommendation

In every case the physician must render a written decision as to whether or not the employee is physically able to perform the assigned task that requires use of a respirator.

D. Instruction

The prospective user of a respirator must be advised of the nature of the contaminants and the potential exposure. The prospective user must be instructed by a qualified specialist on the proper use and the limitations of the respirator prior to commencing work. The training must be comprehensive, understandable, recur at least annually and when new hazards or equipment is introduced. At a minimum the training is to include:

Why the respirator is necessary and how improper fit, use, or maintenance can compromise its protective effect:

- 1) Limitations and capabilities of the respirator:

- 2) Effective use in emergency situations;
- 3) How to inspect, put on and remove, use and check the seals;
- 4) Maintenance and storage;
- 5) Recognition of medical signs and symptoms that may limit or prevent effective use; and
- 6) General requirements of the Cal/OSHA respirator standard (GISO §5144.) including the frequency of the respirator change-out policy.

E. Fitting

When a respirator is issued to an employee, the respirator must be fit tested to determine that an effective face seal is possible. With the exception of hoods and certain powered air purifying respirators, fit checks must be formed by an employee using a respirator. If "face fit" cannot produce an effective seal, the respirator shall **not** be issued, and the employee shall **not** be permitted to enter the contaminated area until properly protected.

The procedures for conducting positive and negative pressure fit checks are followed every time an employee is going to use a respirator in an atmosphere that may contain a hazardous substance.

- 1) Positive Pressure Fit Check
- 2) The positive pressure fit check must be satisfactorily passed before a respirator can be used.
- 3) Close off the exhalation valve by placing the palm of the hand over the valve. On some respirators the exhalation valve cover may have to be removed.
- 4) Breathe out gently. Air will escape through the respirator if there are face seal gaps, or through the inhalation valves if there is a malfunction of the valves or valve seat, or if the cartridges are not seated properly.
- 5) If a leak is detected, examine the respirator for possible deterioration or need of repair. Make the repairs, reposition and facepiece, readjust the straps. Repeat the check.

F. Negative Pressure Fit Check

- 1) The negative pressure fit check must be satisfactorily passed before a respirator can be used.
- 2) Close off the respirator inlet or inhalation valve, using the palm of the hand over the cartridge covering the valve.
- 3) Gently inhale to create a slight vacuum in an attempt to cause a partial inward collapse of the facepiece.
- 4) Maintain the vacuum inside the respirator for at least 10 seconds.

- 5) If a leak is detected, examine the respirator for possible deterioration or need of repair. Make the repairs, reposition the facepiece, re-tighten the straps. Repeat the check.
- 6) Certain physical characteristics such as: facial hair (beards, mustaches, or large sideburns), deep facial scars, or a perforated eardrum, prohibit obtaining a "face fit". Any person with facial hair or other physical characteristic that do not allow a full "face fit", will **not** be permitted to wear a respirator. Contact lens wearers often experience difficulty when using a full-face respirator or self-contained breathing apparatus (SCBA). Persons required to wear a full face respirator or SCBA will **not** be permitted to wear contact lenses while utilizing the respirator.

G. Qualitative Fit Test Overview

All testing shall be under the direction of the qualified respirator program administrator and in accordance with the GISO §5144 Appendix B-1. If a test fit fails, the employee should be refit or offered another style of respirator and the test repeated.

- 1) Irritant smoke: a stream from a tube is directed toward the respirator wearer, if the person being fit tested reports the irritant smoke the test is failed.
- 2) Isoamyl Acetate(IAA): the qualified test operator mixes a solution introduced into the fit testing room. If at any time during the test, the subject detects the banana-like odor of IAA, the test failed. The test subject is to quickly leave the test chamber to avoid olfactory fatigue.
- 3) Saccharin or Bitrex solution aerosol: prior to testing with the respirator the fit subject tastes the solution to see if able to detect the material. If so the test subject dons the respirator and test enclosure and breaths the aerosol produced to determine the threshold for the sweet or bitter taste. The fit test is conducted. If the subject tastes the solution, the test is failed.

H. Maintenance

The Department shall provide, repair, or replace respiratory protection devices as may be required due to wear and/or deterioration.

1. Cleaning

- a) The Department shall provide the means for cleaning all respiratory protective devices.
- b) Routinely used respiratory protection devices shall be regularly cleaned, inspected, and sanitized by a qualified individual.
- c) Respiratory protection devices shall **not** be passed from one person to another until it has been cleaned and sanitized.
- d) Air-purifying respirators shall be cleaned, disinfected and inspected before being used. Any part that is worn or deteriorated shall be replaced.
- e) Self-contained breathing apparatus (SCBA) shall be cleaned and disinfected after each use.

2. Repair

Respirators should only be repaired or serviced by qualified personnel trained in said procedures. All maintenance shall be in accordance with the manufacturer's specifications.

3. Storage

All respirators, whether for daily or emergency use, shall be stored in protective containers, in a sanitary location, and shall be loosely packed such that the function of the valve and face seal will not be impaired when put into use.

4. Inspection Records

Self-contained breathing apparatus (SCBA) must be inspected regularly. Inspection records must be kept by the Supervisor. Each SCBA must have a tag affixed either to the unit, or to the storage container indicating the date and results of the last inspection.

5. Change out policy

VIII. Decision Tree for Issuance of Respirator

The following sequence must be followed prior to issuing respirators:

- 1) Respiratory Protection Program Administrator or Supervisor evaluates the atmospheric contaminants to determine:
 - a. degree of exposure;
 - b. need of respirator in this specific work environment;
 - c. which protective device will be most effective according to the appropriate ANSI standard.
- 2) Supervisor verifies the employee is qualified to wear a respirator. Qualification to wear a respirator includes:
 - a. medical clearance for working while wearing a respirator;
 - b. training in the use of the specific respirator;
 - c. face fit testing of the respirator in use.
- 3) Respirators issued to qualified personnel working in contaminated area.
- 4) Qualified personnel allowed to enter contaminated area utilizing respirators.

IX. Voluntary Use of Respirators When Not Required For Designated Hazards

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, employees may request to wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If the supervisor provides respirators for employee voluntary use, or if the employee provides his or her own respirator, the supervisor needs to make sure that the respirator itself does not present a hazard to the user.

The supervisor must make certain the employee voluntarily using a respirator for hazards below the allowable exposure level:

- 1) Reads and heeds all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- 2) Chooses respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell the supervisor and the employee what the respirator is designed for and how much it will protect you.
- 3) Does not wear the respirator into atmospheres containing contaminants for which the respirator is not designated to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small solid particles of fumes or smoke.
- 4) Keep track of each employee assigned a respirator so that employees do not mistakenly use someone else's respirator.

APPENDIX 20

MODIFIED WORK PROGRAM

I. Scope

This program is designed to return an employee to a productive level of employment while in a temporary modified work assignment following an injury or illness. This Modified Work Program should not be confused with Americans with Disabilities Act (ADA) or Fair Employment and Housing Act (FEHA) accommodations. Human Resources administers a separate policy that addresses permanent modified work assignments.

II. Purpose

The City of Santa Barbara recognizes the need for a modified work program for an employee who is temporarily unable to perform his/her full range of duties due to an industrial or non-industrial injury or illness. The City may provide a temporary modified work position to an employee who is unable to perform his/her full range of duties as a result of an industrial or non-industrial injury or illness. The employee must provide a medical release to return to work with specified temporary work restrictions to qualify for a temporary modified work position.

III. Responsibilities

A. Department Head

A Department Head must:

1. Implement the Modified Work Program in the Department;
2. Determine when suitable modified work exists;
3. Determine what modified work is appropriate; and
4. Review any modified work assignment that extends beyond ninety (90) days as outlined below.

B. Manager

A Manager must:

1. Evaluate the appropriateness of modified work assignments;
2. Obtain clarification of an employee's medical status and/or restrictions, when necessary;
3. Complete the modified work assignment contract; and
4. Review any modified work assignment that extends beyond ninety (90) days as outlined below.

C. Supervisor

A Supervisor must:

1. Designate the modified work assignments by adhering to General Requirements outlined below; and
2. Review any modified work assignment that extends beyond ninety (90) days as outlined below.

D. Employee

An Employee must:

1. Notify his/her supervisor of any work restriction imposed by the treating physician before performing any job duty;
2. Work within the work restrictions outlined by the treating physician;
3. Complete the tasks and duties outlined in the Modified Work Contract; and
4. Notify his/her supervisor of any changes to the work restrictions issued by the treating physician.

E. Risk Management The

Risk Analyst must:

1. Assure compliance with pertinent laws;
2. Conform to the best risk management and medical practices; and
3. Refer any report that outlines permanent work restrictions to Human Resources for compliance with ADA and DFEH requirements

IV. General Requirements

A. Assignment

An Employee may be assigned to modified work duty when temporarily unable to perform his or her full range of duties, provided the following requirements are met:

1. The assignment must be medically suitable. The employee must be capable of performing the modified work without violating a medical restriction; and
2. The assignment must fulfill a necessary job function or functions; and
3. The assignment must be temporary.

B. Review Standards

The following factors shall be considered when determining the appropriateness of a modified work assignment:

1. Needs of the Department,
2. Anticipated length of the time the modified work status could continue,
3. Job classification of the modified work assignment,
4. Experience and/or training of the employee,
5. Career goals and preference of the employee,
6. Performance of the employee.

C. Modified Work Assignment Contract

The Manager shall draft a modified work assignment contract before an employee begins a modified work assignment. The modified work contract outlines the duties and responsibilities for the employee, supervisor, and manager during the modified work assignment. A Manager can use the contract template in Exhibit A below to create a modified work assignment contract. The modified work contract shall contain each of the following items:

1. Describe the current work restrictions in place for the employee;
2. List the specific duties and responsibilities the employee shall perform in the modified work assignment;
3. List the specific activities the employee shall not perform while working in a modified work position;
4. Date that the employee shall begin the modified work assignment;
5. Date that the modified work assignment shall end; and
6. Signature of the employee, supervisor and manager.

D. Ninety (90) Day Review

Department Management shall review all modified work assignments that exceed ninety (90) days in duration. This review shall determine the appropriateness of the employee continuing in the modified work assignment. Department Management shall utilize the same review standards outlined above.

V. Refused Modified Work

An employee may refuse to accept a modified work assignment. However, refusing a modified work assignment that meets the prescribed medical limitations may end the employee's eligibility to receive industrial injury leave benefits or Workers' Compensation disability payments according to California law.

An employee should attempt to perform modified work duties prior to declining the assignment. After attempting to perform the modified work duties, the employee may find that s/he cannot physically perform the modified work duties. The employee must immediately advise both his/her supervisor and the treating physician of any difficulty performing a specific task or tasks. The physician will determine if and when the work restrictions need modification.

The City shall adhere to written medical reports when making a determination of an employee's ability to return to either full duty or modified work assignment. Independent medical examinations may be obtained to verify or refute questionable medical opinions. Risk Management will review any case where the attending physician does not approve temporary modified work; or, the information provided by the physician requires clarification.

VI. Disputes

The employee may dispute a medical opinion that indicates s/he can return to work on full duty status or modified work status.

A. Industrial Injury or Illness

The employee may file an appeal with the Workers' Compensation Appeals Board (WCAB) to dispute a medical opinion that indicates s/he can return to work on full duty status or modified work status that involves an industrial injury or illness. California workers' compensation laws shall govern the procedures for disputing return to work status involving an industrial injury or illness.

B. Non-Industrial Injury or Illness

The employee shall follow the appropriate procedures for disputes outlined in the respective Memoranda of Understanding or grievance procedure available to the employee for any appeal involving a non-industrial injury or illness. The employee may choose to submit a second opinion by his or her own physician to support the appeal. The employee must pay for any costs or fees to obtain the second opinion for the appeal.

The employee shall remain off work until a resolution to the dispute is reached. The employee may use any available leave balances while awaiting the resolution of the dispute. Available leave balances may include sick leave, vacation, compensatory leave, personal leave, family medical leave, and leave without pay, to name a few.

VII. Termination

Modified work assignments under this program shall terminate when one or more of the following occur:

- A. Physician releases the employee to return to full duty;
- B. Employee refuses to accept the modified work assignment;
- C. The department determines that the modified work assignment no longer meets the goals of the department;
- D. Physician imposes permanent work restrictions for the employee.

VIII. Permanent Work Restrictions

Human Resources administers a separate policy that addresses permanent modified work assignments. Risk Management shall refer any employee with a permanent work restriction to Human Resources.

In the case of an employee who may otherwise be entitled to receive supplemental job displacement benefits under the workers' compensation laws, and to the extent consistent with the City's workers' compensation policies and procedures, a department head may offer an employee a modified work assignment under Labor Code § 4658.6 which would last 12 months.



City of Santa Barbara

Temporary Modified Work Assignment Contract

Employee:	Supervisor:
Job Classification:	Division Manager:

Dr. _____ reported on _____ that you are temporarily, partially disabled as the result of an injury or illness that you sustained on _____. Dr. _____ indicates that you can return to work with the following temporary work restrictions:

- keep dressing clean & dry
- no exposure to solvents/chemicals
- no driving/operating heavy equipment
- no operating power tools
- no lifting
- may lift up to _____ pounds
- use of hand/arm/leg/foot limited to _____ hours/shift
- climbing/bending/stooping/kneeling limited to _____ hours/shift
- sit _____ hours/shift
- stand _____ hours/shift
- walk _____ hours/shift
- other

The Santa Barbara _____ Department will accommodate these temporary work restrictions by providing a modified work assignment for you. The modified work assignment consists of the following work duties:

Your modified work assignment is scheduled to begin on _____ and end on _____. Santa Barbara _____ Department will review this modified work assignment with you prior to _____ or upon receipt of new medical information.

Remember, it is your responsibility to perform only duties that are consistent with the work restrictions outlined by Dr. _____ during the period described in this agreement.

Information about the City's Modified Work Program is contained in Appendix 20 of the City's Injury & Illness Prevention Program Manual (IIPP).

http://moss/Departments/Finance/Risk_Management/Workers_Compensation/IIPP_Manual.pdf.

You are encouraged to review, and become familiar with, the information contained in the IIPP.

Employee Signature/Date Supervisor Signature/Date Manager Signature/Date

cc: Risk Management, Human Resources

APPENDIX 21:
CONFINED SPACE PROGRAM

I. Scope

This section establishes requirements, responsibilities, and guidelines necessary for all employees that work in or around confined spaces; for example, manholes, sewer mains, vaults, crawl spaces, drop ceilings, and treatment tanks, to name a few.

This confined space policy and procedure shall be used in conjunction with other safety policies and practices, as needed. Other safety policies that may be integrated include but are not limited to : respirator protection, lockout/tagout, working alone, protective footwear, protective clothing, and hazard communication. Refer to the pertinent chapters in the preceding pages of this manual for more information on these related safety programs.

II. Purpose

The purpose of this section is to:

- 1) Establish a comprehensive framework for performing tasks in a confined space; and
- 2) Bring the City into compliance with federal and state regulations and mandates that require a written Confined Space Program for use in or around confined spaces, including Title 8, *California Code of Regulations*, §§ 5156 -5159, and 29 CFR §1910.146.

III. General

The City shall provide a safe work place for its employees. Confined spaces present a unique challenge because they may contain one or more hazards. These hazards include atmospheric contaminants such as harmful dusts, fogs, fumes, gases, mists, smokes, sprays or vapors, and physical hazards such as sloping or converging walls or floors, and/or small or restricted work areas.

Control of hazards in confined spaces shall be accomplished by accepted engineering controls (as far as practicable), such as general and local ventilation or enclosure. When engineering controls are not feasible, or during the period that the engineering controls are being instituted, appropriate precautions shall be provided to employees working in the confined space. These precautions shall include the following:

- 1) Evaluation of the work place to determine if any work areas are permit-required confined spaces, as defined in Section V. below.
- 2) If the work place contains permit-required confined spaces, post "Warning" or "Danger" signs to inform employees of the:
 - a. Existence of permit-required spaces;

- b. Location of permit-required spaces; and,
 - c. Danger posed by the permit-required spaces.
- 3) If employees are not required to enter permit-required spaces, the department or division shall implement effective measures to prevent its employees from entering permit spaces.
 - 4) If employees are required to enter permit spaces, the City shall develop and implement a written permit space program to comply with Cal/OSHA regulations.

IV. Regulations

Federal and state regulatory agency mandates and rules include those promulgated by Federal Occupational Safety and Health Administration (FED/OSHA), California Occupational Safety and Health Administration (Cal/OSHA), National Institute of Safety and Health (NIOSH), and the American National Standards Institute (ANSI).

Federal and state regulatory agency mandates and rules governing this program include: California Occupational Safety and Health Administration (Cal/OSHA) -Title 8, California Code of Regulations, Article 108, § 5156 through § 5159; 29 CFR §1910.146, American National Standards Institute (ANSI) - ANSI Z117.1-1977; and all other applicable code sections governing confined space work.

V. Definitions

acceptable entry conditions	Conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can enter safely into, and work within the space.
attendant	An individual stationed outside one or more permit-required spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the City's permit space program.
authorized entrant	An employee authorized by the City to enter a permit space.
blanking or blinding	The absolute closure of a pipe, line, or duct by the fastening of a solid plate that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.
confined space	An area large enough and so configured that an employee can bodily enter it and perform assigned work; has limited or restricted means of entry or exit; is not designed for continuous occupancy.
double block and bleed	The closure of a line, duct, or pipe by closing and locking or tagging a drain or vent valve in the line between two closed valves.
emergency	Any occurrence or event internal or external to the permit space that could endanger entrants.

engulfment	The surrounding and effective capture of a person by a liquid, or finely divided (able to flow) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.
entry	The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.
entry permit (permit)	The printed document provided by the City to allow and control entry into a permit space. This document shall contain all the information outlined below in section VII., A., 3.
entry supervisor	The person responsible for: determining if acceptable entry conditions are present at a permit space where entry is planned; for authorizing entry and overseeing entry operations; and for terminating entry as required by this section.
Hazardous atmosphere	<p>An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue or escape unaided from a permit space, injury, or acute illness from one or more of the following causes:</p> <ul style="list-style-type: none"> • Flammable gas, vapor, or mist in excess of 10% of its lower flammable limit (LFL); • Airborne combustible dust at a concentration that meets or exceeds its LFL (This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet or less); • Atmospheric oxygen concentration below 19.5% or above 23.5%; • Atmospheric concentration of any substance for which a permissible exposure limit is published in the Cal/OSHA General Industry Safety Orders §5155 for airborne contaminants and which could result in employee exposure in excess of its dose or permissible exposure limit; • Any other atmospheric condition that is immediately dangerous to life or health.
hot work permit	The City's written authorization to perform operations (such as riveting, welding, or cutting) capable of providing a source of ignition.
immediately dangerous to life or health (IDLH)	Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would

	interfere with an individual's ability to escape unaided from a permit space.
inerting	The displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is non-combustible.
isolation	The process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; removing sections or effecting the misalignment of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.
line breaking	The internal opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material an inert gas, or a fluid at volume, pressure or temperature capable of causing injury.
non-permit confined space	A confined space that does not contain or, with respect to atmospheric hazards, does not have the potential to contain any hazard capable of causing death or serious physical harm.
oxygen deficient atmosphere	An atmosphere containing less than 19.5% oxygen by volume.
oxygen enriched atmosphere	An atmosphere containing more than 23.5% oxygen by volume.
permit-required confined space (permit space)	<p>A confined space that has one or more of the following characteristics:</p> <ul style="list-style-type: none"> • Contains or has potential to contain a hazardous atmosphere; • Contains a material that has the potential for engulfing an entrant; • Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or • Contains any other recognized serious safety or health hazard.
permit-required confined space program	The City's overall program for controlling, and protecting employees from permit space hazards, and for regulating employee entrance into permit spaces.
permit system	The City's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

prohibited condition	Any condition in a permit space that is not allowed by the permit during the period when entry is authorized.
rescue service	The personnel designated to rescue employees from permit spaces.
retrieval system	The equipment (including retrieval line, harness, wristlets, anchor, and lifting device) used for non-entry rescue of persons from a permit space.
testing	The process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests performed in the permit space.

VI. Responsibilities

A. Department Heads

Department Heads are responsible for:

- 1) Establishing firm, internal requirements for all personnel to fully adhere to the policies established herein;
- 2) Frequently checking on compliance with this policy;
- 3) Holding Managers fully accountable for any deviation from this policy and procedure. "Fully accountable" is defined as being able to: explain why the deviation occurred; proffer recommendation(s) to prevent similar recurrences; and ensure the implementation of the prevention techniques;
- 4) Holding Managers fully accountable for preventable confined space injuries to either employees, contractors, or the public that occur within their area;
- 5) Requiring contractors that provide services to the City in or around confined spaces adhere to the policies established herein; and
- 6) Contacting Risk Management for any assistance needed to implement or maintain this program.

B. Managers

Managers are responsible for:

- 1) Ensuring that all employees within their division understand and adhere to this policy;
- 2) Enforcing compliance with this confined space program within their Division. This includes both City employees and any contractors performing work for the City;
- 3) Establishing approved confined space protection measures in their areas;
- 4) Ensuring that employees covered by this policy receive annual training for work in or around a confined space as outlined in section VII. below; and
- 5) Ensuring that contractors covered by this policy have trained their employees on performing work in or around a confined space as outlined in section VII. below. Employee training must have taken place within twelve (12) months of commencement of contract work.

C. Supervisors

Supervisors are responsible for:

- 1) Making the work place as safe as possible for both employees and the public. This shall be accomplished by establishing and following practices which minimize accident potential;
- 2) Evaluating each operation in terms of potential exposure to confined spaces as defined in this policy;
- 3) Educating each employee regarding this policy;
- 4) Providing employees with all necessary equipment needed for work in or around confined spaces;
- 5) Identifying work areas as potential confined spaces, and determining if each confined space is a permit-required or non-permit-required as defined above.
- 6) Identifying any required safety equipment for work in the confined space;
- 7) Providing and maintaining all required personal protective equipment in clean, sanitary condition;
- 8) Assigning an entry supervisor to coordinate work in each permit-required confined space;
- 9) Ensuring that any person assigned to work in a confined space is fully informed of the nature of the potential hazard(s) encountered;
- 10) Ensuring that any person assigned to work in a confined space has received proper training in confined space operations from a qualified trainer. The training shall be performed at the following intervals:
 - a) prior to beginning work in or around a confined space, and,
 - b) annually thereafter.
- 11) Arranging for confined space equipment repair services as needed.

D. Entry Supervisor

The Entry Supervisor is responsible for:

- 1) Determining if acceptable entry conditions are present at a permit space where entry is planned;
- 2) Completing and posting of entry permit at work site prior to beginning work in permit-required confined space;
- 3) Authorizing and overseeing entry operations; and

- 4) Terminating entry as outlined below.

E. Employees

Employees that work in confined spaces are responsible for:

- 1) Following the directions of the entry supervisor;
- 2) Using all confined space equipment issued in accordance with the manufacturer's instructions and training procedures;
- 3) Reporting any malfunctioning confined space equipment to their supervisor;
- 4) Utilizing only undamaged and unaltered confined space equipment. Refraining from disassembling, or altering equipment other than to change respirator cartridges; and
- 5) Informing their supervisor of any personal health problem that could be aggravated by work in a confined space.

F. Risk Analyst

The Risk Analyst is responsible for:

- 1) Providing guidance in identifying confined spaces through the use of a Safety Consultant or Industrial Hygienist;
- 2) Assisting individual departments in the selection and procurement of confined space safety equipment, where appropriate;
- 3) Assisting the departments in evaluating work conditions or exposures that may require the use of specialized safety equipment; and
- 4) Periodic review of this program to verify the program meets all applicable federal and state regulations.

VII. Requirements

A. Identification

Departments shall survey their work sites to determine the existence of any confined spaces. Refer to the definitions in Section V. above for identifying confined spaces. Identify which work areas are permit-required confined spaces and which are non-permit-required confined spaces.

If the work place contains permit-required confined spaces, the department/division shall inform exposed employees by posting danger signs which note:

- 1) The existence and location of the permit-required confined space;
- 2) The danger posed by the permit-required confined space.

B. Training

Departments shall provide annual training for employees that perform work in or around confined spaces. The training shall be performed by qualified personnel, and cover the topics of: identification of confined spaces, testing, confined space permits, hazards, entry procedures, surveillance, personal protective equipment, and rescue techniques.

Training shall be performed at the following intervals:

- 1) Prior to beginning work in or around a confined space, and,
- 2) Annually thereafter.

All contractors performing work in or around confined spaces on behalf of the City must train their employees in accordance with the criteria listed above. Employee training must have taken place within twelve (12) months of commencement of contract work.

C. Procedures

The following procedures are to be utilized for work in confined spaces of similar configuration. These examples may not include all confined spaces encountered throughout the City. Any work in a confined space that does not fit the examples outlined below should begin only after the department develops appropriate written procedures to meet Cal/OSHA requirements.

WORK PLACE

Sewer, storm drain, wet wells, dry wells, enclosed lift stations, crawl spaces, trenching greater than five (5) feet, electrical vaults, water meter vaults, water treatment tanks, waste water treatment tanks, manholes

1. Potential Hazards

Employees could be exposed to the following:

- a. Engulfment
- b. Presence of Toxic Gases
 1. Equal to or greater than 10 ppm hydrogen sulfide as measured at an 8 hour time weighted average.
 2. If the presence of other toxic contaminants is suspected, specific monitoring programs will be developed.
- c. Presence of Explosive Flammable Gases Equal to or greater than 10% of the lower flammable limit (LFL).
- d. Oxygen Deficiency

1. A concentration of oxygen in the atmosphere equal to or less than 19.5% by volume.
 2. Entry without Permit/Attendant
2. Certification
- a. Confined spaces may be entered without the need for a written permit or attendant provided that the space can be maintained in a safe condition for entry by mechanical ventilation alone as provided in GISO §5157(c)(5).
 1. All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise.
 2. Any employee required or permitted to pre-check or enter an enclosed/confined space shall have successfully completed, at a minimum, the training required by Section VII. above.
 3. A written copy of operating and rescue procedures shall be at the work site for the duration of the job.
 4. The confined space pre-entry check list must be completed by the lead worker before entry into a confined space. This list verifies completion of items listed below. This checklist shall be kept at the job site for the duration of the job. If circumstances dictate an interruption in the work, the permit space must be re-evaluated and a new checklist must be completed.
 - b. Controls of Atmospheric and Engulfment Hazards
 1. Pumps and Lines
 - a. All pumps and lines which may reasonably cause contaminants to flow into the space shall be disconnected, blinded and locked out, or effectively isolated by other means to prevent development of dangerous air contaminants or engulfment.

Not all laterals to sewers or storm drains require blocking. However, where experience or knowledge of industrial use indicates there is a reasonable potential for contamination of air or engulfment into an occupied sewer, then all affected laterals shall be blocked.
 - b. If blocking and/or isolation requires entry into the confined space, the provisions for entry into a permit-required confined space must be implemented.
 2. Surveillance
 - a. The surrounding area shall be surveyed to avoid hazards such as drifting vapors from tanks, piping, or sewers.
 3. Testing

- a. The atmosphere within the space will be tested to determine whether dangerous air contamination and/or oxygen deficiency exists. Detector tubes, alarm-only type gas monitors, and explosion meters are examples of equipment that may be used to test permit space atmospheres.
- b. Testing shall be performed by the lead worker who has successfully completed the gas detector training for the monitors utilized.
- c. The minimum parameters to be monitored are:
 - oxygen deficiency;
 - LFL; and,
 - hydrogen sulfide concentration.
- d. A written record of the pre-entry test results shall be made and kept at the work site for the duration of the job.
- e. The supervisor shall certify in writing, based on the pre-entry testing, that all hazards have been eliminated.
- f. Affected employees shall be able to review all testing results.
- g. The most hazardous conditions shall govern when work is being performed in two adjoining, or connected confined spaces.

4. Entry Procedures

If there are no non-atmospheric hazards present and if the pre-entry tests show there is no dangerous air contamination and/or oxygen deficiency within the space and there is no reason to believe that any is likely to develop, entry into and work within may proceed. Continuous testing of the atmosphere in the immediate vicinity of the workers within the space shall be accomplished. The workers will immediately leave the permit space when any of the gas monitor alarm set points are reached as defined. Workers will not return to the area until an ENTRY SUPERVISOR who has completed the gas detector training has used a direct reading gas detector to evaluate the situation and has determined that it is safe to enter.

5. Rescue

Arrangements for rescue services are not required where there is no attendant. See the rescue portion of section VII. A. 3. a. (5) below, for instructions regarding rescue planning where an entry permit is required.

3. Entry Permit Required

All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. Any employee required or permitted to pre-check or enter a permit-required confined space shall have successfully completed, at a minimum, the training as required by the following sections of these procedures. A written copy of

operating and rescue procedures as required by these standards shall be at the work site for the duration of the job. The Confined Space Entry Permit must be completed before approval can be given to enter a permit-required confined space. This permit verifies completion of items listed below. This permit shall be kept at the job site for the duration of the job. If circumstances cause an interruption in the work or a change in the alarm conditions for which entry was approved, a new Confined Space Entry Permit must be completed.

a. Control of Atmospheric and Engulfment Hazards

1. Surveillance

The surrounding area shall be surveyed to avoid hazards such as drifting vapors from tanks, piping or sewers.

2. Testing

The confined space atmosphere shall be tested to determine whether dangerous air contamination and/or oxygen deficiency exists. A direct reading gas monitor shall be used. Testing shall be performed by the ENTRY SUPERVISOR who has successfully completed the gas detector training for the monitor he/she will use.

The minimum parameters to be monitored are:

- oxygen deficiency;
- LFL; and,
- hydrogen sulfide concentration.

A written record of the pre-entry test results shall be made and kept at the work site for the duration of the job. Affected employees shall be able to review the testing results. The most hazardous conditions shall govern when work is being performed in two adjoining, connected spaces.

3. Space Ventilation

Mechanical ventilation systems, where applicable, shall be set at 100% outside air. Where possible, open additional manholes to increase air circulation. Use portable blowers to augment natural circulation, if needed. After a suitable ventilating period, repeat the testing. Entry may not begin until the testing has demonstrated that the hazardous atmosphere has been eliminated.

4. Entry Procedures

The procedures which follow shall be observed if any of the following conditions exist:

Testing demonstrates the existence of dangerous or deficient conditions and additional ventilation cannot reduce concentrations to safe levels;

- The atmosphere tests as safe, but, unsafe conditions can reasonably be expected to develop;

- It is not feasible to provide for ready exit from spaces equipped with automatic fire suppression systems and it is not practical or safe to deactivate such systems; or,
- An emergency exists and it is not feasible to wait for pre-entry procedures to take effect.

All personnel working in or around a permit-required confined space must be trained in safe work practices.

A self-contained breathing apparatus (SCBA) shall be worn by any person entering the space. At least one worker shall stand by the outside of the space ready to give assistance in case of emergency. The standby worker shall have a SCBA available for immediate use. There shall be at least one additional worker within sight or call of the standby worker. Continuous powered communication shall be maintained between the worker within the confined space and standby personnel.

If at any time there is any questionable action or non-movement by the worker inside, a verbal check will be made. If there is no response, the worker will be moved immediately. Exception: If the worker is disabled due to falling or impact, s/he shall not be removed from the confined space unless there is immediate danger to his/her life. Local fire department rescue personnel shall be notified immediately by calling 911.

The standby worker may only enter the confined space if all of the following three (3) steps are met:

In case of an emergency,

- Wearing self-contained breathing apparatus, and,
- Only after being relieved by another worker.

A safety belt or harness with attached lifeline shall be used by all workers entering the space with the free end of the line secured outside the entry opening. The standby worker shall attempt to remove a disabled worker via his/her lifeline before entering the space.

When practical, these spaces shall be entered through side openings--those within 3.5 feet (1.07m) of the bottom. When entry must be through the top opening, the safety belt shall be of the harness type that suspends a person upright. A hoisting device or similar apparatus shall be available for lifting workers out of the space. In any situation where their use may endanger the worker, use of a hoisting device or safety belt and attached lifeline may be discontinued.

When dangerous air contamination is attributable to flammable and/or explosive substances, lighting and electrical equipment shall be Class 1, Division 1 rated per National Electrical Code and no ignition sources shall be introduced into the area.

Continuous gas monitoring shall be performed during all confined space operations. If alarm conditions change adversely, entry personnel shall exit the confined space and a new confined space permit issued.

5. Rescue

Call the fire department services for rescue by dialing 911. Where immediate hazards to injured personnel are present, workers at the site shall implement emergency procedures to fit the situation.

WORK PLACE

Dry bulk tanks, boats (fire fighting or rescue from below deck areas), pond maintenance, and similar tanks during maintenance or service.

1. Sources of hazards

In addition to the mechanical hazards arising from the risks that an entrant would be injured due to contact with components of the tank or the tools being used, there is also the risk that a worker could be injured by breathing fumes from welding materials or mists or vapors from materials used to coat the tank interior. In addition, many of these vapors and mists are flammable, so the failure to properly ventilate a tank could lead to a fire or explosion.

2. Control of Hazards

a. Welding

Local exhaust ventilation shall be used to remove welding fumes once the tank or carrier is completed to the point that workers may enter and exit only through a manhole. (Follow the requirements of California Code of Regulations, Title 8, welding standards at all times.) Welding gas tanks may never be brought into a tank or carrier that is a permit entry confined space.

b. Application of interior coatings/linings

Atmospheric hazards shall be controlled by forced air ventilation sufficient to keep the atmospheric concentration of flammable materials below 10% of the lower flammable limit (LFL) (or lower explosive limit (LEL), whichever term is used locally). The appropriate respirators are provided and shall be used in addition to providing forced ventilation if the forced ventilation does not maintain acceptable respiratory conditions.

3. Permits

Because of the repetitive nature of the entries in these operations, an "Area Entry Permit" will be issued for a 1-month period to cover those production areas where tanks are fabricated to the point that entry and exit are made using manholes.

a. Authorization

Only the area supervisor may authorize an employee to enter a tank within the permit area. The area supervisor must determine that conditions in the tank trailer, dry bulk trailer or truck, etc. meet permit requirements before authorizing entry.

b. Attendant

The area supervisor shall designate an employee to maintain communication by employer specified means with employees working in tanks to ensure their safety. The attendant may not enter any permit entry confined space to rescue an entrant or for any other reason, unless authorized by the rescue procedure, and even then, only after calling the rescue team and being relieved by an attendant or another worker.

c. Communications and Observations

Communications between attendant and entrant(s) shall be maintained throughout entry. Methods of communication that may be specified by the permit include voice, voice powered radio, tapping or rapping codes on tank walls, signaling tugs on a rope, and the attendant's observation that work activities such as chipping, grinding, welding, spraying, etc., which require deliberate operator control continue normally. These activities often generate so much noise that the necessary hearing protection makes communication by voice difficult.

4. Rescue Procedures

Acceptable rescue procedures include entry by a team of employee-rescuers, use of public emergency services, and procedures for breaching the tank. The area permit specifies which procedures are available, but the area supervisor makes the final decision based on circumstances. (Certain injuries may make it necessary to breach the tank to remove a person rather than risk additional injury by removal through an existing manhole. However, the supervisor must ensure that no breaching procedure used for rescue would violate terms of the entry permit. For instance, if the tank must be breached by cutting with a torch, the tank surfaces to be cut must be free of volatile or combustible coatings within 4 inches (10.16 cm) of the cutting line and the atmosphere within the tank must be below the LFL.

The retrieval lines and harnesses generally required under this standard are usually impractical for use in tanks because the internal configuration of the tanks and their interior baffles and other structures would prevent rescuers from hauling out injured entrants. However, unless the rescue procedure calls for breaching the tank for rescue, the rescue team shall be trained in the use of retrieval lines and harnesses for removing injured employees through manholes.

C. Repair or Service of "Used" Tanks and Bulk Trailers

1. Sources of Hazards

In addition to facing the potential hazards encountered in fabrication or manufacturing, tanks or trailers which have been in service may contain residues of

dangerous materials, whether left over from the transportation of hazardous cargoes or generated by chemical or bacterial action on residues of non-hazardous cargoes.

2. Control of Atmospheric Hazards

A "used" tank shall be brought into areas where tank entry is authorized only after the tank has been emptied, cleansed (without employee entry) of any residues, and purged of any potential atmospheric hazards.

In addition to tank cleaning for control atmospheric hazards, coating and surface materials shall be removed 4 inches (10.16 cm) or more from any surface area where welding or other torch work will be done. Furthermore, care shall also be taken that the atmosphere within the tank remains well below the LFL. (Follow the welding requirements standards of California Code of Regulations, Title 8, at all times.)

3. Permits

An entry permit valid for up to 1 year shall be issued prior to authorization of entry into used tank trailers, dry bulk trailers or trucks. In addition to the pre-entry cleaning requirement, this permit shall require the institution of employee safeguards specified for new tank fabrication or construction permit areas.

Only the area supervisor may authorize an employee to enter a tank trailer, dry bulk trailers or trucks within the permit area. The area supervisor must determine that the entry permit requirements have been met before authorizing entry.

VIII. Deviations

Deviation from the requirements of this standard are not permitted, except where local regulations are more stringent.

APPENDIX 22:

INFECTIOUS WASTE DISPOSAL PROGRAM

I. Scope

To establish awareness of procedures to protect the safety of City employees coming into contact with infectious waste in the performance of their work.

II. Purpose

To prescribe procedures for proper handling, storage and disposal of infectious waste, thereby meeting the minimal standards prescribed by the Infection Control Plan.

III. Definitions

container	Refers to a double disposable RED plastic bag that is impervious to moisture and has sufficient strength to preclude ripping, tearing, or bursting under normal conditions of usage and handling.
fomites	Any inanimate objects other than food which may, when contaminated with infectious materials, harbor or transmit pathogenic organisms.
handling	The transporting or transferring from one place to another, loading, unloading, or packaging of infectious waste.
hauler	A person who transports infectious waste on a public road, railway, by air, or on water to an infectious waste treatment facility. None of the City of Santa Barbara personnel are licensed infectious waste haulers.
infectious waste	Infectious waste includes, but is not limited to, blood soiled clothing, needles or sharps, and discarded equipment, instruments, or utensils.
on-site infectious waste facility	The City of Santa Barbara does not have any facility which handles, stores and treats infectious waste received from a generator. All medical waste from an emergency medical response is packaged to go to the medical facility where the patient is next treated.
producers/generator	Any person who generates infectious waste for either on-site or off-site treatment. The only City of Santa Barbara personnel who do generate medical waste are the Fire Emergency Medical Technicians.
Treatment	A technique or method designed to render infectious waste

noninfectious.

Sharps

Shall include but are not limited to, hypodermic needles, syringes, blades, and broken glass. Sharps also include any devices, instruments, or other objects which have acute rigid corners, edges or protuberances.

IV. Storage and Containment Requirements

The California Administrative Code, Chapter 30, Article 13, Section 66840, establishes storage and containment requirements for infectious waste. Any found medical waste on City premises should not be stored in any City facility. Contact emergency responders by calling 9-1-1 for proper identification and handling of found waste. Do not handle the waste without personal protective equipment, i.e. rubber gloves for wet products and leather gloves for sharps. Until the emergency responders arrive, keep the waste segregated from other non-infectious waste and protected from the weather, animals and people.

V. On Site Treatment and Disposal

1) Treatment

On-site treatment is **prohibited**. Spilled blood and bodily products can be disinfected and sterilized in accordance with the Bloodborne Pathogens Training. Disinfected liquids can be legally introduced into the sewer system.

2) Disposal of Infectious Waste

- a. The City will dispose of Infectious Waste in accordance with the guidelines set forth. Infectious waste will be placed in an appropriate container, as defined above. Containers should then be transported with the patient treated in the medical emergency.
- b. Infectious waste may be discharged to the sewer if the liquid or semi-liquid has been rendered non-infectious prior to discharge. This method must be approved by the Department of Health.
- c. Infectious waste may be disposed of at a Class I or Class II landfill if rendered non-infectious and does not contain recognizable anatomical remains or human fetal remains. Waste that is identifiable as human anatomical remains must be transported with the patient. If found on City premises, call 9-1-1 for proper handling.

VI. Transfer To Off Site Treatment, Storage, and Disposal Facilities

The City of Santa Barbara does not have an infectious waste pick-up service. Any generated waste is transported with patients. Any found waste is identified by the emergency responders for the generator to transport and of which to properly dispose.

Small quantities of infectious waste shall be transported only in leak proof, fully enclosed containers or vehicle compartment by emergency responders.

Persons manually loading or unloading infectious waste must wear adequate protective clothing, including eye protection and gloves.

Transport vehicle contaminated by spills or leakage must be cleaned and decontaminated by thoroughly washing the area with a germicide as described in the Bloodborne Pathogens Training guide.

VII. Deviations

Deviations from the requirements of this standard are not permitted, however household waste is not regulated as infectious waste. Special precautions must be taken in handling potentially infectious materials which are properly defined as household waste.

A single sharp (syringe, needle, lancet or other sharp object) found in the garbage or on City premises may be disposed into the landfill bound garbage if properly put into a hard-plastic or metal container. Never attempt to break the tip. Using proper impermeable gloves, place the sharp in a container that is not recyclable or see-through. If the container does not have a screw-on top use heavy-duty tape to secure the lid.

Plastic strip bandages, tampons, sanitary napkins are household garbage, not medical waste. Wear rubber or latex gloves when handling this type of garbage. These items are best placed in a securely fastened plastic bag before disposing into the garbage.

Do not use a red medical waste bag for household garbage.

APPENDIX 23:
EMERGENCY ACTION PLANS

I. Scope

This section outlines requirements for advance planning to cover unforeseen events which threaten the safety of personnel and property.

II. Purpose

The purpose of this section is to create the framework for basic emergency action plans which can be expanded and adapted to local practices. A Plan Implementation Checklist and several guideline documents for evacuation plan development follow this narrative.

III. Responsibilities

1) Directors

It is the responsibility of each director to see that emergency plans exist and a team of qualified people is organized to carry out the plans.

2) Managers

It is the responsibility of managers to:

- a. Instruct their employees on the location of escape routes, emergency doors and evacuation procedures;
- b. Know what action to take when the emergency alarm is sounded; and
- c. Assign employees to assist handicapped persons.

3) Department Emergency Action Coordinators

Department Emergency Action Coordinators shall organize teams of people who will work together in the event of an emergency, such as fire, power loss, service loss, etc. They shall organize evacuation drills and also produce and maintain manuals of emergency action plans, which should be distributed on a limited basis. The manuals shall include, but not be limited to the following information:

- a. A list of names and telephone numbers of responsible personnel and their areas of expertise;
- b. A diagram of the buildings showing location of sprinkler control valves;

- c. A plumbing diagram showing the locations of valves for natural gas services and internal gases and liquids piped under pressure;
- d. A plumbing diagram of water lines showing locations of main and secondary valves;
- e. An electrical diagram showing locations of all distribution panels and main cutoffs, as well as emergency power and lighting units;
- f. A procedure for power shutdown and power reduction. Activities that will be adversely affected by power loss should have special shutdown procedures posted near the equipment, i.e., computers and controlled tests;
- g. A ventilation and heating diagram showing the locations of all controls, including emergency warnings and procedures where safety ventilation is required; and
- h. A procedure for isolation, containment, neutralization and clean up of spilled acids or other hazardous chemicals, such as solvents, battery acids, welding tanks or propane tanks.

IV. Requirements For Emergency Action

- 1) Assess Emergency
- 2) Organize Priorities
- 3) Alert Switchboard
 - a. Telephone Service
 - 1. A specific telephone routine shall be established for each major type of emergency.
 - 2. Local fire, police and emergency medical services shall be given pertinent information which will expedite their services on premises. During normal business hours all calls to outside services must be limited to telephone operators.
 - b. Switchboard Service Loss

Plan an alternate communications link with outside services. A pay phone should be available in a selected area in event of a switchboard blackout.
- 4) Take Action

V. Evacuation

Evacuation plans showing routes, exits and holding areas shall be posted conspicuously along all paths of travel.

Hazardous areas shall be equipped with additional evacuation alarms as needs dictate.

Evacuation drills shall be held, observed and evaluated. The frequency of the drills shall be determined by the Safety & Health Engineer.

APPENDIX 24:

Workplace Security Program

I. Scope

Employers must include as part of their Illness & Injury Prevention Program procedures for identifying workplace security hazards (Title 8, General Industry Safety Orders (GISO) §3203(a)(4)), procedures for investigating occupational injuries or illnesses arising from an assault (Title 8, GISO, §3203(a)(5)), procedures for correcting unsafe conditions, work practices and work procedures when hazards are observed or discovered, (Title 8, GISO, §3203(a)(6)), and training and instruction to their employees (Title 8, GISO, 3203(a)(7)).

II. Purpose

This program establishes the City of Santa Barbara's policy regarding security in its workplaces. Violence and threats of violence in City workplaces are unacceptable and will not be tolerated. Moreover, possession of a weapon that is not required to perform an assigned job duty on City premises is prohibited. This policy establishes the City's zero tolerance of violence and possession of weapons on City premises. This program provides guidance in identifying and correcting workplace security hazards, addressing types of workplace violence, and instructing employees governed by this program.

III. Definitions

Critical Incident

Immediate threat or act of violence upon employees of the City in the scope of their job duties; assault on a City employee or intentional destruction of City property.

Hazards

Type I - A violent act by an assailant with no legitimate relationship to the workplace who enters the workplace to commit a robbery or other criminal act.

Type II - A violent act by a recipient of a service provided by the City of Santa Barbara, such as a client, customer, or a criminal suspect or prisoner.

Type III - A violent act by a current or former employee or another person who has some employment-related involvement with the City such as an employee's spouse or lover, an employee's relative or friend, or another person who has a dispute with a City employee.

Hazard Assessment

An on-site inspection of workplace and/or analysis of employment function to discern the physical characteristics and the work practices that impact security of the employees who work at the site and/or perform the function.

Modified Work Program	A temporary assignment, not to exceed 90 days, designed to provide a secure work environment to an employee who has been threatened with assault.
Security Plan	Written procedures for identifying and correcting unsafe conditions and training employees in maintaining premises protection.
Violent Action	<ul style="list-style-type: none"> • Grabbing, pushing, striking, pinching, groping or fondling another person; • Fighting or challenging another person to a fight; engaging in horseplay, skylarking, or any behavior which needlessly risks the safety of one's self or another person; • Stalking or following another person; • Accosting or harassing another person in an intimidating way whether face-to-face, by telephone, fax, mail, computer or other form of communication; • Illegally possessing, displaying, threatening to use, or using a firearm, knife or other weapon.
Workplace	Site away from an employee's home where performance of paid job duties for the City of Santa Barbara take place, to include all City property and locations for City job duties.
Weapon	<ul style="list-style-type: none"> • Gun, rifle, shotgun, pistol, revolver or any other device which projects a missile by an explosive type of ammunition; • Knife, dagger, ice pick, straight edge razor, sword; • Explosive bomb devices; • Any other equipment, tools or items that are used to threaten or enact damage or injury.

IV. Responsibilities

Workplace safety and security demands full cooperation and participation by every member of City staff.

A. Department Heads

Department Heads are responsible for:

1. Implementing and maintaining a Workplace Security Program within their departments.

2. Ensuring that all safety and health policies and procedures involving workplace security are communicated to all department employees;
3. Establishing a policy of zero tolerance for workplace violence;
4. Directing the establishment of workplace security assessments and corrections;
5. Accommodating training for all employees;
6. Holding managers accountable for any deviation from this policy; and
7. Contacting Risk Management for any assistance needed to implement or maintain this program.

B. Managers

Managers are responsible for:

1. Ensuring all employees within their division understand and adhere to this policy;
2. Enforcing compliance with the Workplace Security Program;
3. Establishing measures to prevent workplace violence;
4. Ensuring resources are available for correcting any workplace hazard;
5. Ensuring all employees receive appropriate training in this program;
6. Responding quickly to potentially violent behavior;
7. Reinforcing the message that violent behavior is unacceptable in the work environment; and
8. Holding supervisors accountable for implementing the policies contained herein.

C. Supervisors

Supervisors are responsible for:

1. Making the workplace as safe as practical for both the employees and the public by evaluating each operation in terms of potential exposure to workplace violence;
2. Educating each employee regarding the Workplace Security Program;
3. Identifying any special training employees need to implement this policy;
4. Informing all employees of their responsibilities to report potential or actual workplace violence;
5. Making appropriate referrals for assistance;

6. Disciplining employees who violate the Workplace Security Program policies;
7. Answering employee questions about the applications of these policies; and
8. Identifying and providing appropriate intervention for employee problems.

D. Employees

Employees are responsible for:

1. Using safe work practices;
2. Following all health and safety policies and procedures;
3. Maintaining a safe and secure work environment; and
4. Immediately reporting to their direct supervisor or manager all verbal and physical threats or acts of violence upon oneself or a co-worker.

E. Risk Analyst and Risk Safety Coordinator

The Risk Analyst and Risk Safety Coordinator are responsible for:

1. Providing expertise for training employees in the application of Workplace Security measures;
2. Assisting managers and supervisors in identifying and correcting workplace security hazards;
3. Assisting departmental coordinators in assessing work conditions posing a possible security threat; and
4. Periodic review and revision of this program as security needs change.

V. Compliance

This program ensures all employees, including staff, supervisors, managers, and department heads, comply with work practices designed to make the workplace more secure. This program prohibits the use of verbal threats or physical actions which create a security hazard for others in the workplace by:

- A. Incorporating a security hazard assessment into facility safety inspections and making corrections accordingly.
- B. Informing all employees of the provisions of the Workplace Security Program.
- C. Evaluating all employees' success in complying with the tenets of this program and adopted workplace security measures.
- D. Recognizing employees who perform work practices which promote security in the workplace.

- E. Providing training, counseling, or both, to employees whose performance is deficient in complying with work practices designed to ensure workplace security.
- F. Disciplining employees for failure to comply with workplace security practices.

I. Communication

Open communication among all employees, including staff, supervisors, managers, and department heads maintains a safe, healthy, and secure workplace. To implement workplace security, each operation needs a system for sharing a continuous flow of safety, health, and security information in a readily understood format and a reporting system with no threat of reprisal.

Such a system includes:

- A. The written Workplace Security Program available for all employees to read.
- B. Employee orientation in workplace security policies, procedures, and work practices.
- C. Training programs designed to address specific aspects of workplace security.
- D. Regularly scheduled safety meetings where issues related to workplace security, among other things, can be raised and discussed.
- E. Effective communication of safety, health, and security suggestions among all employees, including supervisors, managers, and department heads.
- F. Posted or distributed workplace security information, i.e. evacuation routes, brochures, posters.
- G. A procedure for employees to inform management about workplace security hazards. This procedure shall maintain employee confidentiality when reporting verbal or physical threats of violence. The chosen protocol must include a means of protecting employees from retaliation by the person making the threats.
- H. A plan for immediately and safely communicating a warning to law enforcement authorities, management, and other employees about an imminent act of violence or threat of imminent violence.

II. Hazard Prevention and Control

A. Workplace Analysis

Use the sample Workplace Security Assessment Questionnaire (attached to the end of this appendix) and review injury/illness and incident records to track and identify patterns of aggressive behavior and assault hazards. Steps to make a security assessment include:

1. Classifying known hazards according to the Hazards Type I, II, and III definitions in Section III of this Workplace Security Program;

2. Reviewing conditions, operations, and situations that create or contribute to security hazards; and
3. Identifying areas where hazards are likely to develop.

B. Identification of Security Hazards

A workplace analysis should identify and document the following:

1. Those work positions in which staff are at risk of assaultive behavior;
2. High-risk factors such as:
 - a. Physical layout and construction of the building;
 - b. Isolated locations/job activities;
 - c. Limited lighting;
 - d. Perilous activities or situations;
 - e. Difficult clients or members of the general public;
 - f. Uncontrolled access;
 - g. Areas of previous security problems;
3. Low risk positions for potential modified duty or restricted activity;
4. Reduction or elimination of hazards;
5. Evaluation of programs in place, engineering control measures and effectiveness of protective measures taken;
6. Security evaluation of new or modified facilities and public services programs ensuring hazard reduction or elimination before involving clients or employees;
7. Periodic inspection reports (this may be incorporated in the annual facility inspection and completed whenever there are operational changes) identifying new or previously unnoticed risks and deficiencies and assessing the effects of changes in the building designs, work processes, and security practices;
8. Information gathered and how this information was applied to correcting problems; and
9. Ongoing surveillance procedures.

C. Inspections

Identifying and evaluating workplace design, changes in employee work practices, and assessing for more than one type of workplace violence mitigates security hazards. Departments and divisions shall perform inspections: (1) upon implementation of the Workplace Security Program; (2) upon recognition of new or previously unidentified security hazards; (3) upon identification of industrial injuries or threats of injury; and (4) whenever workplace security conditions warrant an inspection.

Perform inspections for each type of workplace violence by using the methods specified below to identify and evaluate workplace security hazards.

1. Inspections for Type I Workplace Security Hazards (Robbery or Criminal Act)
 - a. Survey the exterior and interior of the workplace for its attractiveness to criminals and/or thieves.
 - b. Evaluate the need for security surveillance measures, such as mirrors or cameras.
 - c. Confirm posting of signs notifying the public that limited cash is kept on the premises.
 - d. Verify the existence of procedures for employee response during a robbery or other criminal act.
 - e. Verify the existence of procedures for reporting suspicious persons or activities.
 - f. Confirm posting of emergency telephone numbers for law enforcement, fire and medical services where employees have access to a telephone with an outside line.
 - g. Evaluate limiting the amount of money in cash drawers through the use of time access safes for large bills or excess sums.
2. Inspections for Type II Workplace Security Hazards (Client/Member of General Public Violence)
 - a. Evaluate access to and freedom of movement within the workplace.
 - b. Assess adequacy of workplace security systems, such as door locks, security windows, physical barriers and restraint systems.
 - c. Evaluate frequency and severity of threatening or hostile situations that may lead to violent acts by persons who are service recipients of the City.
 - d. Assess employees' skills in safely handling threatening or hostile service recipients.
 - e. Ascertain the effectiveness of systems to warn others of a security danger or to summon assistance (e.g., alarms or panic buttons).

- f. Consider the use of work practices such as "buddy systems" for specified emergency events, as appropriate.
 - g. Assess the availability of employee escape routes.
3. Inspections for Type III Workplace Hazards (Employee/Friend/Relative Violence)
- a. Evaluate how effective the Workplace Security Program's anti-violence policy has been made known to all employees, including staff, supervisors, managers or department heads.
 - b. Explore employee awareness of warning signs for potential workplace violence.
 - c. Examine access to and freedom of movement within the workplace by non-employees, including recently discharged employees or persons with whom one of our employees is having a dispute.
 - d. Determine frequency and severity of reported threats of physical or verbal abuse by any employee.

D. Hazard Correction

Hazards which threaten the security of employees shall be corrected in a timely manner upon first observation or discovery. Immediate corrective action includes: (1) Notifying law enforcement authorities of any criminal act; (2) Providing emergency medical care in the event of any violent act upon an employee; and (3) Offering post-event trauma counseling to employees in need of such assistance.

1. Corrective Measures: Type I - Robbery or Criminal Act
- a. Making the workplace unattractive to thieves/criminals.
 - b. Utilizing surveillance measures, such as cameras or mirrors, to observe all activities at the workplace.
 - c. Reporting suspicious persons or activities.
 - d. Posting emergency telephone numbers for law enforcement, fire and medical services where employees have access to a telephone with an outside line.
 - e. Posting signs notifying the public that limited cash is kept on the premises.
 - f. Limiting the amount of money in cash drawers through the use of time access safes for large bills or excess sums.
 - g. Instructing all employees in emergency action procedures.
2. Corrective Measures: Type II - Client/Member of the Public Violence

- a. Controlling access to, and freedom of movement within the workplace consistent with business necessity.
 - b. Ensuring the adequacy of workplace security systems, such as door locks, security windows, physical barriers and restraint systems.
 - c. Providing employee training in recognizing and handling threatening or hostile situations that may lead to violent acts by persons who are service recipients of the City.
 - d. Placing effective systems to warn others of a security danger or to summon assistance, e.g., alarms or panic buttons.
 - e. Establishing procedures for a "buddy system" for specified hazards.
 - f. Ensuring adequate employee escape routes.
3. Corrective Measures: Type III - Employee/Friend/Relative Violence
- a. Effectively communicating the City's anti-violence policy to all employees.
 - b. Teaching employees of the warning signs of potential workplace violence.
 - c. Controlling access to, and freedom of movement within, the workplace by non-employees, including recently discharged employees or persons engaged in a dispute with an employee.
 - d. Providing counseling to employees exhibiting behavior that may lead to physical or verbal abuse of co-employees.
 - e. Ensuring all reports of violent acts, threats of physical violence, verbal abuse, property damage or other signs of strain or pressure in the workplace are handled confidentially by management and that the person making the report is not subject to retaliation.
 - f. Consistently disciplining employees for breaches in the Workplace Security Program.

VIII. Training

A. Who and When

All employees, including supervisors and managers, shall receive instruction in general and job-specific workplace security practices. This training shall take place at:

1. Orientation of a new employee and annually thereafter;
2. Orientation for a new job assignment requiring specific workplace security measures; and
3. Detection of any new or previously unrecognized security hazards.

B. Parameters

Attachment 3 to this appendix provides a Workplace Security Training Checklist for managers and supervisors. This guide covers topics basic to every City operation. Become familiar with the training topics below to tailor the instruction to a particular work group.

NOTE: Supervisors and managers must understand the entire Workplace Security Program to provide employees with appropriate training in the hazards present in their workplace.

C. Training and Instruction Topics

1. Type I - Robbery and Criminal Act

- a. Crime awareness.
- b. Location and operation of alarm systems.
- c. Cautious work practices for specific work sites, activities or assignments, e.g., parking kiosk operators, library check-out, and duties in remote locations.

2. Type II - Client/Members of the Public Violence

- a. Self-protection.
- b. Dealing with angry, hostile, and threatening individuals.
- c. Care, use, and maintenance of alarms and other protective devices.
- d. Location and operation of alarm systems.
- e. Determination of when to use the "buddy" system or other assistance from co-workers.
- f. Awareness of indicators that lead to violent acts by recipients of service providers.

3. Type III - Employee/Friend/Relative Violence

- a. Employee Assistance Programs.
- b. Teaching indicators that could lead to violent acts.
- c. Managing with respect and consideration for employee well-being.
- d. Reviewing anti-violence policy and procedures.

IX. Incident Investigations

Procedures for investigating incidents of workplace violence include:

- A. Reviewing all previous incidents involving violence at our workplace, including threats of violence and/or verbal abuse.
- B. Visiting the scene of an incident as soon as possible.
- C. Interviewing injured and/or threatened employees and witnesses.
- D. Examining the workplace for security risk factors associated with the incident, including any reports of inappropriate behavior by the perpetrator.
- E. Determining the cause of the incident.
- F. Taking corrective action to prevent the incident from recurring.
- G. Recording the findings and corrective actions taken.

X. Medical Services and Counseling

A. Medical Services

Employees that sustain an injury resulting from a violent act while performing their duties shall receive prompt medical evaluation and treatment. Maintain first aid kits or materials in each office or facility to provide immediate treatment of injuries. Remove injured employees from the workplace until order has been restored. Transport the injured employee to medical care as outlined in Chapter 4 of the IIPP.

B. Counseling Services

Violence often leaves staff fearful and concerned. They need to have the opportunity to discuss these fears and to know that administration is concerned and will take measures to correct deficiencies. A defusing or debriefing session with employees after an incident will help them to resume normal work duties.

Offer intervention to an employee victimized by an assailant. Trauma-crisis counseling or critical incident debriefing is available through departmental programs and the City's Employee Assistance Program. Referrals may also be made via the City's workers' compensation program. All counseling shall be provided by psycho-social counselors trained to understand the issues of assault and its consequences.

Co-workers may also receive counseling to prevent "blaming the victim syndrome" and to assist them with any difficulties experienced as a result of a violent incident.

Consider reassigning staff after an assault. Staff often discover returning to the workplace after a violent incident difficult. Assailants often repeat threats. Aggressive actions to prevent recurrence must be taken. Avoid staffing shortages after an assault. Prompt coverage for the employees removed from the scene should take place.

The City Attorney can provide legal advice regarding pressing charges after a violent incident. Additional information regarding workers' compensation benefits and other employee rights will be provided regardless of apparent injury. The City's Modified Work Program (IIPP, Appendix 20) outlines procedures to follow in the event the victim sustains disability or requires a light duty assignment.

All assaults must be investigated, including completing all necessary reports and needed corrective action determined. The investigation shall gather all the facts and related pertinent information of the incident to prevent further problems. Remember, the primary function of the investigation is to rectify deficiencies in security. Avoid blaming the employee for incompetence, as this can aggravate psychological injuries.

XI. Recordkeeping

As a local governmental entity, the City of Santa Barbara is not required to keep written records of the steps taken to implement and maintain its IIPP. However, the City shall maintain the following records and training documentation for three (3) years:

- A. Records of workplace security inspections. A hazard assessment and correction form identifying the person or persons conducting the inspection, the unsafe conditions and work practices, and the action taken to correct the identified deficiencies.
- B. Documentation of safety, health, and security training for each employee, including the employee's name or other identifier, training dates, type(s) of training, and training providers.

XII. Program Evaluation

Supervisors and managers should review their departmental practices frequently to reevaluate procedures and discuss changes. At a minimum, program evaluations shall take place in conjunction with the annual facility safety inspections. Evaluation techniques include:

- A. Establishing a uniform reporting system and regular review of reports.
- B. Reviewing reports and minutes of safety and security committee.
- C. Analyzing trends and rates in illness/injury or incident reports.
- D. Surveying employees.
- E. Evaluating job or workplace changes or new systems.
- F. Keeping current records of job improvements or implemented programs.
- G. Following an incident, reviewing employee experiences with the hostile situation and determining the effectiveness of counseling or medical treatment provided.
- H. Sharing new or revised procedures with all employees.

- I. Correcting deficiencies identified so risks to employees and to clients are equally considered.

ATTACHMENT 1

Workplace Security Assessment Questionnaire

Date: _____ Inspector Name: _____

Location: _____

Nature of Work: _____

Hours of Operation: _____

1. Describe the physical layout of the job site (if helpful, attach evacuation map):

2. Job site location in relation to other businesses/residences in the area and access to street:

3. Number/gender of employees on site between 10pm and 5am:

4. Describe nature and frequency of client/customer/other contact:

5. Are cash transactions conducted with the public during work hours? _____

6. If yes, how much cash is kept in the cash register or in another place accessible to a robber?

7. Is there a safe or lock-box on the premises into which cash is deposited? _____

8. What is the security history of the job site and environs?

9. What physical security measures are present?

10. What work practices has the City implemented to increase security?

11. Has security training been provided to employees? _____

12. If so, has the training been effective?

ATTACHMENT 2

**SAFETY INSPECTION CHECKLIST
WORKPLACE SECURITY**

Department/Location: _____

Inspector: _____ Date: _____

The numbers in parentheses at the end of each question refers to an applicable safety order. If a question does not apply to your facility, write the letters N/A (not applicable). Use the space at the bottom of each page for room number or area of description where each discrepancy occurs.

	YES	NO
1. Has a Workplace Security Program been implemented and maintained? §3203(a)	_____	_____
2. Does the program include periodic inspections of the workplace? §3203(a)(2)	_____	_____
3. Have employees been trained in security hazards involved in the job assignments? §3203(a)(7)	_____	_____
4. Are employees instructed on the security hazards unique to a specific job before each assignment? §3421(d)	_____	_____
5. Is there a safe or lock-box on the premises if cash transactions are conducted during working hours?	_____	_____

LOCATION OF DISCREPANCIES (Use question number to identify)

ATTACHMENT 3

Managers' Workplace Security Training Checklist

- Direct all supervisors to familiarize themselves with the Workplace Security Program documents and policies found in Appendix 24 of the IIPP prior to supervising employees.
- Provide guidance to all supervisors on the departmental procedures for reporting and responding to violence in the workplace.
- Require all supervisors to conduct Workplace Security training for the staff they supervise.
- Require all supervisors to create and maintain a class roster/sign-in sheet for all Workplace Security training conducted that includes an attendee's employee number. Supervisors shall maintain records of attendance for three (3) years and provide a copy of the class roster/sign-in sheet to Risk Management.
- Require supervisors and employees to complete the Safety Orientation form in Appendix 1 of the IIPP before assigning work duties to new employees and maintain records of completed Safety Orientation forms for three (3) years.
- Incorporate the Workplace Security Assessment Questionnaire (Attachment 1) and Safety Inspection Checklist (Attachment 2) into the annual departmental safety audits and facility inspections.

Supervisors' Workplace Security Training Checklist

- Complete the Safety Orientation form in Appendix 1 of the IIPP before assigning work duties to new employees and maintain records of completed Safety Orientation forms for three (3) years.
- Tell employees the location of the Injury and Illness Prevention Program (IIPP), Appendix 24 and its availability for review.
- Explain the Workplace Security Program's zero tolerance for both violent actions and possession of weapons on City premises. (Section II. Purpose)
- Discuss potential workplace security hazards, including the risk factors associated with the types of potential workplace violence. (Section VII. Hazard Prevention and Control)
- Explain departmental procedures for reporting workplace security hazards or threats to managers and supervisors.
- Brainstorm ways to diffuse hostile or threatening situations.
- Instruct employees how to summon others for assistance.
- Demonstrate routes of escape to employees.
- Review emergency action and post-emergency procedures.

- Discuss sensitivity needed to protect feelings and reduce trauma experienced by victims of threats or assaults.
- Specify security instructions to those whose work assignments exposes them to unique job hazards.
- Require all employees trained in Workplace Security to sign a class roster/sign-in sheet and maintain a copy of the Workplace Security to sign a class roster/sign-in sheet for three (3) years. Provide a copy of all Workplace Security training sign-in sheets to Risk Management.

APPENDIX 25

FLAMMABLE STORAGE & HANDLING

I. Scope

This Section covers requirements and responsibilities for the storage and handling of flammable liquids and to meet or exceed OSHA requirements.

II. Purpose

The purpose of this section is to establish operating procedures to minimize the exposure of personnel to the hazards associated with the storage and handling of flammable liquids, and to meet or exceed OSHA requirements.

III. Responsibilities

A. Managers

It is the responsibility of Managers to ensure that flammable liquids are properly handled and stored in accordance with the requirements of this Section.

B. Supervisors

It is the responsible of Supervisors to:

1. See that personnel assigned to handle flammable liquids are trained in the safe handling and storage of flammable liquids; and
2. See that flammable liquids are stored in proper containers and cabinets or other suitable storage areas.

C. Risk Analyst

It is the responsibility of the Risk Analyst to:

1. Assist Managers and Supervisors in establishing safe handling procedures for flammable liquids and in training employees to use the procedures.
2. Assist Managers and Supervisors by specifying the storage requirements for flammable liquids which will comply with the requirements of this section.

IV. Definitions

flash point	The minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.
lower explosive limit (LEL)	The lowest value, expressed in percent by volume of fuel vapor in air, at which a particular vapor or gas mixture with air will burn when ignited.
safety can	An approved container of not more than five gallons capacity, having a spring-closing lid, spout cover and a flame arrester and so designed that it will safely relieve internal pressure when subjected to fire exposure.
threshold limit value (TLV)	An exposure level under which most individuals can work a normal shift on a 40-hour-week basis without harmful effects.
flammable liquid	<p>A liquid having a flash point below 100 degrees F (37.8 degrees C) and having a vapor pressure not exceeding 40 psia (pounds per square inch absolute), except any mixture having components with flash points of 100 degrees F (37.8 degrees C) or higher, the total of which make up 99% or more of the total volume of the mixture. Flammable liquids shall be known Class I Liquids and are divided into three classes:</p> <ul style="list-style-type: none">Class IA Liquids: Have flash points below 73 degrees F (22.8 degrees C) and a boiling point below 100 degrees F (37.8 degrees C).➤ Class IH: Includes liquids having flash points below 73 degrees F (22.8 degrees C) and a boiling point at or above 100 degrees F (37.8 degrees C).➤ Class IC: Includes liquids having flash points at or above 73 degrees F (22.8 degrees C) and below 100 degrees F (37.8 degrees C).
combustible liquid	<p>A liquid having a flash point at or above 100 degrees F (37.8 degrees C). They are subdivided as follows:</p> <ul style="list-style-type: none">➤ Class II Liquids: Include those with flash points at or above 100 degrees F (37.8 degrees C) and below 140 degrees F (60 degrees C).➤ Class IIIA Liquids: Include those having flash points at or above 100 degrees F (60 degrees C).

- Class IIB Liquids: Include those having flash points at or above 200 degrees F (93.3 degrees C).

Where the term "Class III Liquids" is used in this section, it shall mean only Class IIIA Liquids.

V. Requirements

A. Training

Employees involved with the storage and handling of flammable liquids shall be fully instructed in their characteristics, hazards and methods of control. Areas to be covered by the training shall include but not be limited to the following:

Proper labeling;
 Storage of flammable liquid;
 Spills;
 Sources of ignition;
 Bonding & grounding requirements;
 Fire fighting with an extinguisher;
 Emergency first-aid;
 Ventilation;

TABLE 1: Container Requirements

{PRIVATE }Container Type	Flammable 1A	Flammable 1B	Flammable 1C	Combustible Class II	Combustible Class III
Glass	1 pt. (472 ml)	1 qt. (945 ml)	1 gal. (3.78 l)	1 gal. (3.78 l)	5 gal. (18.9 l)
Metal (other than D.O.T. drums) or approved plastic	1 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Safety Cans	2 gal.	5 gal.	5 gal.	5 gal.	5 gal.
Metal Drums (DOT Spec)	60 gal.	60 gal.	60 gal.	60 gal.	60 gal.
Approved Portable Tanks	660 gal.	660 gal.	660 gal.	660 gal.	660 gal.

B. Flammable Storage Containers.

Only approved containers and portable tanks shall be used (see Cal/OSHA Regulation, Title 8, General Industry Safety Order, § 5532 for construction details). Flammable and combustible liquid containers shall be in accordance with TABLE 1.

Exception: Glass or plastic containers of not more than one-gallon capacity may be used for a Class IA or IB flammable liquid provided:

Such liquid would be rendered either unfit for its intended use by contact with metal, or would excessively corrode a metal container so as to create a leakage hazard;

The users process would require:

More than 1 pint but not more than 1 gallon of Class IA liquid;

More than 1 quart but not more than 1 gallon of Class IB liquid of a single assay lot to be used at one time;

The maintenance of an analytical standard liquid (of a quantity which is not met by the specified standards of liquids available) in a quantity (required to be used in one control process) which exceeds one-sixteenth the capacity of the container allowed under TABLE 1 for the class of liquid.

C. Labeling

All containers shall be marked with the chemical name of contents and any special handling precautions.

D. Flammable Storage Cabinets

Not more than 60 gallons of Class I or Class II Liquids, nor more than 120 gallons of Class III Liquids, may be stored in an approved storage cabinet. Design and construction specifications for flammable storage cabinets can be found in Cal/OSHA regulation, title 8, General Industry Safety Orders, § 5533.

E. Inside Flammable Storage Rooms

The design and construction of inside storage rooms shall comply with the test specifications in "Standard Methods of Fire Tests of Building Construction and Materials", NFPA 251.1972. Storage inside storage rooms shall comply with TABLE 2. One (1) clear aisle at least 3 feet wide shall be maintained in every inside storage room. Containers over 30 gallons capacity shall not be stacked.

NOTE: Storage rooms are not the same as storage and mixing rooms. Where flammable liquids are dispensed, Class I Division I wiring is required. (National Code, NFPA No. 70-1978)

TABLE 2: Storage Inside Rooms

{PRIVATE }Fire Protection Provided*	Fire Resistance	Maximum Size	Total Allowable Quantities (gals/sq. ft./floor area)
Yes	2 hrs.	500 sq. ft.	10
No	2 hrs.	500 sq. ft.	4
Yes	1 hr.	150 sq. ft.	3
No	1 hr.	150 sq. ft.	2

*Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

F. Storage Inside Buildings

The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed:

25 gallons of Class IA Liquids in containers;

120 gallons of Class IB, IC, II or III Liquids in containers. Flammable or combustible liquids shall not be stored so as to limit use of exits, safe egress of people. Additional requirements can be found in Cal/OSHA Regulation, Title 8, General Industry Safety Orders §5534.

G. Handling Liquids at Point of Final Use.

1. Flammable liquids shall be kept in covered containers when not actually in use.
2. Where flammable or combustible liquids are used or handled, except in closed containers, means shall be provided to dispose of leakage spills promptly and safely.
3. Class I Liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.
4. Flammable or combustible liquids shall be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system, from safety cans, by means of air pressure on a container or portable means of air pressure on a container or a portable tank shall be prohibited.

Note: An approved safety container shall automatically become non-approved if the flash arrester is removed.

5. Local fire regulations specify the type of transfer method used.
 - a. Approved self-closing spigots - NFPA (an approved spigot will have the Factory Mutual mark).
 - b. Drum transfer pump - Uniform Fire Code (preferred method).

6. Whenever flammable or combustible liquids are transferred from one container to another, both containers shall be effectively grounded to dissipate static electricity.
7. Ventilation: General or local exhaust ventilation shall be provided for removal or dilution of vapors for both the health hazard and the flammability hazard. In the case of health hazards, the concentration of vapor shall be kept to less than 1/2 the TLV limit. In the case of flammability hazard, the vapor concentration shall be kept to less than 20% of the LEL of the particular vapor involved.

H. Fire Protection

At least one portable fire extinguisher having a rating of not less than 12-B units shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage of flammable or combustible liquids.

At least one portable fire extinguisher having a rating of not less than 12-B units must be located not less than 10 feet, nor more than 25 feet, from any Class I or Class II liquid storage area located outside of a storage room but inside a building.

I. Sprinklers

When sprinklers are provided, they shall be installed in an approved manner per NFPA and fire department guidelines.

J. Open Flames and Smoking

Open flames and smoking shall not be permitted in flammable or combustible liquid storage areas.

K. Water Reactive Materials

Materials which react with water shall not be stored in the same room with flammable or combustible liquids.

L. Compatible Chemicals

All chemicals stored must be compatible. Check NFPA Standard 491M for chemicals which must not be intermixed.

APPENDIX 26

PORTABLE FIRE EXTINGUISHERS

VI. Scope

This section covers requirements for the selection, installation, inspection, maintenance and testing of portable fire extinguisher.

VII. Purpose

The purpose of this section is to establish operating practices and responsibilities for the installation, inspection, maintenance and testing of a portable fire extinguisher.

VIII. Responsibilities

A. Managers

Managers shall see that appropriate portable fire extinguisher are in plain view in their departments and that access to the fire extinguisher is FREE and CLEAR.

B. Supervisors

It is the responsibility of the supervisors to see that all personnel under their direction know how to operate a fire extinguisher in their areas. They also shall instruct their personnel in evacuation procedures in case of emergency. They shall work closely with the Risk Analyst to assure that new equipment or processes in their areas are adequately protected before start-up.

C. Risk Analyst/Fire Department

The Risk Analyst/Fire Department is responsible for the following:

- Selecting type and location of a portable fire extinguisher.
- Overseeing the inspection and maintenance of a portable fire extinguisher.
- Conducting training programs in the use of a portable fire extinguisher.
- Overseeing the preparation and installation of evacuation route maps.
- Arranging periodic fire drills.

D. Building Maintenance

It is the responsibility of Building Maintenance to install and inspect, or cause to be inspected, on a periodic basis each portable fire extinguisher, and to accurately maintain the inspection tags attached to the extinguisher.

IV. Deviation

Deviations from the requirements of this section are not permitted, except in cases where other regulations are more stringent.

V. Classification Of Fire Extinguishers

A portable fire extinguisher is classified according to the type of fire for which they are effective. The U.L. rating consists of a letter which indicates the class of fire, preceded by a rating numeral (Class A & B only) which indicate the relative extinguishing effectiveness. An extinguisher classified for use on Class C or H fires do not have such a numeral.

VI. Selection of Fire Extinguisher

The selection of an extinguisher shall be determined by the anticipated fire hazards, the building construction, the occupancy and/or the nature of the property to be protected.

- A. Class "A" extinguisher for Class "A" fires are selected from among water and multi-purpose dry chemical types.
- B. Class "B" extinguisher for Class "B" fires are selected from among the following:
 - 1. bromotrifluoromethane (Halon 1301);
 - 2. bromochlorodifluoromethane (Halon 1211), carbon dioxide, and dry chemical types.
- C. Class "C" extinguisher for Class "C" fires are selected from among the following:
 - 1. bromotrifluoromethane (Halon 1301);
 - 2. bromochlorodifluoromethane (Halon 1211), carbon dioxide, and dry chemical types.
- D. Class "D" extinguisher for Class "D" fires shall be selected on a basis of the specific combustible metal, its physical particle size, area to be covered and recommendations by the extinguisher manufacturer on data from control tests conducted.
- E. Halon Fire Extinguisher

A portable fire extinguisher containing Halon 1301 or 1211 are recommended for the following areas:

- 1. Computer room facilities and copy machines;
- 2. Integrated circuit laboratories;
- 3. Where a clean agent is required;
- 4. Where there are surface burning flammable solids, such as thermoplastics;
- 5. Where the hazard area contains a process or object of high value.

IX. Distribution of Extinguisher

Rooms or areas shall be graded generally as light hazard, ordinary hazard, or extra hazard. Limited areas of greater or lesser hazard shall be protected as deemed appropriate by the Fire Department.

X. Classification of Fires

- A. Class "A"

Class A fires are those arising from ordinary combustibles, wood, paper, cloth, rubber and many plastics.

**Table 1: CLASS A FIRES
Fire Extinguisher Size and Placement**

AREAS TO BE PROTECTED PER EXTINGUISHER

{PRIVATE }Basic Min. Extinguisher Rating for Specified Area	Max. Travel to Extinguisher	Light Hazard Occupancy	Ordinary Hazard Occupancy	Extra Hazard Occupancy
1A	75 ft.	3,000 sq. ft.	N/P	N/P
2A	75 ft.	6,000 sq. ft.	3,000 sq. ft.	N/P
3A	75 ft.	9,000 sq. ft.	4,500 sq. ft.	3,000 sq. ft.
4A	75 ft.	11,250 sq. ft.	6,000 sq. ft.	4,000 sq. ft.
6A	75 ft.	11,250 sq. ft.	11,250 sq. ft.	5,000 sq. ft.
10A	75 ft.	11,250 sq. ft.	11,250 sq. ft.	9,000 sq. ft.
20A	75 ft.	11,250 sq. ft.	11,250 sq. ft.	11,250 sq. ft.
40A	75 ft.	11,250 sq. ft.	11,250 sq. ft.	11,250 sq. ft.

B. Class "B"

1. General

Class B fires are those arising from burning liquids, gases and greases as well as other than fire in flammable liquids of appreciable depth, for example, dip tanks.

2. Extinguisher

Fires of this nature are considered to be a special hazard. An extinguisher containing foam or carbon dioxide which are classified for Class B fires are relatively ineffective on this hazard due to stream and agent characteristics. Selection shall be made on the basis of recommendations by manufacturers of this specialized

3. Equipment

The system used to rate an extinguisher on Class B fires (flammable liquids in depth) is not applicable to these types of hazards. It has been determined that special nozzle design and rates of agent application are required to cope with such hazards.

CAUTION: It is undesirable to attempt to extinguish this type of fire unless there is reasonable assurance that the source of fuel can be promptly shut off.

TABLE 2: CLASS B FIRES

{PRIVATE }Type of Hazard	Basic Minimum Extinguisher Rating	Extinguisher
Light	5B 10B	30 ft. 50 ft.
Ordinary	10B 20B	30 ft. 50 ft.
Extra	20B 40B	20 ft. 50 ft.

C. Class "C" Fires

Class C fires are those arising from live electrical equipment, electrical motors, controls and wiring.

An extinguisher with Class C ratings shall be required where energized electrical equipment may be encountered which would require a non-conducting extinguishing media. This will include fire either directly involving or surrounding electrical equipment. Since the fire is a Class A or Class B hazard, the extinguisher are sized and located on the basis of the anticipated Class A or B hazard.

NOTE: Whenever possible, electrical equipment should be de-energized before attacking a Class C fire.

D. Class "D" Fires

Class D fires are those arising from burning metals, such as magnesium, titanium, zirconium, sodium and potassium.

An extinguisher or extinguishing agents with Class D ratings shall be provided for fires involving combustible metals.

Extinguishing equipment shall be located not more than 75 feet from the Class D hazard.

Size determination shall be on the basis of the specific combustible metal, its physical particle size, area to be covered and recommendations by the extinguisher manufacturer on data from control tests conducted.

IX. Classification of Hazards

Light Hazards: Where the amount of combustibles or flammable liquids is such that fires of small size may be expected i.e., offices.

Ordinary Hazards: Where the amount of combustibles or flammable liquids present is such that fires of moderate size may be expected i.e., parking garages and warehouses.

Extra Hazards: Where the amount of combustibles or flammable liquids present is such that fires of severe magnitude may be expected i.e., processes such as flammable liquid handling, painting, dipping, etc.

XI. Requirements

A. General

A portable extinguisher shall be maintained in a fully charged and operable condition and kept in its designated place at all times when not in use. An extinguisher shall be conspicuously located where it will be readily accessible and immediately available in the event of fire. It shall be located along normal paths of travel including exits from all areas or directly adjacent to a known hazardous operation. The method of operation of an extinguisher shall be prominently indicated on the extinguisher and shall face outward.

B. Inspection

An extinguisher shall be inspected monthly to ensure that it is in its designated place and in operable condition. Note inspection record each time it is inspected.

C. Maintenance

At regular intervals, not more than one year apart, the extinguisher shall be thoroughly examined and if necessary, recharged, repaired, or replaced by a trained service person. This service is usually provided by an outside agency. While maintenance is in process, a spare extinguisher shall be left as a temporary replacement.

D. Inspection Tags

Each portable fire extinguisher shall have two inspection tags; one to record the monthly check (which assures that the extinguisher is available and operable) and the other to record that the extinguisher has been subjected to a thorough annual maintenance inspection.

E. Hydrostatic Tests

If at any time an extinguisher shows evidence of corrosion or mechanical injury, it shall be subjected to a hydrostatic pressure test or replaced. All extinguishers require periodic hydrostatic testing at specified intervals depending on type. Refer to Cal/OSHA regulations, Title 8, General Industry Safety Orders, § 6151(f).

APPENDIX 27

ELECTRICAL SAFETY PRACTICES

XII. Scope

This section covers requirements and responsibilities for the installation, use and maintenance of electrical equipment.

II. Purpose

The purpose of this Section is to establish operating practices to minimize the hazards associated with the installation, use and maintenance of electrical equipment.

XIII. Responsibilities

A. Managers

It is the responsibility of Managers to see that all electrical devices procured for their areas are U.L. listed and that safety procedures for working with electrical equipment are established and followed.

B. Supervisors

It is the responsibility of supervisors to:

1. See that all electrical devices procured for their areas are U.L. listed;
2. See that personnel working with or around electrical equipment have been instructed regarding the hazards of that equipment;
3. Establish and document safe operating practices;
4. Assure that all electrical devices used in the area are in safe operating condition by a regular inspection program which would include documentation of tests on equipment, i.e., current leakage and ground resistance; and
5. Maintain access to electrical panels, switches, controls, etc. in the work area.

C. Building Maintenance

It is the responsibility of Building Maintenance to see that:

1. Electrical equipment, installation and wiring meet the requirements of the current National Electrical Code, Electrical Safety Orders, and applicable local regulations;
2. Electrical maintenance is performed according to established safe practices and procedures;
3. Suitable signs are posted and barricades used in hazardous situations; and
4. Lockout and warning tags are used for shutdown of electrical equipment and circuits.

D. Risk Analyst

It is the responsibility of the Risk Analyst to assist supervisors in training personnel in electrical safety practices and to assist Facilities Maintenance by monitoring the electrical safety program.

IV. Deviation

Deviations from the requirements of this Standard are not permitted except in cases where local regulations are more stringent.

V. Requirements

A. General

Electrical safety practices and procedures shall comply with the Cal/OSHA Regulations, Title 8, Subchapter 5, Electrical Safety Orders.

B. Personnel

Only qualified electricians shall work with electrical circuits.

C. Work Practice

1. All circuits shall be tested with appropriate instrumentation to assure they are de-energized prior to starting work.
2. Appropriate instrumentation and necessary tools for electrical work shall be available and properly maintained and tested.
3. Eye protection shall be worn while working on electrical equipment.
4. Face away from switches, disconnects and circuit breakers when they are operated.
5. Never handle electrical equipment when hands, feet, body or the equipment is wet.
6. Energized Equipment
 - a. Never allow an employee to work alone around live electrical circuits.
 - b. Never wear jewelry, rings, watches or bracelets on hands or arms while working on live electrical circuits.

D. Work Environment

1. Regard all floors around high voltage equipment as conductive, unless the floors are covered with a well maintained dry rubber matting which is approved for such use.
2. Work space around electrical boxes, circuit breakers, control panels, etc. must have a clearance of 36" in width and depth at all times for 151 to 600 volts to ground.

3. Where electrical shock hazards exist, first-line backup protection shall be provided to prevent access to energized circuits and parts. Use lockouts, interlocks, grounding hooks, barriers and approved rubber mats.
4. Hazardous equipment shall have conspicuous visual indication of both "ON" and "OFF" conditions, and an immobilizing emergency "OFF" switch clearly identified and within easy reach.
5. Exposed Line Potentials. If exposed circuitry must be energized, only qualified electricians shall be permitted in the area. Suitable barricades and warning signs shall be used.
6. Extension cords are for temporary use only, and not to be used in place of permanent wiring. They shall be heavy enough for anticipated loads, and used alone, never extension to extension. Extension cords shall not go through walls or be draped across ceilings or partition walls or across floors. Extension cords shall be tested semiannually for continuity, especially the grounding conductor.
7. Motor Controls - Disconnecting means shall be readily accessible, and shall plainly indicate the "ON" and "OFF" positions.
8. Explosive Atmosphere - Electrical equipment to be operated in an explosive atmosphere shall comply with the National Electric Code NFPA 70-1978.
9. Where possible, ground fault interrupts shall be used on circuits or on equipment used in damp locations and where work must be performed on energized circuits.

E. Grounding

All equipment which has exposed metal parts and operates at a voltage which presents a shock hazard shall be grounded through a grounding conductor. Portable tools which are grounded shall be periodically tested to assure ground continuity.

F. Ungrounded Equipment

Portable tools do not require grounding if they are:

1. Supplied through an isolating transformer which drops the voltage to below 50 volts.
2. Protected by a system of double insulation which is U.L. listed. The insulation shall be tested periodically to assure integrity.

G. Power Distribution

1. Enclosures - Switchboards shall be enclosed in cabinets that have located accesses separating switches from wiring.
2. The power distribution switchboard shall have no open spaces which would allow access to wiring.
3. Switchboard cabinets shall be locked against unauthorized entry, and Building Maintenance shall maintain the key.

4. Switchboard Marking - All switches and circuits shall be clearly labeled as to function.

H. Shutdown Procedure for Maintenance Purposes

1. Switch Panels - Tag open switches and lock switch panel doors, or otherwise guard with suitable lockouts against unauthorized entry.
2. Electrical Machinery - Electrical machinery that is deactivated for maintenance purposes shall be tagged and locked.
3. Lockout Devices - Maintenance personnel shall have padlocks, warning tags and multiple lockout devices for machinery shutdown purposes.
4. Status of Lockout - The Department Supervisor or designated representative must be aware of status during maintenance, and present when lockout is removed.

APPENDIX 28

GRINDING MACHINES & ABRASIVE WHEELS

I. Scope

This section covers requirements and responsibilities for the use and care of grinding machines and wheels.

II. Purpose

The purpose of this section is to establish operating practices to minimize the hazards associated with the use and maintenance of grinding machines and wheels.

III. Responsibilities

A. Supervisors

It is the responsibility of supervisors to see that only fully trained employees operate said machinery.

B. Employees

It is the responsibility of employees to observe all safety requirements.

C. Risk Analyst

It is the responsibility of the Risk Analyst to assist Department Managers and Supervisors in complying with the requirements of this section.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. Abrasive Wheel Guards

All abrasive wheels shall be guarded. Wheel exposure angles shall not exceed the Cal/OSHA standards as defined in Title 8, General Industry Safety Orders § 3578(g).

B. Wheel Exposure Adjustments

Wheel exposure adjustments shall not be made with the wheel in motion.

C. Adjustable Tongue

The constantly decreasing diameter of the abrasive wheel is guarded by an adjustable tongue. The distance between the wheel and the work rest shall not exceed 1/8 inch.

D. Work Rests

Work rests shall be adjusted closely to the wheel. The distance between the wheel and the work rest shall not exceed 1/8 inch.

E. Cup Wheel

Revolving cup guard clearance shall not exceed 1/16 inch.

F. Mounting and Inspection of Abrasive Wheels

Immediately before mounting, the "ring test" shall be applied. All wheels must be dry and free from sawdust, otherwise the sound will be deadened. The "Ring Test" consists of tapping the wheels about 45° from each side of the vertical centerline and about 1 or 2 inches from the periphery. Then, rotate the wheel 45 degrees and repeat the test. A sound and undamaged wheel will give a clear metallic tone. If cracked, there will be a dead sound and no clear "ring". There shall be no excessive tightness between wheel mounting and machine spindle. A safety clearance shall be maintained between the two. The grinding wheel shall fit freely on the spindle and remain free under all grinding conditions. Mounting surfaces or wheels, blotters and flanges shall be flat and free of foreign matter. Grinding machines shall be equipped with flanges designed for the particular type of wheel being guarded. Blotters (compressible washers) are sometimes required between flanges and wheel mounting surfaces to ensure uniform distribution of flange pressure.

G. Abrasive Wheel Storage

Abrasive wheels should be stored in racks, bins or drawers (to fit type and size of wheel) in a dry area. Alternate use of wheels, to ensure against lengthy storage time. Abrasive wheels shall not be exposed to high temperatures, humidity, dampness, freezing temperatures, condensation, or physical abuse of any kind while in storage.

H. Exhaust Ventilation

Exhaust ventilation systems shall be provided for grinding, buffing and polishing operations which produce grinding dust such that employee exposure to airborne contamination could exceed prescribed limits. For specific ventilation requirements refer to Cal/OSHA regulation, Title 8, General Industry Safety Orders, § 5152.

VI. Safe Operating Procedures

- Use eye protection with side shields.
- Check all adjustments.
- Never use a poorly maintained or imbalanced wheel.
- Never grind on the side of a peripheral grinding wheel.
- Never take too heavy a cut.
- Approach work with care, especially on a cold wheel.
- Use compressible washers (blotters) when required.
- Never exceed recommended speeds.
- If the wheel vibrates, don't use it.

VII. Mechanical Power Transmission Protection

Power transmission apparatus such as flywheels, shafting pulleys, belts and couplings shall be guarded when they are located or extend 9 feet or less from the floor.

Fixed barrier guards of solid sheet metal are best for power transmission apparatus. The sheet metal must be heavy enough to withstand pressure and not come into contact with apparatus being guarded.

All moving, sliding or hinged panels and gates should be interlocked with machine operation.

VIII. Position Guarding

Dangerous machinery not easily accessible shall be guarded.

APPENDIX 29
MACHINE GUARDING

I. Scope

This section covers requirements and responsibilities for machine guarding.

II. Purpose

The purpose of this section is to establish machine guarding requirements in order to minimize hazards associated with moving parts of machinery.

III. Responsibilities

A. Manager

It is the responsibility of Managers to see that all machines comply with the requirements of this standard.

B. Supervisor

It is the responsibility of Supervisors to: 1) train employees in safe practices and see that machine guards are installed when necessary; 2) to see that machines are systematically and routinely inspected and maintained; and 3) that records documenting these activities are kept.

C. Risk Analyst

It is the responsibility of the Risk Analyst to assist Supervisors in complying with the requirements of this section, and to evaluate conditions which may require mechanical guarding.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. Mechanisms Requiring Guards

The following mechanisms require guards:

Rotating mechanisms.

Cutting or shearing mechanisms.

In-running nip points.

Screw or worm mechanisms.

Forming or bending mechanisms.

Belts and pulleys.

Gear drives or pinch points.

B. Point-of-Operation Guards

To be effective, a point-of-operation guard shall:

Be considered a permanent part of the machine.

Be substantially designed to protect the operator.

Prevent access to the danger zone during operation.

Not weaken the structure of the machine.

Be convenient, neither interfering with efficient operation of the machine nor causing discomfort to the operator.

Be designed for the specific job and specific machine, with provisions made for safe and easy oiling, inspecting, adjusting, and repairing of parts.

Be resistant to fire and corrosion.

Be durable and constructed to resist normal wear and shock.

Present no hazard such as splinters, pinch points, shear points, sharp corners, rough edges, exposure to electrical shock or other sources of injury.

C. Classification of Guards in Order of Desirability

1. Fixed or Adjustable Enclosure Guards

Fixed or adjustable enclosure guards should be used and are preferred to all other types. A major design consideration of enclosure guards is work visibility, which can be achieved by use of parallel bars, expanded metal, wire mesh, or clear polycarbonate plastic. Enclosure guards admit hands into the danger zone because of feed opening size, remote location or unusual shape.

2. Interlocking Guards

There are several types of interlocking guards:

enclosure or gate guards with electrical or mechanical interlocks;

barriers with electrical or mechanical interlocks which activate a brake;

electronic or other type of field or beam connected with an operating and stopping mechanism.

An interlocking enclosure guard should be able to:

Shut off or disengage the power to prevent the starting of the machine when the guard is open;
Guard the danger point before the machine can be operated; and
Keep the guard closed until the dangerous part is at rest, or stop the machine when the guard is opened.

Electrical interlocking devices should be so designed that if they fail, they fail safely, making the guarded machine inoperative.

3. Remote Control, Placement, Feeding, Ejecting

a. General

There are various forms of remote control, placement, feeding and/or ejecting mechanisms:

Two-hand tripping devices (also, multiple operation).

Automatic or semi-automatic feed

Special jigs or holding devices.

Special hand tools and dies

Special ejecting devices.

These devices require simultaneous action of both hands of the operator on electrical switch buttons, air control valves, or mechanical levers. The actuating controls should be so located as to make it impossible for the operator to be able to move his/her hands from the controls to the danger zone before the machine has completed its closing cycle.

b. Remote Control

Remote control devices consist of special jigs, holding devices and dies may be used to manipulate stock at the point of operation, yet keep hands safe.

c. Placement

The minimum spacing of buttons shall be in accordance with Cal/OSHA Title 8, General Industry Safety Orders §§ 4190 and 4208.

Buttons shall have ring guards.

Distance from buttons to point of operating die (danger zone) shall be sufficient to prevent operator from getting hands in the die after buttons have been activated. The distance shall be dependent on the speed of the operation of the machine.

d. Feeding & Ejecting

Mechanical means for feeding and air operated means for ejecting may be used to manipulate parts while in the danger zone.

e. Automatic Guards

Push-away, hold-out and pull-back devices which restrain the hands are the least acceptable methods of machine guarding and **ARE NOT** recommended. Alternative work processes should be designed; for example, vacuum devices for handling the work.

APPENDIX 30
COMPRESSED AIR

I. Scope

This section covers requirements for the use of compressed air as a means of cleaning or replenishing air-supplied respirators.

II. Purpose

The purpose of this section is to establish safe operating practices in the use of compressed air.

III. Responsibilities

A. Supervisors

It is the responsibility of each supervisor to see that compressed air is used only for its intended purpose, and to see that equipment is inspected and maintained routinely.

B. Building Maintenance

It is the responsibility of Building Maintenance to see that the installation of compressed air equipment meets Cal/OSHA standard, Title 8, General Industry Safety Orders, and §§ 4649, 4650.

C. Employees

It is the responsibility of employees to comply with these standards, and not to alter equipment such as air guns by defeating the pressure limiting mechanism.

D. Risk Analyst

It is the responsibility of the Risk Analyst to assist the supervisors and Building Maintenance in complying with the OSHA standards.

IV. Deviation

Deviations from the requirement of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

Safety glasses shall be worn while using compressed air.

Compressed air used for cleaning chips and dirt from machinery shall be less than 30 psi, and then only with effective chip guarding and personal protective equipment (i.e., safety glasses).

Air guns used for cleaning purposes shall be of a type that limits the static pressure at the main orifice to less than 30 psi when dead-ending occurs.

Compressed air shall not be used to fill or empty containers of liquids.

Air compressors used for supplying air-line respirators shall be equipped with safety and stand-by devices.

Air-line connections shall be unique to preclude the possibility of connecting improper gas sources.

APPENDIX 31

FORKLIFT TRUCKS

I. Scope

This section covers requirements and responsibilities for the operation and maintenance of powered industrial vehicles, which include gas and electric lift trucks.

II. Purpose

The purpose of this section is to establish operating practices and procedures to minimize the hazards associated with the use and maintenance of gas and electric lift trucks.

III. Responsibilities

A. Managers

It is the responsibility of each manager to see that all vehicles procured for the department meet the American National Safety Institute (ANSI) standard for Powered Industrial Trucks, ANSI B56.1-1975. The Manager shall also ensure that safe operating procedures are established, posted and followed.

B. Supervisors

It is the responsibility of each supervisor to see that only fully trained employees operate vehicles, and that those employees be easily identifiable by use of colored badges.

C. Employees

It is the responsibility of the employee to comply with all established safety requirements.

D. Risk Analyst

It is the responsibility of the Risk Analyst to assist Managers and Supervisors in complying with the requirements of this section and the training of operators.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

A. General

Trucks are to be categorized and coded according to the atmosphere and location where they can be safely operated. Locations shall first be classified by level of hazard, and vehicles shall be selected to suit the locations. General Industry Safety Orders, Article 25 provides the standards for use and operation of industrial trucks.

B. Approval

All vehicles shall carry a label of approval which indicates that they have been tested using nationally recognized testing standards, e.g., Part II, ANSI B56.1 - 1975, Safety Standard for low lift and high lift trucks.

C. Control of Noxious Gases and Fumes

Levels of carbon monoxide gas caused by industrial trucks shall not exceed the levels specified in the General Industry Safety Orders, § 5146.

D. Fuel Handling and Storage

Gasoline and diesel fuel shall be handled and stored according to codes NFPA No. 30-1969 and NFPA No. 58-1969.

E. Vehicle Guard

An overhead guard, appropriate for the job application, shall be used for protection against falling objects.

F. Operator Training

Specific qualifications prior to training shall include possession of a valid driver's license. Classroom instructions shall be given in safe vehicle operation, safe handling and securing of materials, actual power vehicle operation, and movement of materials.

G. Posting Operating Requirements

The following operating rules shall be conspicuously posted:

- Only authorized drivers shall operate vehicles.
- Vehicles shall be checked at least once per shift.
- Do not permit others to ride.
- Maintain a safe speed, and safe distance (3 truck lengths) between moving vehicles.
- Stunt driving and horseplay are prohibited.
- Unattended vehicles shall have power shut off, brakes set, the mast brought to the vertical position, and forks left in the "down" position. When left on an incline, the wheels shall be blocked.
- The rated load capacity of the truck shall not be exceeded.
- Trucks shall not be driven up to anyone standing in front of a bench or other fixed object of such size that the person could be caught between the truck and the object.

- No one shall stand or pass under the elevated portion of any truck.
- Grades up and down shall be maneuvered slowly.
- When ascending or descending grades in excess of 10 degrees, loaded trucks shall be driven with the upgrade.
- On all grades, the load and load engaging means shall be tilted back, if applicable, and raised only as far as necessary to clear the road surface.
- Motorized hand and hand rider trucks shall be operated on all grades with the load engaging means downgrade.
- Loaded vehicles shall not be moved until the load is safe and secure.
- Operators shall look in the direction of travel, and shall not move a vehicle until certain that all persons are in the clear.
- Vehicles shall not be run onto any elevator unless specifically authorized to do so. Before entering an elevator, driver shall make sure that the capacity of the elevator is not exceeded. Enter an elevator with the load end forward. Once on an elevator, power shall be shut off and brakes set.
- Vehicles shall not be operated on floors, sidewalk doors, or platforms that will not safely support the loaded vehicle.
- The forks shall always be carried as low as possible, consistent with safe operation.
- The reverse gear shall not be used as a brake.
- Vehicles shall not be driven in and out of highway trucks and trailers at unloading docks until such trucks are securely blocked and brakes set.
- Employees shall not place any part of their body outside the running lines of the industrial truck or between mast uprights or other parts of the truck where shear or crushing hazards exist.
- Other trucks traveling in the same direction shall not be passed at intersections, blind spots, or dangerous locations.
- The driver shall slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- No truck shall be operated with a leak in the fuel system.
- Extreme care shall be taken when tilting loads. Tilting forward with the load engaging means elevated shall be prohibited except when picking up a load. Elevated loads shall not be tilted forward except when the load is being deposited onto a storage rack or equivalent. When stacking or tiering, backward tilt shall be limited so that necessary to stabilize the load.

- The load-engaging device shall be placed in such a manner that the load will be securely held or supported.
- Special precautions shall be taken in the securing and handling of loads by trucks equipped with trailer attachments, and during the operation of these trucks after the loads have been removed.

H. Unattended Vehicles

A powered industrial vehicle is considered unattended when the operator is more than 25 feet from the vehicle, or the vehicle is out of his/her sight.

When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and the brakes shall be set. Wheels shall be blocked if the truck is parked on an incline. The key shall be removed.

When the operator is dismounted and within 25 feet of the vehicle and still in view, the load engaging means shall be fully lowered, controls neutralized and the brakes set to prevent movement.

I. Maintenance of Industrial Trucks

- Defective trucks shall not be used until repaired by authorized personnel.
- Repairs shall not be made in hazardous areas, i.e., where there are flammable gases, combustible dust, or ignitable fibers.
- Repairs to fuel and ignition systems which involve fire hazards shall be made in appropriate safety areas.
- Prior to repair, the electrical system shall be disconnected from the battery.
- Open flames shall not be used for checking electrolyte level in storage batteries or gasoline level in fuel tanks.
- Maintenance area shall be kept clean.
- Vehicle servicing records shall be maintained.

J. Operator's Daily Checklist

Gas or LPG Truck Driver's Daily Checklist:

TO BE COMPLETED WITH EACH SHIFT CHANGE

Date:_____Truck Number:_____

Operator:_____

Hour Meter Reading:_____

+++++

SPACE "OK" OR "NA" (Needs Attention)

<u>VISUAL CHECKS</u>	O.K.	N.A.
Engine Oil Level	()	()
Radiator Water Level	()	()
Battery	()	()
Tire Condition	()	()
Forks	()	()
Lights	()	()
Obvious Damage/Leaks	()	()
Gauges and Instruments	()	()
Fire Extinguisher	()	()
<u>OPERATIONAL CHECKS</u>		
Horn	()	()
Steering	()	()
Service Brake	()	()
Parking Brake	()	()
Hydraulic Controls	()	()

Explain below **ALL** items needing attention or repair which show up during the inspection or any time while operating the truck:

THEN NOTIFY YOUR SUPERVISOR

The Supervisor Certifies that:

- He has been made aware of the problem(s) checked/described.
- He will notify Maintenance to have repair done.
- The problem is such that the truck is still operational.
- The truck should not be used until repaired. TAG TRUCK.

Supervisor (print name):

Supervisor (Signature):

APPENDIX 32

HOISTING EQUIPMENT

I. Scope

This section covers requirements and responsibilities for the installation and maintenance of electrically powered stationary hoisting equipment.

II. Purpose

The purpose of this section is to establish operating procedures and practices to minimize hazards associated with the installation, use and maintenance of electrically powered stationary hoisting equipment.

III. Responsibilities

A. Manager

It is the responsibility of Managers to see that all stationary hoisting equipment is in safe operating condition and complies with the requirements of this section. They shall also see that safe operating procedures are established and followed.

B. Supervisor

It is the responsibility of Supervisors to see that only trained employees operate the equipment and that inspection reports are accurately maintained.

C. Employees

It is the responsibility of employees to visually check the equipment and to report any observable wear to the supervisor. They shall also report all equipment malfunctions immediately.

D. Building Maintenance

It is the responsibility of Building Maintenance to:

1. Select the site;
2. Verify that the supporting structure is safe;
3. Test the equipment after installation and prior to use;
4. Establish and maintain a monthly and annual inspection program;
5. Set up a record keeping log on safety checks, maintenance and repairs; and
6. Post current monthly inspection reports in the vicinity of the hoist.

E. Risk Analyst

It is the responsibility of the Risk Analyst to assist Building Maintenance in complying with Federal and State safety requirements.

IV. Deviations

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

Only fully trained employees shall operate hoisting equipment.

A. Limit Device

Each overhead electric hoist shall be equipped with an enclosed limit device which will stop the travel before the hook passes the highest and, where applicable, the lowest point of travel.

After the limit of travel has been reached, there shall remain at least two wraps of cable on the hoist drum.

B. Brakes

The braking system shall perform the following functions:

1. Arrest and hold up to 125% of rated load when controls are released.
2. Limit the speed of load during lowering to a maximum of 120% of rated lowering speed.

C. Capacity Marking

Each hoist shall have its rated load marked clearly and conspicuously.

D. Control Equipment

Operating controls shall be plainly marked to indicate the direction of travel.

E. Slings and Hooks

Slings and hooks must be capable of carrying up to 125% of rated load, and hooks shall be equipped with safety latches.

F. Electrical Equipment

1. Electrical equipment shall be located or enclosed so that no live parts shall be exposed to accidental contact under normal operating conditions.
2. Electrical equipment shall be protected from dirt, grease, oil and moisture.
3. Guards for live parts shall be substantial and so located that they cannot be accidentally deformed so as to make contact with live parts.

G. Handling the Load

1. Size of Load

The equipment shall not be loaded beyond its rated capacity except for rated load test in accordance with Cal/OSHA standard, Title 8, General Industry Safety Orders, § 4999.

2. Attaching the Load

- a. The load shall be attached to the hook by way of slings or other suitable and effective means which shall be properly rigged to ensure the safe handling of the load.
- b. Chain and rope slings shall be freed of kinks or twists before use.
- c. Baskets, tubs, skips or similar containers used for hoisting bulk materials shall be loaded so as not to exceed their safe carrying capacity.
- d. The hoist rope shall not be wrapped around the load.
- e. Never move the load without checking the balance and the brakes. Check the brakes by raising the load a few inches and then applying them.

H. Monthly Inspection

An inspection and written signed report must be made by Facilities Engineering of all components used on or associated with the hoist. Components checked must include:

- Hoist or load attachment;
- Chains and their end connections;
- Wire rope slings;
- Hooks and hook latches;
- Motors and brakes;
- Push-buttons and other electrical control equipment; and
- Hardware, sheaves, bolts, rivets, pins and drums.

Any defects should be corrected before the hoist is used. The report must be dated and signed by the person performing the inspection.

I. Annual Inspection

Once each year a more detailed inspection must be made by Building Maintenance (or a qualified service company selected by Building Maintenance). After completing the annual inspection, the report must be filled out and signed by the person performing the inspection. At the end of the calendar year, the report will be returned to the Risk Analyst, and a new form issued.

J. Checklist for Inspection

The following checklist shall be used as a guide for inspection of hoisting equipment.

- The safe working load shall be posted on each hoisting unit.
- A swivel type self-latching safety hook shall be used for the load hook. The cable shall be secured to the load hook by the use of two approved cable clamps.
- Load hooks shall not be deformed or damaged in any way. The hook is normally designed to be the weakest part of the hoisting unit, so it should be the first point to indicate overload.

- Load hooks shall be subjected to crack detection tests annually.
- The hoist chain shall not show excessive wear and shall not have twisted, cracked or distorted links.
- The cable shall be inspected for signs of kinking. It shall be free from broken strands and wind smoothly and evenly on the drum.
- On electric hoists, both an upper and lower limit switch are required, and they shall be adjusted properly.
- The hoist track shall be level with carefully matched joints.
- The track stops shall be located to prevent the carriage from traveling beyond the last track hanger. Each hanger shall be capable of supporting, with a factor of five, the entire weight of the track, carriage and load.
- Double wheel stops shall be securely fastened on both tracks and at both ends (a total of eight).
- The entire hoist mechanism must be grounded. A positive grounding means, such as a bus bar and shoes, shall be used. It is not satisfactory to ground through wheel-track contact.
- Protective covers shall be installed over the track bus bars.
- The carriage on an electric hoist shall be provided with limit stops to prevent excess travel and strain on electrical connections.
- Where two or more electric hoist carriages operate on the same track, a small bumper shall be attached to each end of each carriage so that nothing can impinge against any part of the electrical apparatus of any hoist.

VI. Eyebolt Inspections

A six month inspection program shall be set up to systematically magnaflux and x-ray inspect eyebolts for defects. After each inspection, eyebolts shall be freshly color-coded.

APPENDIX 33

WELDING, CUTTING, AND BRAZING

I. Scope

This section established safety requirements, defines responsibilities, and outlines operating procedure for welding practice and associated.

II. Responsibilities

A. Building Maintenance

Building Maintenance is responsible for:

1. Intermittent welding and cutting processes associated with construction, maintenance, and repair.
2. The safe operating conditions of portable, manually operated welding equipment used under their direction.
3. Training personnel in complying with OSHA standards.

B. Supervisors

It is the responsibility of Supervisors to see that:

1. Cutting and welding are scheduled appropriately, taking into consideration the activities of other departments.
2. Fire potential of the area is evaluated and safeguards are established.
3. Fire watches are available if required.
4. Combustibles in the welding area are protected if not practicable to remove.
5. Protective shields are used to safeguard passersby.
6. Only qualified welders or apprentice welder under direct supervision of a qualified welder are judged to be competent undertake welding.

C. Welders

It is the responsibility of welders to comply with the requirements of this Section and Cal/OSHA regulations, Title 8, General Industry Safety Orders, § 4794-4853.

III. Deviation

Deviation from the requirements of this Standard are not permitted, except in cases where local regulations are more stringent.

IV. Recommendation

Mapp Gas - Mapp gas should be substituted for acetylene. It is a mixture of stabilized methyl acetylene and propadiene. It combines the desirable high temperature of acetylene and the manageability of propane and natural gas. Mapp is a Dow registered trademark.

V. Requirements

A. Cutting/Welding

No cutting or welding shall be undertaken until approved by Building Maintenance.

B. Personnel

Welders shall be thoroughly familiar with the requirements of the Code of Federal Regulations, Title 8, General Industry Safety Orders, and shall be judged competent before being allowed to undertake welding or any associated activity. Written instructions covering operation of the equipment shall always be readily available.

C. Posting

Safety rules shall be posted in a permanent welding booth.

D. Welding Equipment

Welding equipment shall meet the Cal/OSHA requirements of the General Industry Safety Orders (ANSI B31.1.1983).

E. Power Source and Grounding

Electric welding operations and equipment must meet the power and grounding requirements of the General Industry Safety Orders § 4850 (See ANSI, 249.1 - 1973, Safety in Welding & Cutting).

F. Gas Pressure

1. Never use gas without approved pressure regulation, except low-pressure gas used for air-gas tanks.
2. Never use acetylene at more than 15 lbs./sq. in gauge pressure (psig).

G. Hose Fittings

ANSI approved anti-flashback fittings, preferably with quick disconnect features, and shall be used on oxygen and acetylene equipment.

H. Handling and Use

- Compressed gas cylinders shall be handled and used only by properly trained persons.
- Cylinders shall never be placed near boilers, steam, or hot water pipes, or any sources of ignition, or where they could accidentally become part of an electrical circuit. When gas containers are used in conjunction with electric welding, they must not be grounded.

- Where removable caps are provided for valve protection, such caps shall remain on the cylinder at all times except when connected to dispensing equipment.
- The user shall keep container valves closed at all times (charged or empty) except when the container is in use. "In Use" includes standby tie between operations utilizing the gas.
- Use only the appropriate regulator and connections designed for a particular gas.
- No one shall use a cylinder's contents for purposes other than those intended by the supplier.
- Always stand to one side of the direction the pressure regulator gauge faces when opening cylinder valves.
- If by accident there is no positive pressure left in a cylinder, tag the cylinder to warn the recharger.
- Gas cylinders shall not be subjected to temperatures above 52°C (125°F). A flame shall never be permitted to come in contact with any part of a compressed gas container.
- Regardless of size, cylinders shall be secured in an upright position at all times by clamp, chain or strap, to a bench, bulkhead, cradle, floor stand or transport device to assure vertical stability.
- Cylinders may deviate from the upright position for the short periods of time necessary for hoisting and carrying.
- Avoid rolling or dragging cylinders, even for a short distance.

I. Oxygen and Acetylene Storage

A distance of at least 20 feet shall be maintained between oxygen and acetylene cylinders in storage.

J. Ventilation

TBA

K. Inert Gas Welding

Whenever inert gas welding is performed in a confined space, local exhaust ventilation must be used. An inert gas such as helium or argon can displace the oxygen in a confined space and result in a serious hazard to the welder (*Refer to Confined Spaces Program*).

L. Toxic Fumes

Cadmium, zinc, mercury and beryllium-bearing materials and the like may produce harmful concentrations of toxic fumes when welded. Therefore, local exhaust ventilation is required where toxic fumes, gases and dust could exceed the maximum concentrations specified in Cal/OSHA Regulations, Title 8, General Industry Safety Orders, § 5150. Also refer to General Industry Safety Orders § 5150, "Ventilation & Personal Protective Equipment for Welding, Brazing and Cutting."

M. Ultraviolet Radiation

Ultraviolet light and infrared rays generated by electric arcs and gas flames can "sunburn" the eyes and skin. Hence, welders shall wear suitable flameproof protective clothing and eye protection as described in the "Protective Clothing" and "Eye Protection" policies. Passersby shall be protected by flameproof screening that is opaque to infrared and ultraviolet light.

Ultraviolet radiation from the welding or cutting arc can decompose chlorinated hydrocarbons, such as trichloroethylene and perchloroethylene, to form highly toxic substances. Since this decomposition can occur even at a considerable distance (75 feet) from the arc, de-greasing operations and other work using these chlorinated solvents should be located so that no solvent vapor will reach the welding or cutting area. Dilution ventilation is not acceptable.

N. Fire Prevention Precautions

Welding shall be permitted only in areas that are fire safe and of non-combustible or fire-resistant construction, free of combustible and flammable contents, and suitably segregated from adjacent areas.

When it is practicable to move the work, the area shall be made safe by removing the combustibles to a 35-foot radius protecting combustibles from ignition sources. Combustible floors shall be kept wet. When welding is done near a wall, partition, ceiling or roof of combustible construction, a fire-resistant shield or guard shall be provided to prevent ignition.

Caution: Asbestos is a carcinogen. When preparing heat shields of material containing asbestos, avoid any fabrication that releases asbestos fiber from its bonding. Air sampling should be conducted if there is a reasonable possibility that an airborne asbestos fiber concentration could exceed the threshold limit value.

Ducts and conveyor systems that might carry sparks to distant combustibles shall be suitably protected or shut down.

Firewatchers equipped with suitable fire extinguisher shall be required whenever welding or cutting is performed in locations where a fire might develop. Fires are not visible through a welder's helmet. Welding shall not be permitted in the following situations:

- In areas not authorized by Management;
- In sprinklered buildings while such protection is impaired;
- In the presence of flammable or explosive atmosphere(s);
- In areas near the storage of large quantities of exposed, readily ignitable materials;
- In confined spaces unless special procedures are followed: purging, air supply, ventilation, safety crew, etc. (*Please refer to the Confined Space Program*)

O. Normal Shutdown

When welding operations are temporarily suspended or unattended, for example during lunch, equipment shall be left in a safe condition, electrodes removed and primary power disconnected, gas supply valves closed, pressure released on regulators and all lines bled. An inspection shall be made of immediate surrounding areas including the other sides of nearby walls and the floor below where the welding shall occur.

P. Arc Welding Safeguards

Where the work permits, the welder should be enclosed in an individual booth painted with a finish of low reflectivity, such as zinc oxide (an important factor for absorbing ultraviolet radiations) and lamp back, or shall be enclosed with noncombustible screens similarly painted. Booths and screens shall permit circulation of air at floor level. People adjacent to the welding areas shall be protected from rays by noncombustible or flameproof screens or shall be required to wear appropriate goggles.

Q. Welding or Cutting Used Containers

No welding, cutting or other hot work shall be performed on used drums, barrels, tanks or other containers until they have been cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids or other materials which when subjected to air, might produce flammable or toxic vapors. Any pipelines or connections to the drum or vessel shall be disconnected or blanked, and containers shall be vented during welding.

R. Precautions/Hazards

Always strip plating, especially zinc, nickel, lead, and cadmium, paint, oil and unknown contaminants from parts prior to welding. This avoids generating any poisonous gas.

S. Never allow acetylene or oxygen to come into contact with oil. The combination is explosive.

T. The electrode voltage is approximately 80 volts RMS. Use gloves, insulated soles or rubber mats. Avoid bare skin contact with the electrode insulation, or any metal part of the electrode holder. It is possible to become exposed to open circuit voltage while changing electrodes, setting up work, or changing work position; also, the danger of electric shock is greater when the operator is perspiring.

U. During welding operations, cylinders and containers shall be kept at a safe distance from working area to guarantee that no cylinder can be contacted by a welding rod or holder.

V. Security

Welding equipment shall be secured during off hours.

W. Personal Projects

Personal welding projects are not permitted.

APPENDIX 34

GAS CYLINDER HANDLING

I. Scope

This section covers requirements and responsibilities for the use and storage of compressed gas cylinders, i.e., propane, acetylene, etc.

II. Purpose

The purpose of this section is to establish safe operating practices for gas cylinder handling.

III. Responsibilities

A. Managers

It is the responsibility of Managers to see that gas cylinders are stored, used and maintained in accordance with the requirements of this section.

B. Supervisors

It is the responsibility of Supervisors to see that personnel assigned to handling compressed gas cylinders are trained in the safe handling, installation, use and storage of such cylinders. Supervisors shall see that receiving personnel check incoming cylinders for:

- Legible content identification;
- D.O.T. (Date of Transportation) label; and
- Valve protection cap.

It is also their responsibility to see that cylinders are in compliance with this section.

C. Risk Analyst

It is the responsibility of the Risk Analyst to assist supervisors with training personnel in complying with OSHA regulations. The Risk Analyst also has the responsibility of formulating procedures to contend with malfunctioning cylinders.

IV. Deviation

Deviations from the requirements of this standard are not permitted, except in cases where local regulations are more stringent.

V. Requirements

The following safety requirements apply to all types of compressed gas cylinders at all times:

A. Identification

1. Compressed gas cylinders shall be legibly marked, identifying the gas content with either the chemical or trade name. Such marking shall be by means of stenciling, stamping, or labeling and shall not be readily removable.
2. Containers bearing an illegible identification shall not be accepted from the gas supplier. The numbers and markings stamped on the cylinders shall not be tampered with.
3. Whenever practicable, the marking shall be located on the shoulder of the cylinder. The method must conform to the American National Safety Institute (ANSI) standard "Method for Marking Portable Compressed Gas Containers to Identify the Material Contained," Z48.1-1954 (R1971).

B. Posting

Container storage areas shall be prominently posted with the names of stored gases. Also, "NO SMOKING" signs and signs barring unauthorized people shall be posted around the storage area and at the entrance to cylinder storage rooms which contain flammable gases. All signs shall be readable from a 25 foot distance.

C. Construction

All portable cylinders used for the storage and shipment of compressed gases shall be constructed and maintained in accordance with the regulations of the U.S. Code of Federal Regulations, Title 49 "Transportation", Parts 171-179.

D. Fittings

1. Compressed gas cylinders shall be equipped with connections complying with the ANSI Standard "Compressed Gas Cylinder Valve Outlet and Inlet Connections", P57.1-1965.
2. All cylinders with a water weight capacity of over 30 pounds (.48 cubic feet internal volume) shall be equipped with the means to connect a valve protection cap or with a collar or recess to protect the valve.
3. Gas cylinders with valve protection caps shall always have the caps in place and hand-tight, except when the cylinders are in use or connected for use.

E. Handling & Use

1. Compressed gas cylinders shall be handled and used only by properly trained persons.
2. Cylinders shall never be placed near boilers, steam, hot water pipes, or any sources of ignition, or where they could accidentally become part of an electrical circuit. When gas containers are used in conjunction with electric welding, they must not be grounded.
3. Where removable caps are provided for valve protection, such caps shall remain on the cylinders at all times except when connected to dispensing equipment.
4. The user shall keep container valves closed at all times (charged or empty) except when the container is in use. "In Use" includes standby time between operations utilizing the gas.
5. Use only the appropriate regulator and connections designed for a particular gas.

6. No one shall use a cylinder's contents for purposes other than those intended by the supplier.
7. Always stand to one side of the direction the pressure regulator gauge faces when opening cylinder valves.
8. Always leave some positive pressure in a cylinder to prevent suck-back and contamination.
9. If, by accident, there is no positive pressure left in a cylinder, label the cylinder to warn the recharger.
10. Gas cylinders shall not be subjected to temperatures above 52°C (125°F). A flame shall never be permitted to come in contact with any part of a compressed gas container.
11. Regardless of size, cylinders shall be secured in an upright position at all times by clamp, chain or strap, to a bench, bulkhead, cradle, floor stand or transport device to assure vertical stability.
12. Cylinders may deviate from the upright position for the short periods of time necessary for hoisting and carrying.
13. Avoid rolling or dragging cylinders even for a short distance.

F. Cylinder Refilling

1. No one except the owner of the cylinder or person authorized by him/her shall refill a cylinder.
2. No attempt shall be made to transfer acetylene from one cylinder to another.
3. No attempt shall be made to mix gases in a cylinder.
4. No compressed gas shall be transferred from one container to another container.

G. Inside Transportation

Compressed gas cylinders shall be transported secured to an appropriately designed cart, and:

1. Cylinder valves shall be closed during transportation.
2. Regulators shall be removed before transportation.
 2. Valve protection caps shall not be used for lifting or moving cylinders from one vertical position to another.
 - 3.
 4. Cylinders shall not be dropped, rolled, dragged, or permitted to strike each other violently.
 - 5.

H. Inside Storage

1. Cylinders shall be stored in a well-ventilated, dry location at least 20 feet away from all hazardous substances such as:
 - Corrosive materials, acids, concentrated alkalis, salt; and
 - Combustible materials, oil, packing material (excelsior).

2. Cylinders shall be stored in specifically assigned places away from elevators, stairs or aisles.
3. Assigned storage spaces shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons. If cylinders are stored in cabinets, the cabinets must be adequately ventilated.
4. Cylinders shall be segregated for storage according to type of gas.
5. Inside storage near function areas, for example manufacturing, machine shops, etc. should have only the minimum number of cylinders on hand as required by the user for uninterrupted operation.

I. Outside Storage

1. Cylinders shall be protected from bottom corrosion, and stored in well-drained areas.
2. Cylinders shall be protected against excessive variations in temperature, direct sun and continuous dampness.
3. Cylinders shall not be stored near salt, corrosive chemicals or fumes.

J. Storage of Toxic Gases

Toxic gases such as arsine, phosphene, etc. shall be stored in a separate room or in exhaust-ventilated storage cabinets designed specifically for this purpose. The total quantity of toxic gas should be limited to the minimum necessary.

K. Storage of Oxygen Cylinders

Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease) a minimum distance of 20 feet or by a non-combustible barrier at least five feet high having a fire-resistance rating of at least one half hour.

L. Storage of Liquid Nitrogen

Liquid nitrogen cylinders are equipped with pressure relief devices that permit intentional venting of internal pressure. These cylinders should be used and stored only in well-ventilated areas to prevent any accumulation of vented gas. Protective equipment such as gloves and full-face masks shall be used when handling liquid nitrogen.

M. Storage of Empty Cylinders

Empty cylinders shall be so marked and stored separately with their valves closed.

N. Leaks

The method of handling leaks depends on the content of the cylinder; contact the Risk Analyst.

O. Maintenance

Containers and their fittings shall be maintained only by the container owner or his/her authorized representative.

P. Returning Empty Cylinders

Before returning empty cylinders, the valve shall be closed and valve protection caps shall be replaced. Cylinders equipped with valve-outlet caps or plugs, or sealing valve caps shall be returned with these caps or plugs in a gas-tight condition.

Q. Shipping Documents

The company shall provide carriers transporting empty cylinders all necessary shipping documents and empty cylinders shall be marked and labeled per DOT CFR 49 Part 172.

APPENDIX 35

HEAT ILLNESS PREVENTION PROGRAM

I. Scope

This HIPP applies to the control of risk of occurrence of heat illness and applies to all outdoor places of employment and other locations where the environmental risk factors for heat illness are present. Any employee participating in job tasks where environmental risk factors for heat illness are present shall comply with the procedures outlined in this HIPP.

Cal-OSHA defines a trigger temperature and “shade up” provisions when temperatures exceed 80°F and “high heat” procedures at 95°F. Typically, temperatures above 80°F, especially with heavy physical work activities, would represent conditions where there is some risk of heat illness. Other factors, such as high humidity or work conditions such as the wearing of protective clothing that restricts the body’s ability to cool itself, could result in a risk of heat illness at lower temperatures.

II. Purpose

Heat illness is a serious medical condition that results when the body is unable to cool itself sufficiently through sweating. Both personal and environmental factors can contribute to the likelihood of developing heat illnesses which include, but are not limited to, heat cramps, heat exhaustion, and heat stroke. Heat stroke can be fatal, especially if medical treatment is delayed. The purpose of this Heat Illness Prevention Program (HIPP) is to prevent heat illnesses from occurring through education and proper work practices. The HIPP also teaches employees how to recognize the signs and symptoms of heat illness and how to respond should heat illness occur on the job.

I. Authority

California Code of Regulations (CCR):

- Title 8 CCR 3395, Heat Illness Prevention

Code of Federal Regulations (CFR):

- Title 29 CFR 1910.132, Personal Protective Equipment
- Title 29 CFR 1910.141, Sanitation

II. Responsibilities

A. Department Head

It is the responsibility of each Department Head to:

1. Provide the necessary resources to ensure the health and safety of employees.
2. Confirm that departmental tasks have been evaluated for potential heat exposure.

3. Ensure departmental compliance with the City's HIPP policies and procedures.
4. Ensure that Managers, Supervisors, and Lead Workers with supervisory duties are trained on their responsibilities under the HIPP.

B. Manager / Supervisor / Lead Worker (Referred to hereafter as "Supervisory Personnel")

It is the responsibility of Supervisory Personnel to:

1. Learn and follow the HIPP.
2. Provide HIPP training to employees upon initial assignment where occupation exposure to heat may take place and annually thereafter.
3. Provide potable drinking water and a shaded break area for all employees covered by the HIPP.
4. Encourage employees to take cool-down rest breaks as needed.
5. Check and monitor the temperature and humidity forecast.
6. Know and be able to recognize the signs and symptoms of heat illness.
7. Know first aid procedures needed to treat the various forms and stages of heat illness.
8. Contact emergency services and accurately report the work location to emergency medical services (EMS) as needed.

C. Employees

It is the responsibility of each Employee to:

1. Learn and follow the HIPP.
2. Know and be able to recognize the signs and symptoms of heat illness.
3. Know the first aid procedures needed to treat the various forms and stages of heat illness.
4. Frequently consume the provided drinking water throughout the work day.
5. Take breaks in adequately shaded areas when a preventative recovery period is needed.
6. Contact EMS and accurately report the work location as needed.
7. Follow instructions from Supervisory Personnel about heat illness prevention.

E. Risk Analyst / Safety Coordinator

It is the responsibility of the Risk Analyst / Safety Coordinator to:

1. Assist Supervisory Personnel in complying with the requirements of this HIPP.

2. Assist Supervisory Personnel with providing appropriate training for employees who may be exposed to heat on the job.

V. HIPP Elements

The elements of an effective HIPP include:

- Access to Water
- Access to Shade
- High Heat Procedures
- Acclimatization
- Weather Monitoring
- Employee and Supervisory Training
- Written Procedures, including Emergency Response for Heat Illness

A. Access to Water

The City of Santa Barbara (City) shall ensure that all employees working outdoors, or at other locations when environmental risk factors for heat illness are present, have access to potable drinking water at all times during their work shift. Water shall be fresh, pure, suitably cool, and provided to employees free of charge. Water should be kept out of direct sunlight to remain as cool as possible. The water shall be located as close as practicable to the areas where employees are working.

The City has plumbed potable water at each of its facilities for its employees. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantities at the beginning of the work shift to provide one quart per employee per hour for drinking the entire shift. Supervisory Personnel for each department will determine how much water will be distributed to employees. Supervisory Personnel may begin the shift with smaller quantities of water and replenish during the shift as needed to allow employees to drink one quart or more per hour. The City will fulfill its obligation to provide water to its employees by providing water to each employee, ice in chests or other ice containers, or portable water dispensers with ice and individual drinking cups. The frequent drinking of water shall be encouraged by Supervisory Personnel. At times when employees are working at remote locations away from City facilities and Supervisory Personnel and in need of water, the City shall reimburse employees for their expense in full for their purchase of ice and water when the original receipt is submitted.

If employees are working at a site where no plumbed and potable water is available, Departments will supply sealed one-time use sanitized water containers. Departments will set aside funds for the purchase of water for employees working in locations where water is not plumbed or otherwise continuously supplied. Departments will also provide a receptacle for disposing of the used water containers.

Supervisory Personnel will verbally encourage employees to drink water. In addition, employees may receive reminder telephone calls and/or cell phone text message reminders.

B. Access to Shade

City employees may be exposed to direct sunlight when working outdoors. When outdoor temperatures exceed 80°F, shade shall be maintained in one or more work areas while employees are present. Shade is defined as the blockage of direct sunlight. Some sources of shade may include trees, canopies, pop-up tents, buildings, etc. When outdoor temperatures do not exceed 80°F, employees will have access to shade upon request or as needed. All employees will be provided with a shaded area, or other cooling methods that are at least as effective, for their rest/recovery breaks.

Shade is not adequate when heat in the area of shade does not allow the body to cool. Examples of inadequate places to seek shade are cars or parking booths (unless air conditioned), or near heat generating machinery.

Shaded areas shall not expose employees to other health or safety hazards. Areas underneath mobile equipment or areas that require crouching in order to sit fully in the shade are unacceptable.

Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade for a period when they feel the need to do so to protect them from overheating. Such access to shade shall be permitted at all times. An employee who takes a preventative cool-down rest shall be monitored by Supervisory Personnel and asked if they are experiencing symptoms of heat illness, encouraged to remain in the shade, and not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than five (5) minutes in addition to the time needed to access the shade. If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the City shall provide appropriate first aid or emergency response.

C. High Heat Procedures

High heat procedures shall be implemented by Supervisory Personnel when the outdoor temperature exceeds 95°F, including:

- Ensuring effective communication by voice, observation, or electronic means so that employees can contact Supervisory Personnel when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area where employees are working is reliable.
- Observing employees for alertness and signs or symptoms of heat illness by implementing one or more of the following:
 - Supervisory Personnel observation of 20 or fewer employees or;
 - Mandatory “buddy” system or;
 - Regular communication with employees by radio or cellular phone; or
 - Other effective means of observation.

- Designating one or more employees as authorized to call for EMS and allowing other employees to call for EMS when no designated employee is available.
- Encouraging employees to drink plenty of water throughout the work shift and take breaks in shaded areas as needed, either verbally or via electronic means.
- Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, remind employees of their right to take a cool-down rest when necessary, and discuss any proposed modifications to the work scheduled due to the weather conditions present.
- Conducting employee training to ensure that employees receive training on the necessity of being aware of and alert to the symptoms of heat illness in themselves as well as in others.
- Monitoring the weather hourly throughout the work shift and adjusting work assignments / work load as needed.

D. Acclimatization

The human body needs time to adjust to working in hot and humid conditions. When employees are exposed to the environmental and personal risk factors of heat illness, they should take proper precautions. Use of acclimatization, or the gradual adaption of the body to work in the heat, can help minimize an employee's chances of falling ill.

Acclimatization is important for employees who are, for example, returning to work after a prolonged absence, returning to work after being off sick, moving from a cooler climate to a hotter climate, or are in an area experiencing a heat wave bringing higher temperatures / humidity levels.

All employees shall be closely observed by Supervisory Personnel during a heat wave. Heat wave means any day in which the predicted high temperature for the day will be at least 80°F and at least 10°F higher than the average high daily temperature in the preceding five (5) days.

Most people become acclimated to significant changes in temperature by progressively increasing their workload over a period of up to fourteen (14) days. Therefore, an employee who has been newly assigned to a high heat area shall be closely observed by Supervisory Personnel for the first fourteen (14) days of employment.

E. Weather Monitoring

Supervisory Personnel shall receive instruction on how to track the weather on a job site by monitoring predicted temperature highs. Supervisory Personnel shall track the weather daily and assess the risk to workers. They shall know how hot it will be during scheduled work activities and use this information to determine which preventative measures should be taken including rescheduling of work, increasing employee water intake or cool-down rest breaks, or any other preventative measure they deem necessary to protect the health and safety of their employees.

The following are resources and tools that may be used to monitor weather:

- The National Oceanic and Atmospheric Administration (NOAA)'s National Weather Service website: www.nws.noaa.gov. Check with the National Weather Service to get the current or predicted heat index values and see a map of areas under excessive heat warning.
- Television and radio stations also announce the heat index as part of the local weather. Monitor weather reports daily to remain prepared for high heat index levels.
- OSHA's Heat Smartphone App:
(http://www.osha.gov/SLTC/heatillness/heat_index/heat_app.html)
Download to cell phones and use to check the heat index and to receive reminders about protective measures for specific risk levels.

In addition to the above, the Risk Analyst / Safety Coordinator may post weather information on the City's [SharePoint page](#).

F. Employee Training

Training shall be provided for employees upon assignment to work at locations where environmental risk factors for heat illness are present and annually thereafter. The Department shall maintain records documenting employee training received related to heat illness prevention according to the Department's document retention schedule.

Training in the following topics shall be provided to each employee upon initial employment and before the employee begins work which could reasonably be anticipated to result in exposure to the risk of heat illness:

- The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- The City's procedures for complying with the requirements of Cal-OSHA's Heat Illness Prevention standard, including but not limited to, the responsibility to provide water, shade, cool-down rests, and access to first aid, as well as the employees' right to exercise their rights under this standard without retaliation.
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
- The concept, importance, and method of acclimatization.
- The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and, in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.

- The importance of employees immediately reporting to their Supervisory Personnel, either directly or through another employee, the symptoms or signs of heat illness in themselves or in others.
- The City's procedures for responding to symptoms of possible heat illness, including how EMS will be provided should it become necessary.
- The City's procedures for contacting EMS and, if necessary, for transporting employees to a point where they can be reached by an EMS provider.
- The City's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site will be provided as needed to EMS. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

In addition to the above, Supervisory Personnel shall be provided with training upon initial employment and prior to supervising employees performing work that could reasonably be anticipated to result in exposure to the risk of heat illness on the following topics:

- The information required to be provided under Employee Training above.
- The procedures Supervisory Personnel is to follow when implementing the applicable provisions in this HIPP.
- The procedures Supervisory Personnel is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.
- How to monitor the weather and how to respond to hot weather advisories.

IV. Heat Illness Risk Factors

Heat illnesses can happen if workplace activities in a hot environment overwhelm the body's ability to cool itself. This becomes more likely if additional risk factors are present such as working in a hot environment without adequate access to water for rehydration, working in protective gear that does not allow air circulation across the skin, or working where the humidity is high and does not allow sweat to evaporate efficiently.

A. Environmental Risk Factors

Environmental risk factors for heat illness are working conditions that create the possibility that heat illness could occur. These factors include, but are not limited to, the following:

- Air temperature;
- Humidity;
- Air movement;
- Work severity and duration;

- Personal Protective Equipment (PPE).

B. Personal Risk Factors

Personal risk factors for heat illness include but are not limited to the following:

- Age;
- Health;
- Physical Fitness;
- Diet;
- Hydration (water consumption at work and away from work);
- Consumption of diuretics;
- Degree of acclimatization;
- Use of prescription and non-prescription medications.

C. Heat Balance

Heat illness results when the body is out of heat balance. Heat balance means that the heat the body produces equals the heat it loses. When the body is out of heat balance it produces and retains more heat than it loses causing heat illness.

D. Added Burden of Heat Load on the Body

Heat building up inside of the body from moving muscles during physical work activities is a major source of heat build-up in the body. About 75% of the stored energy the body uses to do physical work is converted into heat. Only about 25% of the energy is converted into the movements required to perform the work. The more strenuous the physical activity, the more internal heat the body produces. Performing physical work activities when risk factors for heat illness are present increases the internal heat the body produces. Added to this internal heat is the external heat load on the body which comes from working where environmental risk factors (e.g. hot air, direct sunlight or lack of effective shading) are present.

A major danger from warm and hot weather, high relative humidity, and lack of air movement is that these factors greatly slow the body's natural processes of releasing heat to the surrounding environment. All of these and other risk factors can increase the risk of heat illness. During a high heat period, the external heat load on the body from working in extremely hot temperatures is much greater. If it does not cool down at night, the heat load in the body continues to build up and the body never has a chance to cool down. This is especially true for employees who do not have access to air conditioned environments or other ways to cool down and rest in the evening. In addition, if there is humidity, sweat does not readily evaporate off the skin. This greatly slows the body's processes of

releasing heat to the surrounding environment causing the body to quickly over-heat. These cumulative effects of high heat can occur over one or more days causing employees to return to work with increased risk of developing heat illness.

E. Personal Protective Equipment (PPE)

The more the body is covered with materials which limit cooling, the greater the potential risk for heat illness. Wearing PPE which covers the body or face limits air movement and the cooling effects of sweating. This results in greatly reduced release of heat from the body to the surrounding environment and an increased heat load on the body. These factors make work tasks harder.

The type and level of PPE worn and the nature and duration of the work tasks are the main factors which determine an employee's additional risk of heat illness from wearing PPE. The types of PPE employees are required to wear can vary widely depending on the work tasks and exposures. PPE work can range from hard hats, gloves, boots, all the way up to a fully encapsulating chemical protective suit and a self-contained breathing apparatus (SCBA).

In warm or hot work environments, or where other environmental risk factors are present, wearing inappropriate work clothing can increase the risk of heat illness. Under these conditions, wearing appropriate work clothing can protect against the sun and other risk factors.

VII. Heat Illnesses and First Aid

There are several types of heat illness. The following sections will explain the symptoms, causes, and first aid procedures for heat stroke, heat exhaustion, and heat cramps. All signs or symptoms of heat illness should be reported to Supervisory Personnel immediately. If Supervisory Personnel observe, or any employee reports, any signs or symptoms of heat illness in an employee, Supervisory Personnel shall take immediate action commensurate with the severity of the illness (see IIPP Chapter 5 for details related to Medical Treatment of Industrial Injuries & Illnesses). If Supervisory Personnel are not immediately available, employees should be prepared to call EMS if the affected employee's signs or symptoms indicate potentially severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), and implement emergency response procedures.

An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services.

The first aid procedures recommended herein are published on the Center for Disease Control (CDC) and Prevention website: <http://www.cdc.gov/niosh/topics/heatstress/>. They are not intended to take the place of certified first aid training or the City's Emergency Action Plan. When in doubt on how to treat an ailing employee or if no one on site has the appropriate first aid training, call 911 immediately.

A. Heat Stroke

Heat stroke is the most serious heat disorder. It occurs when the body becomes unable to control its internal temperature; the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 104°F or higher within ten (10) to fifteen (15) minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Symptoms of heat stroke include:

- Hot, dry skin or profuse sweating;
- Hallucinations;
- Chills;
- Throbbing headache;
- High body temperature;
- Confusion / dizziness; and
- Slurred speech.

If it is suspected that an employee is suffering from heat stroke, the following first aid steps should be taken:

- Call 911 immediately and notify the employee's supervisor.
- Move the employee to a cool, shaded area.
- Offer small sips of water as tolerated.
- Cool the employee using methods such as:
 - Soaking their clothes with water;
 - Misting, sponging, or showering the employee with water;
 - Fanning the employee's body.

NOTE: Do not attempt to cool the body too rapidly as this can cause the employee to go into shock.

B. Heat Exhaustion

Heat exhaustion is the body's response to excessive loss of water and salt, usually through excessive sweating. Employees most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

Symptoms of heat exhaustion include:

- Heavy sweating;
- Extreme weakness or fatigue;
- Dizziness, confusion;
- Nausea;
- Clammy, moist skin;
- Pale or flushed complexion;
- Muscle cramps;
- Slightly elevated body temperature; and
- Fast and shallow breathing.

If it is suspected that an employee is suffering from heat exhaustion, the following first aid steps should be taken:

- Call 911 immediately and notify the employee's supervisor.
- Move the employee to a cool, shaded area.
- Offer small sips of water as tolerated.
- Cool the employee using methods such as:
 - Soaking their clothes with water;
 - Misting, sponging, or showering the employee with water;
 - Fanning the employee's body.

NOTE: Do not attempt to cool the body too rapidly as this can cause the employee to go into shock.

C. Heat Cramps

Heat cramps may affect workers who sweat a lot during strenuous activity. Sweating depletes the body's salt and moisture levels. Low salt levels in muscles cause painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Symptoms of heat cramps include:

- Muscle pain or spasms usually in the abdomen, arms, or legs.

If it is suspected that an employee is suffering from heat cramps, the following first aid steps should be taken:

- Stop all activity and sit in a cool place.
- Drink clear juice or a sports beverage.
- Do not return to strenuous work for at least an hour after the cramps subside because further exertion may lead to heat exhaustion or heat stroke.
- Seek medical attention if any of the following apply:
 - The employee has heart problems.
 - The worker is on a low-sodium diet.
 - The cramps do not subside within one hour.

VIII. Heat Illness Emergency Response

Prior to assigning employees to a particular site, Supervisory Personnel shall provide a map of the site, along with clear and precise directions (such as streets or road names, distinguishing features, and distances to major roads) to employees in order to avoid a delay of Emergency Medical Services (EMS). Efforts will be made to ensure that a qualified and appropriately trained and equipped person is available at the site to render first aid, if necessary.

Prior to the start of a work shift, a determination will be made regarding whether or not a language barrier is present at the site and steps will be taken (such as assigning the responsibility to call EMS to Supervisory Personnel or an English-speaking employee) to ensure that EMS can be immediately called in the event of an emergency.

All Supervisory Personnel will carry cell phones or other means of communication to ensure that EMS can be called. Checks will be made to ensure that electronic devices are functional prior to each shift.

When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once EMS has been called (to reduce the progression to a more serious illness). Under no circumstances will the affected employee be left unattended.

At remote locations, Supervisory Personnel will designate an employee or employees to physically go to the nearest road or highway where EMS can see them. If daylight is diminished, the designated employee(s) shall be given reflective vest(s) or flashlight(s) in order to direct EMS to the location of the site where the affected employee is located, which may not be visible from the road or highway.

During a heat wave or hot temperatures, employees will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.

If an employee does not look well and displays signs or symptoms of severe heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), and the site is located more than 20 minutes away from a hospital, call EMS, communicate the signs and symptoms of the victim, and request an air ambulance.

If the affected employee is hospitalized overnight for anything other than observation, the affected employee's immediate Supervisor shall report the incident to Cal-OSHA and Risk Management immediately, as described in Chapter 5 of this IIPP.

Employee and Supervisory Personnel training will include every detail of these written emergency procedures.

IX. Deviations

Deviations from the requirements of this program are not permitted, except where regulations are more stringent.

APPENDIX 36

WILDLAND FIRE FIGHTING PROTECTION

I. Scope

This section outlines requirements for advance planning to protect workers assigned to and fighting fires in wildland conditions with activities involving exposure to high air temperatures, radiant heat sources, high humidity, direct physical contact with hot objects, and arduous physical activities posing a high potential for inducing injury and/or illness.

II. Purpose

The purpose of this section is to create the framework for hazard identification, measures to prevent the occurrence of injury or illness induced by extreme physical demands and heat exposure, as well as, employee education and instruction in accordance with Federal and State laws including but not limited General Industry Safety Orders (GISO) §3410 and City of Santa Barbara Fire Department S.O.P. E-IV sections 1-6

III. Responsibilities

A. Fire chief

It is the responsibility of the Fire Chief to:

1. Confirm that departmental fire ground operations have been evaluated for potential exposures.
2. Direct all managers to implement awareness and training programs for particular exposures associated with Wildland Fire Fighting.
3. Ensure contracts and mutual aid agreements incorporate policies and practices set herein.

B. Managers

It is the responsibilities of each manager to:

1. Assess potential exposures to injury and illness associated with fireground operations and in particular with Wildland Fire Fighting.
2. Implement policies for safe work practices and personal protective equipment while Wildland fire fighting.
3. Ensure injury and illness prevention policies are communicated and carried out by supervisor to departmental Wildland Firefighter.

C. Supervisors

It is the responsibility of each supervisor to:

1. Assess each job task for potential excess hazards at a Wildland Fire scene and make command decisions and tactical priorities with employee safety as the primary criterion.
2. Instruct staff in the use of protective equipment and procedures for health and safety in accordance with GISO §§ 3401-3410 and Standard Operating Procedures (SOPs) for Wildland Fire Fighting including:
 - E-I-1Command Procedures
 - E-I-2Command Structures
 - E-I-3Command responsibilities
 - E-IV-1Responses
 - E-IV-2Mutual aid and strike team assignments
 - E-IV-3Tactics and strategy
 - E-IV-4Red Flag alert
 - E-IV-6Overhead positions
 - S-I-4Pack test
 - S-IV-1PPE general
 - S-IV-2Structure gear
 - S-IV-3Wildland gear
 - S-IV-6Eye, face and hearing protection
 - S-V-1Fire ground safety
 - S-V-3Hydration and heat stress
 - S-V-4Overhead and single resource
 - S-V-7LCES
 - S-V-8Fire shelters
 - T-II-14Hose packs
 - T-II-15.....Progressive hose lay
 - T-IV-2Use of hand tools
3. Provide annual Wildland Firefighting training to all employees who may be exposed to Wildland Firefighting exposures.
4. Assign personnel to monitor each employee's condition in the arduous tasks of Wildland Fire Fighting (see: SOP S-V-4)
5. Inform Wildland Firefighters when it is safe to remove personal protective equipment and when and where rest periods away from excess heat sources are available.

D. Employees

It is the responsibility of each employee to:

1. Follow instructions regarding awareness of acclimation, hydration, personal protection, clothing, and taking breaks while Wildland Fire Fighting.
2. Maintain fitness to meet arduous requirements of Wildland firefighting.
3. Report any physical symptoms of fatigue, injury, or heat stress when occurring.
4. Complete and stay current on all Wildland Fire Fighting SOPs and required fire training courses including:
 - S-190 - Basic Fire Behavior (given to all department employees)
 - S-290 - Intermediate Fire Behavior (given to all supervisors and acting supervisors)
 - S-234 - Firing Procedures (given to all supervisors and acting supervisors)
 - S-270 - Intermediate Air Operation Support (given to all supervisors and acting supervisors)
 - On going/quarterly training as Emergency Medical Technicians including training in heat related disorders and proper hydration.
5. Annually re-read SOPs listed in C.2 above.
6. Participate in annual pre-wildland fire season manipulative and classroom training to include:
 - Pre-fire season check of all fire safety clothing and equipment.
 - Extended hose lays and fire line construction.
 - The incident Command System
 - Safety issues for consideration as a single resource at a wildland incident.
7. Keep in communication with home base supervisor when Wildland fire fighting.

E. Risk Analyst

It is the responsibility of the Risk Analyst to upon request:

1. Assist Department Managers in complying with the requirements of this section.
2. Assist Supervisors with preparing appropriate training for employees who may be subject to the particular exposures Wildland Fire Fighting entails.

IV. Requirements For Assignment To Wildland Fires

- A. Assess each job assignment for its hazards
 - 1. Assigned personnel that do not have a history of heat illness and that have had sufficiently rested to perform arduous work.
 - 2. Assigned personnel that have completed all course and training requirements for Wildland Fire fighting and awareness of heat illness prevention.
- B. Develop procedures for addressing environmental conditions
 - 1. Upon assignment instruct personnel in acclimation, hydration, medical monitoring, and rest procedures.
 - 2. Upon assignment construct communication and personal monitoring system to identify individual over exposure and fatigue.
 - 3. Assess clothing and protective equipment needed given the job tasks and conditions.
 - 4. Rotate personnel when practical to reduce periods of exposure to excess heat and arduous tasks.
 - 5. Monitor for onset of changing conditions that may require a change in clothing, personal protection, tools, or medical attention.
- C. Work Practices
 - 1. Allow incoming employee(s) sufficient time to acclimate or provide extra rest periods from arduous level work when practical.
 - 2. Remind employees to continually hydrate and rest as heat exposure and fatigue demand.
 - 3. Maintain monitoring and/or communication system to stay in contact with all Wildland Firefighters.
- D. Contractors and Mutual Aid Agreements
 - 1. Evaluate each job contract or agreement for potential exposure to City employees or other personnel under the direction of City employees.
 - 2. Provide for procedures to limit and require appropriate training and personal protection of all Wildland firefighters employed by the City of Santa Barbara.
 - 3. Monitor contractors or mutual aid employees under City command.
 - 4. Contractors must demonstrate they are in compliance with the hazard assessment, employee training and personal protection requirements of all State and Federal mandates governing Wildland Fire Fighting

VI. Deviations

Only when the protection of workers is more stringent than this injury and illness prevention program prescribes are deviations permitted.

APPENDIX 37

FALL PROTECTION PROGRAM

I. Scope

This section establishes procedures, requirements and responsibilities for fall protection at work locations throughout the city. This section applies to all work performed by city employees, as well as any work performed under a contract or purchase order agreement by a third party (a contractor or subcontractor) on behalf of the city.

II. Purpose

This program outlines compliance requirements with federal and state regulations for employees working near elevations 30 inches or greater above the next lower level, for work near wall openings, floor openings, skylights, service pits, excavations and tree trimming. This program also describes fall protection when working over or near water, using ladders, scaffolds, and mobile equipment. The intent is that no person will be injured from a fall and that damage from falls of people or objects to the next lower level will be eliminated.

III. Definitions

ANSI. American National Standards Institute.

Controlled Access Zone (CAZ). An area in which certain work may take place without the use of guardrails, personal fall arrest systems, or safety nets and access to the zone is controlled.

Competent Person. One who is capable of identifying existing and predictable hazards that are dangerous to employees. The competent person has authority to impose prompt corrective measures to eliminate these hazards.

Deceleration Device. Any mechanism, such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.

Deceleration Distance. The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

Fall Protection Plan. A written document detailing measures to be taken in situations where the fall hazard for workers cannot be provided through conventional fall protection systems.

Personal Fall Arrest System (PFA). A system used to stop an employees during a fall from a working level and to keep from hitting a lower level or structure. The system consists of an anchorage, connectors, body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of the aforementioned components/devices.

Personal Fall Protection System (PFP). A personal fall protection system prevents a worker from falling or if the worker is falling, stops the fall. PFP systems include personal fall arrest systems, positioning device systems, fall restraint systems, safety nets and guardrails.

Personal Fall Restraint System. A system used to prevent an employee from falling. It consists of an anchorage, connectors, and body belt/harness. It may include, lanyards, lifelines, and rope grabs designed for that purpose.

Positioning Device System. A body belt or body harness system rigged to allow an employee to be supported on an elevated surface, such as a wall, and work with both hands free while leaning.

Qualified Person. A person designated by the employer who by reason of his training and experience has demonstrated his ability to safely perform his duties and, where required, is properly licensed in accordance with federal, state, or local laws and regulations.

Self-Retracting Lifeline/Lanyard. A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Snaphook. A connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object.

Unprotected Sides and Edges. Any side or edge (except at entrances to points of access) of a walking/working surface, e.g., floor, roof, ramp, or runway where there is no wall or standard guardrail or protection provided.

IV. General Policy

The City will provide a workplace that is safe from fall hazards. This will be accomplished, as far as practicable, by accepted engineering controls such as guardrails, toeboards, removable hole coverings, protective screens and barriers.

When working in city buildings, engineering controls have already been built into the building. However, if maintenance work is required it may be necessary to remove installed protective systems. In this case and when engineering controls are not feasible, personnel will use alternatives such as portable guardrails, warning systems, and/or personal fall protection systems.

Where these methods are not practical a written fall protection plan for a specific fall hazard must be prepared by a qualified person and approved by Risk Management and the Department Head.

V. Regulations

Within the State of California, the California Occupational Safety and Health Administration (Cal-OSHA) regulations apply. Many of these regulations may be more stringent than the Federal regulations. Cal-OSHA regulations are found in Title 8 of the California Code of Regulations (CCR). Requirements for fall protection are found in Article 2, Sections 3207, 3209, 3210, 3211, 3212, 3213 within the General Industry Safety Orders and Article 19, Sections 1632 and others within the Construction Safety Orders. Note that, depending on the task, fall protection requirements vary depending on whether the work is considered construction.

VI. Responsibilities

The primary responsibility for the implementation of this Fall Protection Program lies within each Department where fall protection is used. Department heads must ensure that the Fall Protection Program is implemented within their department and in effect at each work location. Others in the City are also critical to effective implementation. Risk management and department heads will identify qualified persons for fall protection. Specific responsibilities include the following:

A. Department heads will :

- i. establish firm internal requirements for all personnel to fully adhere to the policies established herein;
- ii. frequently verify compliance;
- iii. hold each manager fully accountable for preventable falls that occur within their area;; require non-complying managers to explain why the deviation occurred, offer recommendations to prevent similar recurrences, and implement additional prevention techniques;
- iv. contact Risk Management to obtain assistance to implement, maintain or improve fall protection.

B. Managers will:

- i. establish approved fall protection measures in their areas;
- ii. enforce compliance with this section;
- iii. ensure all staff fully understand and comply with this fall protection section;
- iv. ensure documentation of training of their staff is maintained and updated as required.

v.

C. Supervisors will:

- i. identify areas of potential fall hazards;
- ii. identify tasks requiring fall protection and the persons requiring training in fall protection;
- iii. ensure that persons assigned to a task requiring fall protection are trained in the specific measures used to protect the persons from falling;
- iv. provide fall protection devices, fall restraint systems, or personal fall restraint systems;
- v. inspect and maintain fall protection devices, restraint and personal restraint systems as required by the manufacturer of the systems;
- vi. ensure the proper storage of fall protection equipment.
- vii. act as or assign personnel to be qualified fall protection administrators.
- viii. report equipment needs to management.
- ix. hold employees accountable for failure to properly implement fall protection measures.

D. Qualified Persons will:

- i. inspect and verify all fall protection;
- ii. ensure that the protective measures meet the requirements of this section whenever installed fall protection systems are removed, or when fall protection requires use of temporary fall restraint systems or personal fall restraint systems; and
- iii. identify those situations that may arise during the course of work where fall protection cannot be implemented as described in this section and, therefore, requires a written fall protection plan for the intended work.
- v. notify supervisors when they believe the written fall protection plan should be further developed or altered to reflect changed working conditions.
- vi. notify supervisors when additional or replacement equipment is needed.

- E. Employees** working on tasks or in areas requiring fall protection will:
- i. use fall protection devices and personal fall protection systems as they were trained and in accordance with manufacturers' instructions and the requirements of this section;
 - ii. use only those devices selected by their supervisor and as required for the task;
 - iii. inspect equipment before each use and ensure that it is in good working order;
 - iv. report to a supervisor any defective equipment or equipment that actually has been subjected to a fall;
 - v. not use any defective equipment or equipment that has been subjected to a fall.

- F. Risk Analysts** will:
- i. assist departments and divisions in the selection and procurement of fall protection equipment, as appropriate;
 - ii. assist in arranging needed classes to provide Qualified Persons the information to write a fall protection plan and oversee the protection needed for work tasks.
 - iii. assist departments in evaluating work conditions and tasks that may require the use of fall protection equipment;
 - iv. periodically review, annually at a minimum, this fall protection section to verify that the section meets all applicable federal and state regulations.

VII. Requirements

Requirements differ if the task is considered to be a construction activity or an activity covered under Cal/OSHA's General Industry Safety Orders (GISO) and Construction Safety Orders (CSO). Fall protection in buildings is required when a fall to the next level is 30-inches or greater. Work conducted in locations that are not buildings or building structures require fall protection when the next level is 4-feet or greater below the level of the worker.

For construction tasks, such as work placing or tying rebar in walls or columns, a fall distance of more than 6 feet will require personal fall protection. For work on unprotected platforms, scaffold or the edge of structures, fall protection is required when the fall to the next lower level is 7½ feet or greater. There are additional fall protection requirements identified in the Cal/OSHA Construction Safety Orders that allow greater fall distances for specific construction activities.

A. Guardrails

i. Installed guardrails

Many work locations already have guardrails installed. Guardrails are needed wherever the workers could fall 7 ½ feet. They must meet the minimum requirements described below. Whenever guardrails must be removed for access to a work area, personnel must use an alternative personal fall protection system.

ii. Portable guardrails

When portable guardrails are used they must meet the same requirements as described below.

iii. Guardrail specifications

- a. The vertical distance from the top rail to the surface of the floor. Platform, ramp or runway will not be less than 42-inches nor more than 45-inches.
- b. The height of the mid-rail will be approximately half the distance from the floor, platform, ramp or runway to the top rail.
- c. Guardrail connections and anchorages must support a live load of twenty (20) pounds per linear foot applied either horizontally or vertically downward at the top rail. (Note: This applies to portable guard rails as well).

iv. Toeboards

Toeboards are required when the platform, ramp or runway is 6-feet [7 ½ feet-1621(a)] or more above places where employees normally work or pass. The toeboard is designed to protect against the hazards of tools, materials or equipment falling on the workers below. Toeboards will be constructed of wood, concrete, metal or other suitable material. If metal grill mesh is used the mesh should have openings of 1-inch or less. The toeboard will be at least 3½ - inches high and must not clear more than ¼-inch from the bottom surface to which it is mounted.

B. Elevated Locations requiring permanent or portable guardrails:

- i. unenclosed roof or floor openings, including work near skylights (see further discussion below);
- ii. open and glazed sides of landings;
- iii. balconies and porches;
- iv. platforms, docks, runways, ramps; and

- v. loading docks - loading docks can be protected by erecting a temporary barrier chain or portable barricade that meets aforementioned requirements. A further measure for protection is to mark or paint the surface of the dock with the standard OSHA hazard warning consisting of alternating yellow and black stripes for a distance of 3-feet from the dock edge toward the building. This way, workers will know when they are approaching the edge of the dock.

C. Wall Openings

Any opening in a wall or partition that is not provided with a glazed sash and having a height of at least 30-inches and a width of at least 18-inches through which a person might fall 30-inches [4ft and the opening in the opening bottom is less than 3 feet -1632(j)] or more below, will be guarded by a guardrail or other barrier capable of withstanding a force of at least 200 pounds applied horizontally at any point on the near side of the guard rail or barrier. If this is an area that normally is not accessed, workers may be protected by the use of a personal fall protection system.

D. Floor Openings

All floor and roof openings will be guarded by guardrails or by hinged or removable covers. When a cover is not in place, the opening will be constantly attended by someone or will be protected by guardrails. Toeboards will be installed around edges at openings where persons may pass below the opening. (A stairway or ladder way is excepted)

There are other specific exceptions, in the event work will occur near an opening where it does not seem practical to provide protection, contact a supervisor who can obtain the resources to take alternative measures to provide required protection.

Floor and roof opening covers will be designed by a qualified person and the covers must be capable of supporting at least 400 pounds or twice the weight of the employee, equipment and materials that may be imposed on any one square foot area

E. Roofs

For routine work, where an employee may approach within 6-feet of the edge of a roof more than four times per year, guardrails are required. (This presumes that the roof is flat.) For roofs where access is required less than four times a year, safety harnesses and lanyards or an approved fall protection system may be used in lieu of guardrails.

Work on sloped roofs

Routine work on monolithic roofs where the slope is 0:12-or greater requires safe access using equipment such as scaffolds, elevating work platforms or buckets. If a worker must work on a roof without this equipment, a personal fall protection system must be used.

For construction work activities, such as roofing a building, construction safety orders apply. In this case, there are specific requirements found in Article 30 of T8 CCR. For construction activities on roofs, fall protection is required at significantly higher limit (20-feet or greater above a lower surface). However, review sections [California Code of Regulations, Title 8, Section 1730. Roof Hazards.](#) regulation before allowing work to proceed, if personal fall protection systems are not used.

F. Skylights

When an employee approaches within 6-feet of any skylight the employee will be protected from falling through a skylight by one of the following:

- i. skylight screens specifically designed to meet strength requirements of covers previously mentioned, designed such that under loads or impact, they will not deflect sufficiently downward to break the glass below the cover. Construction of grillwork will have openings no more than 4-inches by 4-inches with openings not more than 2-inches wide with length unrestricted;
- ii. Guardrails;
- iii. Personal fall protection system;
- iv. Covers installed over the skylight (full covers, temporary) meeting 200 pounds capacity specifications; [see [California Code of Regulations, Title 8, Section 1632. Floor, Roof, and Wall Openings to Be Guarded.](#)] or
- v. A written fall protection plan by a qualified person and approved by a risk analyst.

G. Service Pits

Unused portions of service pits and pits not in actual use will either be covered or protected by guardrails. This can be accomplished by moveable posts or stanchions and chain rails or other guard rails that will provide equivalent protection.

H. Ground openings- excavations and trenches

Permanent yard surface openings such as pits or sumps will be guarded as required for floor openings. Guardrails or covers are customarily used.

Trench or conduit covers and their supports when located in roadways will be designed to carry a truck rear-axle load of at least 20,000 pounds.

Manhole covers and their supports when located in roadways will comply with local standard highway requirements, if any. Otherwise, they will be designed to carry a truck rear-axle load of at least 20,000 pounds.

Open excavations and trenches must be guarded or protected. For personal protection guardrails must be installed for any excavation that is 4-feet or greater in depth. Warning lines can be used as a method of protection if they are installed at least 6-feet away from the edge of the excavation. Where the excavation presents a hazard to traffic, barriers such as “K”-rails or “Jersey” barriers must be used. If this is not practical, other control measures may be used if designed and accepted by a qualified person.

Where work in excavations and/or trenches is considered construction, additional protective safety measures are required. Refer to T8 CCR, Construction Safety Orders, Article 6, Excavations.

I. Tree Trimming

Cal-OSHA regulations T8 CCR 3420, 3421 [California Code of Regulations, Title 8, Section 3421. General.](#) and 3427 establish requirements for tree work, maintenance and removal. A portion of these regulations address methods for safe climbing that relates to fall protection. Since other sections of the safety programs may not discuss these requirements, they are addressed here:

i. General Requirements:

- a. All tree work requires at least one employee to be a qualified tree worker. A qualified tree worker is an employee who, through related training and on-the-job experience, has demonstrated familiarity with the techniques and hazards of tree maintenance, removal and the equipment used in the specific operations involved.
- b. Each work location where tree trimming, tree repairing or removal is to be done will be under the direction of a qualified tree worker.
- c. Employees will be trained and instructed in the hazards involved in their job assignments, including the proper use of all equipment utilized in tree work, maintenance or removal operations. Such training shall be documented by the supervisor to certify that the employee has satisfactorily completed the training program prior to performing the job assignment.

- d. A job briefing shall be conducted by a qualified tree worker before each work assignment is begun. Such job briefing shall include the description of the hazards unique to a specific job, appropriate work procedures to be followed, work assignment and other items to ensure that the work can be accomplished safely.
- e. Prior to use, all equipment and safety devices shall be inspected and any found to be defective shall be immediately repaired or removed from service.
- f. Employees shall be trained in the identification and preventive measures relating to common poisonous plants and harmful animals.
- g. There will be an adequate supply of drinking water.
- h. Traffic control complying with Cal-OSHA requirements will be provided where vehicular or pedestrian traffic may endanger employees.
- i. Internal combustion engine fuel tanks shall be refilled as specified in the regulations.
- j. Rescue procedures will be established. There will be training in first aid and CPR and aerial rescue.
- k. Hearing protection will be required when noise levels exceed 90 dB.

ii. Safe Work Practices

- a Climbing and Access.
 - (1) Prior to climbing the tree, the tree shall be visually inspected by a qualified tree worker who shall determine and ensure a safe method of entry into the tree. The location of all electrical conductors and equipment within the work area shall be identified in relation to the work being performed. Workers must be a safe distance from any energized power lines.
 - (2) Only when a tree cannot be safely accessed by climbing or the use of aerial devices, a qualified tree worker may be hoisted into position by using an approved tree worker's saddle suspended from a crane's closed safety type hook that is equipped with a device or locking means to prevent the load from becoming disengaged. The tree worker's saddle shall also be secured to an independent line attached above the crane hook, and the following criteria shall be met:

- (a) All climbing equipment, lines and rigging shall have a minimum breaking strength of at as least 5000 pounds.
 - (b) The crane boom and load line shall be moved in a slow, controlled, cautious manner with no sudden movements when the qualified tree worker is attached to the crane.
 - (c) The requirements for hoisting employees by crane in a personnel platform contained in Sections 5004(d)(2), (4), (5), (6), and 5004(e) shall apply to the hoisting of a qualified tree worker suspended in an approved tree worker saddle.
 - (d) The qualified tree worker being hoisted shall be in continuous communication with the crane operator, or signals shall be relayed by a qualified signal person provided in Section 5001.
 - (e) The crane operator shall remain at the controls when the qualified tree worker is attached to the crane.
 - (f) The qualified tree worker shall be detached from the crane while the load is hoisted;
 - (g) The employer shall ensure that the crane operator and qualified tree worker determine the weight of the load being lifted to prevent the crane from being overloaded.
 - (h) The hoisting of a qualified tree worker shall be promptly discontinued upon indication of any dangerous weather conditions or other impending danger.
- (3) The climbing line must be crotched as soon as practicable after the employee is aloft, and a taut line-hitch tied and checked.

- (4) The climbing rope shall be passed around the main leader or a major upright branch of the tree as high as necessary using branches with a wide crotch to prevent any binding of the safety rope. The crotch selected for tying-in shall be over the work area as nearly as possible, but located in such a way that a slip or fall would not permit the employee to come in contact with any electrical conductor, equipment or other hazard. The rope shall be passed around the main leader or an upright branch, using a limb as a stop. Feet, hands, and ropes should, where possible, be kept out of tight-V-shaped crotches.
 - (5) When working aloft, employees shall be required to wear tree workers' saddles and tie-in with an approved safety strap or rope.
 - (6) Employees shall remain tied in until the work is completed and they have returned to the ground, unless it is necessary to recrotch.
- b Pruning and Trimming.
- (1) Employees shall be instructed to give an audible warning before a limb is dropped. "Timber," "headache" or "heads up" can be used for this purpose.
 - (2) A separate line shall be attached to limbs which cannot be dropped or are too heavy to be controlled by hand. The use of the same crotch for both safety rope and work rope shall be avoided.
 - (3) Cut branches (hangers) shall be removed from the tree prior to leaving the job site.
 - (4) With the exception of minor tree trimming, at operations involving tree maintenance or removal, a second employee shall be used at each work location to render immediate assistance.
- c Felling.
- (1) The work area shall be cleared to permit safe working conditions, and an escape route shall be planned before any cutting is started.
 - (2) A notch and backcut shall be used in felling trees over 10 inches in diameter.
 - (3) Just before the tree is ready to fall, an audible warning shall be given to those in the area. All personnel in the vicinity shall be safely out of range.

J. Fire Hose Drying Towers

The tower may omit the top rail on the working side of the platform if all of the following apply:

- i. the spacing between the hose drying fingers or hangers does not exceed 6-inches;
- ii. the drying fingers or hangers extend the full length of the platform along the opening or working side to within 6-inches of the end rails; and
- iii. the ends of the drying fingers or hangars are positioned at the same height as prescribed for the top rail within 5-inches from the vertical projection of the platform edge.

K. Work Over or Near Water

Unless employees are continuously protected by railings, nets, or personal fall restraint systems, work over or near water require workers to wear U.S. Coast Guard approved personal flotation devices of a type that will support an unconscious person's head above water. Additional requirements are:

- i. U.S. Coast Guard approved 30-inch ring buoys with at least 150 feet of 600 pound capacity line readily available for emergency rescue operations. Distance between ring buoys will not exceed 200 feet.
- ii. One or more lifesaving boats, either manually or power operated, readily accessible at all times. Refer to T8 CCR 1602 for additional details.

L. Scaffolds

The city may rent or use scaffolding. Contractors may also use scaffolding. Scaffolding requirements are very technical and detailed depending on the type of scaffolding used. Since the fall protection program is primarily intended to address fall protection and safe use of equipment to avoid falls, this section of the program discusses hazards common to all scaffolds and their use where falling from a scaffold is a factor.

For construction or erection of scaffolds refer to the regulations (T8 CCR sections 1635.1-1667). The type of scaffolding normally used is metal scaffolding either modular or tube and clamp. The erection, use, and dismantling of scaffolds requires a qualified person as defined by the regulations. Scaffolds are provided for all work that cannot be done safely by employees standing on permanent or solid construction at least 20-inches wide, except where such work can be safely done from ladders. Fall protection must be in place when a worker could fall 7 ½ feet or more from a scaffold.

- i. Construction**
The scaffold will be constructed as specified by the manufacturer of the scaffolding system. All parts will be inspected to ensure that they are in good condition and are compatible with the system (parts must be specifically designed for the specific system, they cannot be interchanged with other systems unless allowed by the manufacturer). The erection must be done under the supervision of a qualified person.
- ii. Planks**
All planking must be at least equivalent to 2-inch x 10-inch lumber of scaffold grade (Each plank must be stamped or embossed as meeting the requirements of a structural plank.) Planks will not overhang by more than 18 inches from their supports.
- iii. Access**
A safe unobstructed means of access such as a walkway, stair, or ladder will be provided to all scaffold platforms. If a ladder is used it will be securely attached and will comply with the requirements for ladder use including the requirement the ladder extends at least 3-feet above the platform level. At no time will cross bracing be used to access the platform.
- iv. Use**
Scaffolds can be used only for their intended load. They must be reasonably parallel and even with the ground. No worker will work on a scaffold where slippery conditions exist. Workers will not stand on guardrails to gain additional height. Ladders will not be used on scaffold platforms unless the scaffold has a design meeting regulatory requirements and the qualified person allows the use of the ladder.
- v. Guardrails**
Guardrails will be on all sides of the scaffold and will meet the requirements for guardrails as described previously. Where the scaffold is erected next to a building or wall, guardrails on the working side are not required as long as the distance between the wall and the scaffold platform does not exceed 8-inches.

M. Ladders

There are regulations that specify the construction and use of ladders. This section presumes that all ladders used by the city are purchased from a commercial vendor and that these ladders meet American National Standards Institute (ANSI) specifications and those of OSHA (ladders are marked with OSHA classification, Cal-OSHA does not have any standard that is more specific for ladders and uses the OSHA specifications). If job made ladders must be used, they will be constructed to the OSHA specifications found in the regulations (8 CCR 3278).

Ladders are most often used for access to another level such as a roof. Working from a ladder is particularly hazardous because workers can't hold onto the ladder with both hands. In addition, workers may reach or carry tools that may upset the balance of the ladder. When work is to be performed from a ladder more than 7½ feet from the ground, some form of fall protection like a harness and lanyard must be used.

i. General Use of Ladders

Employees will be prohibited from carrying equipment or materials that prevent safe use of ladders. This means that an employee cannot carry any items in their hands while climbing a ladder since they must always maintain at least three points of contact while climbing the ladder. Tools and equipment can be hoisted up using an approved system. For smaller lightweight items a bucket attached to a rope is acceptable. Employees will always face the ladder when climbing up or down the ladder and will always use both hands when climbing up or down the ladder. Employees will not stand on the top cap or the step below the top cap of a stepladder. For other types of specific ladders, see the discussion below. Ensure the ladder is rated for the load to be carried. Generally, a ladder designed to support 250-pounds is needed.

ii. Care, Use and Maintenance of Ladders (portable)

a. Only one person on a ladder unless the ladder is a double cleat ladder designed for use by two-way traffic.

- b. Maintain a ladder in good condition at all times. The joints between steps and side rails will be tight, all hardware and fittings securely attached, and moveable parts will operate freely without binding or undue play. Metal bearings of locks, wheels, pulleys, etc. will be frequently lubricated. Frayed or badly worn rope will be replaced. Safety feet and other auxiliary equipment will be in good condition.
- c. Inspect ladders before each use. Those that have developed defects will be withdrawn from service for repair or destruction. They will be tagged as “Dangerous, Do Not Use.”
- d. On two-section extension ladders the minimum overlap for the two sections in use will be 3 feet for a ladder up to and including 36-feet, 4 feet for a ladder over 36 feet and up to and including 48-feet, and 5 feet for a ladder over 48 feet up to and including 60-feet.
- e. When gaining access to a roof or platform the ladder must extend at least 3-feet above the point of access.
- f. Ladders will have non-slip bases. Ladders will be tied off at the top whenever there is chance the ladder could slip.
- g. Ladders will not be placed in front of doors opening toward the ladder unless the door is blocked open, locked or guarded.
- h. Ladders will not be placed on boxes, barrels or other unstable bases to obtain additional height. Ladders are not permitted on most scaffolds to obtain additional height unless the scaffold meets specific criteria.
- i. All rungs will be free of grease and oil or any other substance that would cause the rungs to be slippery.
- j. Employees will wear slip resistant boots or shoes when using ladders.
- k. Ladders will be raised at such a pitch that for every 4 feet in working height the ladder is one foot out horizontally.
- l. Ladders will not be used for any other purpose than to reach another level. They will not be used as ramps, gangways, bracing, skids, guy or gin pole, etc. Ladders will not be fastened together to make longer ladders.

- m. Cross bracing on stepladders will not be used for climbing.
- n. Metal ladders will not be used in the vicinity of electrical circuits. Metal ladders must be marked with a sign that reads: “ CAUTION – Do Not Use Around Electrical Equipment “
- o. Ladders should be stored on their side and laid flat. This will reduce the tendency to place other objects on top of a ladder or for people to walk on top of a ladder lying on the ground (a trip hazard, as well). This policy should reduce the potential of damage to ladder rungs.

N. Mobile Platforms (articulated bucket lifts, Skyjacks TM, elevated work platforms, etc.)

Employees using articulated bucket lifts, elevating work platforms, scissors lifts, Skyjacks, etc. must be trained in the use of the equipment and follow the manufacturers’ operating instructions. This training must be documented. Each device has specific requirements for the safe use of the equipment. For the fall protection program, this section discusses only those issues directly related to fall protection.

i. Elevated Aerial Devices

This category includes boom lifts with attached baskets and equipment with telescoping or articulating arms. The operator must wear fall protection. Guardrails alone are not enough with this type of lift because when the operator within the basket uses the controls to move the lift, the basket may bounce and catapult the operator out of the basket.

If using a personal fall arrest system for compliance, it is important to note that the system must not be anchored to the lift unless the aerial lift is capable of withstanding the loads imposed by an arrested fall. If this cannot be achieved, then a restraint system must be used and attached to the boom or basket.

ii. Mobile Platforms

Railings on an elevated platform are sufficient fall protection if guardrails on the equipment meet the OSHA guardrail requirements. Where the mobile platform has an anchor or attachment point for a personal fall protection system, employees will use a fall protection system and connect to the anchor point provided.

- a. Each platform has a rated capacity that must not be exceeded. For platforms that can accommodate more than one person, each person must use a fall protection system and must connect to a separate anchor point. No more than one person can connect to the same anchor point unless the point is rated and marked as being able to accept the anchoring of more than one person to that point.
- b. Where no anchor point is provided, the platform probably does not require persons on a platform to be attached to a fall protection system. For example, personnel in scissors lifts are already protected by guardrails and may not be required to wear a fall protection. However, if lanyard anchor points are provided, they will be used for the personal fall protection system. In no case will lanyards be attached to any component of a mobile platform (guardrails, platforms, etc.). Lanyards will be attached only to designated lanyard anchor points.
- c. Employees will access the platform as designated by the manufacturer for the equipment. Employees will not walk on any part of the equipment that is not intended to be used for access or egress.
- d. If there are lanyard anchor points the employee will connect the lanyard of the personal fall protection system to the anchor point before the mobile platform is moved or raised.
- e. Personnel on elevated mobile platforms must have controls to raise and lower the platform and to move the platform. Some manufacturers require that personnel not be moved horizontally on the ground with the platform raised or in some cases personnel may not ride the platform at all. Consult the manufacturers' directions before using the platforms.
- f. Guardrails will not be climbed to gain access to a greater height. Ladders and any other item that would allow a worker to reach up higher are prohibited on mobile platforms.

VIII. Personal Fall Protection Equipment

Personal fall protection equipment is used whenever other protective measures are impractical. Personal fall protection equipment must be worn by employees whose work exposes them to falling in excess of 4 feet or greater for work conducted in locations that are not buildings or building structures.

For construction tasks, such as work placing or tying rebar in walls or columns, a fall distance of more than 6 feet will require personal fall protection. For work on unprotected platforms, scaffold or the edge of structures, fall protection is required when the fall to the next lower level is 7½ feet or greater. It is also required when work is conducted on roofs sloped steeper than 7:12 or down slopes steeper than 40 degrees. As stated in Section VII of this document, additional fall protection requirements are identified in the Cal-OSHA Construction Safety Orders that allow greater fall distances for specific construction activities.

A. Personal Fall Restraint (PFR) System

A personal fall restraint system consists of a full body harness or body belt, connection devices and an anchor point. Optionally, a lifeline and other accessories may also be part of the system.

i. Full Body Harness

A full body harnesses may be used for personal fall restraint. Body harnesses must meet the ANSI requirements and be constructed of materials required by OSHA. Harnesses must be “sized” to the individual using the harness. Thus, it may be necessary to have a variety of sizes available for use by the workers. Full body harnesses must be inspected prior to each use. The harnesses must be donned so that the back “D” ring (attachment point) is positioned between the shoulders. A competent person must train workers in the use and wearing of a full body harness. Inspections shall be conducted prior to use for wear damage and other deterioration. A competent person must inspect full body harnesses at least every six months according to manufacturers’ directions. Any harness subjected to “in-service loading” will be tagged and removed from service and will not be used again. Full body harnesses will never be used for hoisting loads.

ii. Body Belt

Body Belts can be used only as a positioning device or within a personal fall restraint system. **Body belts are not approved for use in a personal fall arrest systems.** Body belts must be at least one and five eights inches wide. Inspection and removal from service requirements are the same as a full body harness.

iii. Connection Devices

Connection devices attach to the harness or body belt to the anchorage point. This is typically conducted through the use of lanyards

a. Lanyards

Lanyard is a general term used for the device that attaches between the worker's full body harness or body belt and an anchor point. Lanyards are used to restrain workers from a fall or provide within a position and to arrest falls. When using a lanyard as a positioning device device, it should not allow a worker to fall more than two feet. In a restraint system the lanyard length should be kept as short as possible to only allow the movement of employees only as far as the sides of the working level or area.

Lanyards have different types of configurations depending on use. Most commonly used are lanyards with double-locking snap hooks at each end of the lanyard. For fall protection only double locking snap hooks can be used. Once a lanyard has been subjected to a "in-service " load it must be discarded. Lanyards will never be used for hoisting. A competent person must inspect all lanyards.

iii. Anchorage Point

The anchorage or anchor point is the "immovable" point to which a fall protection system is attached. The anchor point used for fall restraint shall be capable of supporting 4 times the intended load. Anchorage points used for positioning device systems are to be capable of supporting two times the intended load or 3000 pounds whichever is greater. If anchor points are not designated, the competent person must determine methods for anchoring. Sometimes a structural engineer may be needed to ascertain what points are safe anchorages.

B Personal Fall Arrest (PFA)

A Personal Fall Arrest System is used to stop an employee during a fall from a working level and to keep him or her from hitting a lower level or structure. Each personal fall arrest system shall be inspected every six months by a competent person in accordance with manufacturer's recommendations. The date of each inspection shall be documented. A personal fall arrest system must be under the supervision of a qualified person. This system includes the components and requirements identified within a Personal Fall Restraint System, with the following additional requirements, information and/or equipment.

i. Full Body Harness

All Full body harness requirements listed in Section A, Personal Fall Restraint, must be followed. Body belts are prohibited in personal fall arrest systems.

ii. Connection Devices

Connection devices within a fall arrest system can be one device such as a lanyard or a combination of devices such as lanyards, lifelines, worklines and rope grabs.

a. Lanyards

Lanyards used in fall arrest systems shall be configured to neither allow a free fall of no more than four feet nor contact any lower level. In addition to requirements listed in personal fall restraint systems, the safety lanyard must be a shock-absorbing lanyard. Lanyards will have a minimum breaking strength of 5,000 pounds.

- b. **Retractable Lifelines**
Retractable lifelines are devices designed to stop a person from falling more than 2-feet or less. These are often used when working on fixed ladders or other situations where an employee can step back up; this releases the life line and allows the employee to self rescue. Once a retractable lifeline has been subjected to an “in-service” load it must be removed from service and sent back to the manufacturer for inspection and testing. Manufacturers also require that retractable lifelines are sent back to the manufacturer for inspection on a periodic basis. Check with the manufacturer to determine the frequency of periodic inspections by them. A competent person must inspect all retractable lifelines before use.

- c. **Lifelines**
Lifelines must be capable of supporting a dead weight of 5,000 pounds. If lifelines are to be used in a fall protection system a competent person must authorize their use (see discussion on rigging below). Lifelines must meet OSHA requirements for the type of materials used in the lifeline. All life lines must be inspected prior to use and cannot be used for hoisting loads. Once subject to an “In-service” load, lifelines must be removed from service and discarded.

iii. Anchorages

The anchorage or anchor point is the “immovable” point to which a fall restraint system is attached. The anchor point is the critical point in the fall arrest system because if the anchor doesn’t hold the rest of the system is useless. Therefore, it is essential that an anchor point can support the intended weight and be part of a system which maintains a safety factor of at least two.

The anchor point must be independent of any anchorage used to support or suspend platforms and must be able to withstand a weight of 5000 pounds for each person in a fall arrest system. If two persons are connected to the same anchor point, that point must be able to withstand a weight of 10,000 pounds and so on.

If anchor points are not designated, the competent person must determine methods for anchoring. Sometimes a structural engineer may be needed to ascertain what points are safe anchorages.

C. Rigging

Whether the system in use is either a fall restraint, positioning or fall arrest, it is critical to determine the fall distance of these systems in order to insure proper clearances and rigging so that employees do not strike the surface of the ground or object in the event of a fall.

Restraint systems do not allow for a fall, therefore no clearance calculation is required

Work positioning systems are allowed a maximum two foot free fall. These systems are already set up to allow a two foot fall. Employee height and placement of the anchor will determine where the employee will land in the event of a fall

Fall arrest systems are more complicated in that consideration must be given to all components within the system and the variables associated with their use. The following factors must be evaluated when determining fall distances:

- i. location of anchor point (shoulder height or above);
- ii. length of lanyard;
- iii. maximum tear out of lanyard (shock absorbing factor);
- iv. height of worker; and
- v. stretch of harness.

As an example, an entire fall arrest system consists of the full body harness with the D-ring on the back between the shoulders of a wearer, a 6-foot lanyard attached to an anchor point. The choice of the anchor point is important. It should be located above the worker. Consider a 6-foot person with a 6-foot lanyard. If this person falls, 1 ½ feet of lanyard deploys and for safety we add a 3-foot safety factor. If this instance, the length of the fall will be at least 16 ½ feet. So if the next lower surface is less than 16 ½ feet it is possible the worker will hit the next lower surface, that is why it is important to anchor as high overhead as possible in those situations. For example, if the anchor point is 6 feet over the height of the worker, the minimum fall distance would now be 10 ½ feet with built in safety factor (without the safety factor it's 7 ½ feet which is the height at which OSHA requires the use of fall protection systems).

It is also important to note when planning fall distances, obstructions such as pipes, conduits, beams, trusses and even other workers must be factored into the equation. Hitting an object on the way down may result in just as severe of an injury as hitting the ground.

Swing or pendulum falls are additional concerns, this type of fall occurs when anchor points are set at extreme angles to the position of the worker. Falls generated from the side can impact a worker against a beam or wall with nearly as much force as a vertical fall. For this reason anchor points should remain as close to the employee's body position as possible.

IX. Fall Protection Plan

A Fall Protection Plan must be implemented when a fall protection system is required but not used because the system creates a greater hazard or is impractical. The fall protection plan must:

- i. be prepared by a qualified person who is identified in the plan;
- ii. be developed for a specific site or developed for essentially identical operations;
- iii. be updated by the qualified person;
- iv. document why a conventional fall protection system is not used;
- v. identify the competent person to implement and supervise the Fall Protection Plan;
- vi. identify the controlled access zone for each location where conventional fall protection system cannot be used;
- vii. identify employees allowed in the Controlled Access Zone; and
- viii. be implemented and supervised by the competent person.

X. Rescue From a Fall

Whenever a person falls, there must be a plan in place to rescue a worker. A worker should never be left “hanging” more than 15 minutes. Prolonged suspension from fall arrest systems can lead to serious health implications due to “orthostatic intolerance”. This is a condition where venous pooling of blood occurs in the legs and reduces the amount of blood in circulation. This can lead to symptoms of light headedness, fatigue, nausea, dizziness, sweating and fainting and even death. This can occur in less than 30 minutes. To reduce the risk associated with prolonged suspension in a fall arrest system, work crews should plan for a rescue prior to site operations.

XI. Training

Employers are required to provide training for any employee who might be exposed to a fall hazard prior to the exposure or upon hiring. Training must include the following:

An explanation of the City of Santa Barbara Fall Protection Program and safe work practices with general instructions and precautions, specific instructions where required, hazard identification and correct selection and proper use of protective devices and maintenance of equipment. Instruction should also include correct procedures for inspecting, erecting, disassembling and maintaining all protection systems used and the employee’s role in all safety monitoring. Basic and essential elements of the program should be clearly described and understood by all workers.

Training provided to all employees must be documented.

When the City has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the City shall retrain such employees.

Other circumstances where retraining will be required include, but are not limited to, situations where changes in the workplace render previous training obsolete or where changes in the types of fall protection systems or equipment to be used render previous training obsolete.

APPENDIX 38:

AUTOMATED EXTERNAL DEFIBRILLATOR (AED) PROGRAM

I. Scope

This Program establishes the procedures and guidelines for City of Santa Barbara employees using an automated external defibrillator (AED) in City facilities or at City functions. This written Program is to comply with California Code of Regulations, Title 22, Division 9, Chapter 1.8 and all applicable Health and Safety Code sections. All City practices herein shall be in accordance with this IIPP and, specifically, Appendix 7 First Aid and CPR, as well as, Appendix 17 Infection Control.

II. Purpose

The intent of this Program is to develop and maintain a team of trained first aid providers qualified to give immediate help in an emergency situation where an available AED is needed and to provide guidance to the operating Departments for the procurement, training, use, and maintenance of AEDs.

III. Responsibilities

A. Department Heads

Department Heads shall:

- i. Assign a Department AED Coordinator;
- ii. Verify that staff routinely comply with the guidelines of the City's AED Program;
- iii. Hold Managers and Supervisors fully accountable for an explanation of these guidelines;
- iv. Contact Risk Management for any assistance needed to implement this Program;
- v. Learn and know what the City's AED Program entails and enforce compliance with its guidelines; and
- vi. Review all use of AED records in consultation with Risk Management.

B. Department AED Coordinator

The Department AED Coordinator shall:

- i. Notify the Santa Barbara Fire Department of the existence, location, and type of AEDs acquired and placed by the Department.
- ii. Keep a current inventory of all AEDs under the Department's control;
- iii. Annually, notify the Department employees and/or building tenants under the

Department's control as to the location of the AED units placed and provide information to the employees and/or building tenants about who they can contact if they want to voluntarily take AED, First Aid, or CPR training;

- iv. Ensure that instructions for use are posted next to each Department controlled AED in no less than 14-point type on how to use the AED;
- v. Ensure that the AEDs in their Department are maintained and tested according to the operation and maintenance guidelines set forth by the manufacturer;
- vi. Ensure that the AEDs in their Department are tested at least biannually and after each use;
- vii. Ensure that the AEDs located in their Department are inspected at least every 90 days for potential issues related to operability of the device, including a blinking light or other obvious defect that may suggest tampering or that another problem has arisen with the functionality of the AED;
- viii. Ensure that an AED is removed after use to have it inspected and maintained according to the manufacturer's requirements before returning it back to service;
- ix. Ensure the performance of battery checks and routine maintenance are performed before installing any spare AED units within their Department, or prior to reinstalling an AED unit being returned to service;
- x. Ensure records related to AED use, testing, maintenance, and inspection are maintained in accordance with the Department's record retention policy; and
- xi. Learn and know what the City's AED Program entails.

C. Managers

Managers shall:

- i. Appoint, recruit, and provide certification and re-certification classes for employees on an ongoing basis to render first aid in an emergency situation;
- ii. Ensure that employees are permitted and encouraged to attend AED, First Aid, and CPR training;
- iii. Ensure that the AEDs located within their assigned work are maintained and tested as required;
- iv. Notify the Department AED Coordinator when additional AED(s) are placed within their assigned work area(s);
- v. Keep records listing the names of employees trained to use, inspect and maintain the AED in the work area;
- vi. Report all uses of any AED located within their assigned work area(s) and calls to

emergency responders immediately to Risk Management as either a work injury or an incident involving a member of the public;

- vii. Periodically review the records maintained by the Department AED Coordinator related to the AED located within their assigned work area(s); and
- viii. Learn and know what the City's AED Program entails.

D. Supervisors

Supervisors shall:

- i. Encourage employees to attend AED, First Aid, and CPR training;
- ii. Maintain a contact list of all CPR, AED, and First Aid certified employees under their supervision;
- iii. Ensure all authorized employees trained in CPR, First Aid, and AED use are knowledgeable about the internal emergency response plan;
- iv. Annually, review with employees the instructions for use specific to the AED located in their assigned work area;
- v. Learn and know what the City's AED Program entails and educate each employee under their supervision about the City's AED Program; and
- vi. Ensure that 9-1-1 is called for all incidents where first responders use an AED to care for an injured individual.

E. Risk Management

Risk Management shall:

- i. Review and update this Program as needed to ensure compliance;
- ii. Sponsor annual CPR, First Aid, and AED training open to all City employees;
- iii. Maintain records of training courses and employee attendance;
- iv. Provide information, direction, and assistance to Departments regarding the City's AED Program;
- v. Assist Fire Department with the selection of AEDs placed in City facilities;
- vi. Review all use of AED records received from AED Coordinators;
- vii. Fully investigate all AED use incidents; and
- viii. Seek Medical Director feedback with regard to improving employee preparation and AED procedures following any use of AED event, upon direction from the Risk Manager.

F. Fire Department

Fire Department shall:

- i. Keep a current inventory of all AEDs under the City's control;
- ii. Maintain a current list of all Department AED Coordinators;
- iii. Make recommendations to the City Safety Committee for placement of additional AEDs within City facilities or vehicles;
- iv. Notify the agent of the local EMS agency of the existence, location, and type of AEDs acquired by the City;
- v. Be a resource to the Departments for selection of AEDs;
- vi. Seek alternative funding/procurement sources for the placement of additional AEDs, as staff time allows; and
- vii. Provide information, direction, and assistance to departments regarding the City's AED Program.

G. Employees

Employees shall:

- i. Learn and know what the City's AED Program entails; and
- ii. Take universal precautions, including the use of personal protective equipment, and follow their training when providing first aid.

IV. Requirements

In order to ensure public safety, a person or entity that acquires an AED shall do all of the following:

- i. Comply with all regulations governing the placement of an AED.
- ii. Notify an agent of the local EMS agency of the existence, location, and type of AED acquired.
- iii. Ensure that the AED is maintained and tested according to the operation and maintenance guidelines set forth by the manufacturer.
- iv. Ensure that the AED is tested at least biannually and after each use.
- v. Ensure that an inspection is made of all AEDs on the premises at least every 90 days for potential issues related to operability of the device, including a blinking light or other obvious defect that may suggest tampering or that another problem has arisen with the

functionality of the AED.

- vi. Ensure that records of the maintenance and testing required pursuant to this paragraph are maintained.

V. Placement of AED

A manufacturer or retailer supplying an AED shall provide to the City all information governing the use, installation, operation, training, and maintenance of the AED.

When an AED is placed in a City building, the City shall do all of the following:

- i. At least once a year, notify the tenants as to the location of the AED units and provide information to tenants about who they can contact if they want to voluntarily take AED or CPR training.
- ii. At least once a year, offer a demonstration to at least one person associated with the building so that the person can be walked through how to use an AED properly in an emergency. The City may arrange for the demonstration or partner with a nonprofit organization to do so.
- iii. Next to the AED, post instructions, in no less than 14-point type, on how to use the AED.
- iv. A medical director or other physician and surgeon is not required to be involved in the acquisition or placement of an AED.

VI. Training

Training in the use of an AED shall conform to the standards and guidelines of organizations such as the American Heart Association, the American Red Cross, the National Safety Council, or other training programs that meet or exceed the standards identified in Title 22 of the California Code of Regulations and any other controlling regulations.

VII. Internal Emergency Response System

In the event of a serious medical emergency, the following steps should be followed by an employee who responds to a medical emergency event:

- i. Assess the situation and ensure the scene is safe prior to proceeding with assistance. If not safe, either make it safe or wait for Emergency Medical Services (EMS) to arrive.
- ii. Activate Emergency Medical Services (EMS) by calling 9-1-1. Please note that the City's phone system requires that you first dial "9" for an outside line and then dial "9-1-1". Provide the nature, location, number of people involved and what actions are currently being taken to manage the incident.
- iii. Designate someone to promptly direct the EMS resources when they arrive at the scene.

- iv. Employees administering medical aid shall take necessary infection control precautions by donning appropriate personal protective equipment, such as gloves, goggles, masks, as designated and required in IIPP, Appendix 17 Infection Control.
- v. Employees administering first aid will determine the most appropriate course of action to take in accordance with their first aid training and provide the best care to the victim(s) involved prior to the arrival of medical professionals.
- vi. Assess whether the AED is needed.
- vii. If the AED is not needed, the employees should continue to give proper care in accordance with their first aid training until medical professionals arrive.
- viii. If the AED is needed (patient is non-responsive and not breathing), direct someone to retrieve the AED from its current location and initiate basic CPR. Continue to perform CPR until the AED arrives.
- ix. As soon as the AED arrives, turn the unit on.
- x. Employees providing first aid shall use the AED in accordance with their training and the AED manufacturer's instructions for use.
- xi. Employees providing first aid shall follow the AED voice prompts to ensure best results.
- xii. Employees shall transfer care to EMS or other medical professionals upon their arrival at scene.
- xiii. The responding employee shall document all actions taken on Attachment A – Report of AED Use.
- xiv. The Division Supervisor and Manager will review the Report of AED Use and provide copies to Risk Management, the Department Head, and the Department AED Coordinator.

VIII. Failure of the AED

In the unlikely event that the AED does not operate properly, responding employees shall continue with basic life support measures, including CPR, until EMS or other medical professional arrives on scene.

IX. Use of the AED

Prior to using the AED, and in accordance with an employee's first aid training, the responding employee should first confirm that the victim is not bleeding. If the victim is bleeding, then the responding employee should first attempt to control the bleeding, in accordance with their first aid training. If there are no obvious signs of bleeding or trauma and the victim is non-responsive and not breathing or taking agonal respirations, when the AED arrives:

- i. Turn on the AED and follow the voice prompts.

- ii. Remove all clothing covering the victim's chest. This may involve cutting the clothing with scissors to expedite removal.
- iii. Place the pads as prompted by the AED. It is not necessary to shave chest hair unless it seems like the chest hair is so thick that it will interfere with pad-to-skin contact. If this is the case, quickly shave the areas of the chest where the pads will be placed and then attach the pads.
- iv. Plug the connector cable into the AED if necessary.
- v. Let the AED analyze the victim's heart rhythm. Push the "analyze" button to start the process if necessary. Make sure no person or animal, including you, is touching the victim. Say, "EVERYONE CLEAR!" in a loud commanding voice.
- vi. Deliver a shock if the AED determines one is needed. Make sure no person or animal, including you, is touching the victim prior to delivering the shock. Say, "EVERYONE CLEAR!" in a loud commanding voice.
- vii. After the AED delivers the shock, or if the AED does not advise a shock, immediately begin CPR, starting with compressions.
- viii. The AED will continue to check the heart rhythm every two minutes. Listen for prompts from the AED and continue giving CPR. Follow the AED's prompts until you see an obvious sign of life or EMS personnel arrive. If you see an obvious sign of life, stop CPR, but leave the AED turned on and the pads in place on the person's chest, continuing to follow the AED's prompts.

X. Notification of Use of AED

Once Risk Management is notified that the AED has been used during a medical emergency, Risk Management shall contact the City Administrator and any other necessary contacts within eight (8) hours of the incident.

XI. Placing the AED Back In Service

The AED Coordinator shall contact the AED manufacturer to request specific instructions for returning the Department AED back in service. This process may include:

- Replacing the battery in the AED;
- Performing a complete battery insertion test (BIT);
- Replacing the electrode pads;
- Replacing any other PPE or first aid supplies used during the medical response; and
- Requesting a new AED data card from the manufacturer or licensed equipment supplier.

XII. Review of Incidents

A. Internal Post Event Documentation

It is important to document each use of the AED. As such, a Report of AED Use shall be completed by the responding party each time the AED is used. See Attachment A – Report of AED Use. These forms can be obtained from the Department AED Coordinator.

B. External Post Event Feedback

After notification of the use of the AED, the City may seek the Medical Director's feedback with regard to improving employee preparation and AED procedures. This may include providing the Report of AED Use and any data stored on the AED to the Medical Director for review and comment.

XIII. Recordkeeping

A. AED Coordinators

The AED Coordinator for each participating Department shall maintain the following records:

- i. All Department generated Report of AED Use forms;
- ii. All Department generated records related to testing, maintenance, and inspection;
- iii. Documents evidencing annual notification to the Department employees and/or building tenants under the Department's control as to the location of the AED units placed and provide information to the employees and/or building tenants about who they can contact if they want to voluntarily take AED, First Aid, or CPR training; and
- iv. Inventory of all AEDs under the Department's control.

B. Managers

The Manager for each participating Department shall maintain the following records:

- i. All records listing the names of employees trained to use, inspect and maintain the AED in the work area.

C. Supervisors

The Supervisor for each participating Department shall maintain the following records:

- i. Contact list of all CPR, AED, and First Aid certified employees under their supervision; and

- ii. Records of training courses and employee attendance, including employee certificates of completion of CPR/AED/First Aid training.

D. Risk Management

Risk Management shall maintain the following records:

- i. Records of training courses and employee attendance.

E. Fire Department

The Fire Department shall maintain the following records:

- i. Current inventory of all AEDs under the City's control; and
- ii. Current list of all Department AED Coordinators

XIV. Deviations

Deviation from the requirements of this standard are not permitted, except where local regulations are more stringent.

Attachment A

Report of AED Use

PREPARED BY RESPONDER POST-USE

AED Model: _____ Date of Occurrence: _____

Department: _____ Time of Occurrence: _____

Place of Occurrence: _____

Responder Name: _____

Victim's Name (if known): _____

Victim's Sex: Male _____ Female _____

Approximate Down Time Prior to Responder's Arrival: _____

Witnessed Collapse/Arrest: Yes _____ No _____ Alert Time (time aware person down): _____

Bystander CPR Prior to AED at Victim: Yes _____ No _____

Time AED at Victim's Side: _____ Time of First Shock (if given): _____

Total Number of Shocks: _____ Did Victim regain a pulse? Yes _____ No _____

Victim discharged from hospital? Yes _____ No _____ Unknown _____

Responder Signature: _____ Date: _____

Reviewed By Supervisor: _____ Date: _____

Reviewed By Manager: _____ Date: _____

SUPERVISOR – PLEASE PROVIDE COPIES OF THIS REPORT TO THE FOLLOWING:

Risk Management (copy)

Department Head (copy)

Department AED Coordinator (original)

Please attach any additional information that you think would be helpful.

Attachment B

APPENDIX 39

RESPIRABLE CRYSTALLINE SILICA PROGRAM

I. Scope

This Respirable Crystalline Silica Program (RCSP) was developed to prevent employee exposure to hazardous levels of Respirable Crystalline Silica (RCS). RCS exposure at hazardous levels can lead to lung cancer, silicosis, chronic obstructive pulmonary disease, and kidney disease.

II. Purpose

All work involving chipping, cutting, drilling, grinding, or similar activities on materials containing crystalline silica can lead to the release of respirable-sized particles of crystalline silica (i.e. RCS). Crystalline silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of crystalline silica. Many construction materials contain crystalline silica including, but not limited to, cement, concrete, asphalt, pre-formed structures (inlets, pipe, etc.), and others. Consequently, this RCSP has been developed to address and control these potential exposures and to prevent City employees from experiencing the effects of occupational illnesses related to RCS exposure.

III. Authority

California Code of Regulations (CCR):

- Title 8 CCR 1532.3, Occupational Exposures to Respirable Crystalline Silica (Construction Standard)
- Title 8 CCR 5155, Airborne Contaminants
- Title 8 CCR 5204, Occupational Exposures to Respirable Crystalline Silica

Code of Federal Regulations (CFR):

- Title 29 CFR 1926.1153, Respirable Crystalline Silica

IV. Applicability

This RCSP applies to all City employees who have the potential to be exposed to RCS.

V. Responsibilities

The City firmly believes protecting the health and safety of its employees is everyone's responsibility and, therefore, all levels of the City organization assume some level of responsibility for this program.

A. Department Head

It is the responsibility of each Department Head to:

1. Provide the necessary resources to ensure the health and safety of employees.
2. Confirm that departmental tasks have been evaluated for potential RCS exposure.
3. Ensure departmental compliance with the City's RCSP policies and procedures.
4. Ensure that Managers, Supervisors, and Lead Workers with supervisory duties are trained on their responsibilities under the RCSP.

B. Manager

It is the responsibility of each Manager to:

1. Ensure that Supervisors, Lead Workers, and employees within the City Department or Division they oversee are educated in the hazards of silica exposure and trained to work safely with silica in accordance with OSHA's Construction Standard Table 1. Supervisors and Lead Workers may receive more advanced training than other employees.
2. Ensure all applicable elements of this RCSP are implemented within the City Department or Division that they oversee.
3. Assist the Supervisor in selecting the appropriate engineering and work practice control methods outlined in Table 1 to limit employee RCS exposure while engaging in construction tasks and equipment operation.

C. Supervisor

It is the responsibility of each Supervisor to:

1. Select the appropriate engineering and work practice control methods outlined in Table 1 to limit employee RCS exposure while engaging in construction tasks and equipment operation.
3. Ensure that the materials, tools, equipment, personal protective equipment (PPE), and other resources required to fully implement and maintain this RCSP are in place and readily available if needed.
4. Maintain written records of training, inspection, respirator medical clearances, and fit-test results.
5. Coordinate work with other City Departments or Divisions and contractors to ensure a safe work environment relative to silica exposure.
6. Ensure that employees using respirators receive proper training, medical clearance, and fit-testing in accordance with the City's Respiratory Protection Program (see IIPP Appendix 19); maintain records to document completion.

7. Ensure that work is conducted in a manner that minimizes and adequately controls the risk to workers and others. This includes ensuring that workers use appropriate engineering controls, work practices, and wear the necessary PPE.
8. Where there is risk of exposure to silica dust, verify employees are properly trained on the applicable contents of this program and the applicable OSHA Standards. Ensure employees are provided appropriate PPE when conducting such work.
9. Make frequent and regular inspections of job sites, materials, and equipment.
10. Identify existing and foreseeable RCS hazards in the workplace and take prompt corrective measures to eliminate or minimize them.

C. Employees

It is the responsibility of each Employee to:

1. Learn and follow the RCSP.
2. Follow proper work procedures as delineated in OSHA's Construction Standard Table 1 and established in this RCSP.
3. Use the assigned PPE in an effective and safe manner.
4. Report any unsafe conditions or acts to the Supervisor and/or Manager.
5. Report any exposure incidents or any signs or symptoms of silica illness.

E. Risk Analyst / Safety Coordinator

It is the responsibility of the Risk Analyst / Safety Coordinator to:

1. Assist supervisory personnel in complying with the requirements of this RCSP.
2. Assist supervisory personnel with providing appropriate training for employees who may be exposed to RCS on the job.
3. Review and evaluate the City's PCSP to ensure compliance annually, unless changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard require an immediate re-validation of this program.

III. Requirements

A. Specific Exposure Control Methods

The City shall implement specific exposure control methods consistent with OSHA's Construction Standard Table 1 while engaging in activities with potential silica exposure. Supervisors will ensure each employee under their supervision and engaged in a task identified on OSHA's Construction Standard Table 1 have fully and properly implemented

the engineering controls, work practices, and respiratory protection specified for the task on Table 1.

The task(s) which may be performed by the City of Santa Barbara and identified on OSHA's Construction Standard Table 1 are:

**TABLE 1:
Specified Exposure Control Methods
When Working With Materials Containing Crystalline Silica**

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
1	Stationary masonry saws	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
2a	Handheld power saws (any blade diameter) when used outdoors	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
2b	Handheld power saws (any blade diameter) when used indoors or in an enclosed area	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
3	Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less) for tasks performed outdoors only	<ul style="list-style-type: none"> Use saw equipped with commercially available dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency. 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
4a	Walk-behind saws when used outdoors	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
4b	Walk-behind saws when used indoors or in an enclosed area	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
5	Drivable saws for tasks performed outdoors only	<ul style="list-style-type: none"> Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
6	Rig-mounted core saws or drills	<ul style="list-style-type: none"> Use tool equipped with integrated water delivery system that supplies water to cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
7	Handheld and stand-mounted drills (including impact and rotary hammer drills)	<ul style="list-style-type: none"> Use drill equipped with commercially available shroud or cowling with dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes. 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
8	Dowel drilling rigs for concrete for tasks performed outdoors only	<ul style="list-style-type: none"> • Use shroud around drill bit with a dust collection system. • Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
9a	Vehicle-mounted drilling rigs for rock and concrete	<ul style="list-style-type: none"> • Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. 	None	None
9b	Vehicle-mounted drilling rigs for rock and concrete	<ul style="list-style-type: none"> • Operate from within an enclosed cab and use water for dust suppression on drill bit. 	None	None
10a	Jackhammers and handheld powered chipping tools when used outdoors	<ul style="list-style-type: none"> • Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact. 	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10b	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	<ul style="list-style-type: none"> • Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10c	Jackhammers and handheld powered chipping tools when used outdoors	<ul style="list-style-type: none"> • Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater 	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		efficiency and a filter-cleaning mechanism.		
10d	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	<ul style="list-style-type: none"> • Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
11	Handheld grinders for mortar removal (i.e., tuckpointing)	<ul style="list-style-type: none"> • Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism. 	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	Powered Air-Purifying Respirator (PAPR) with P100 Filters
12a	Handheld grinders for uses other than mortar removal for tasks performed outdoors only	<ul style="list-style-type: none"> • Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
12b	Handheld grinders for uses other than mortar removal when used outdoors	<ul style="list-style-type: none"> • Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		<p>instructions to minimize dust emissions.</p> <ul style="list-style-type: none"> Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism. 		
12c	Handheld grinders for uses other than mortar removal when used indoors or in an enclosed area	<ul style="list-style-type: none"> Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism. 	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
13a	Walk-behind milling machines and floor grinders	<ul style="list-style-type: none"> Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None
13b	Walk-behind milling machines and floor grinders	<ul style="list-style-type: none"> Use machine equipped with dust collection system recommended by the manufacturer. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		<ul style="list-style-type: none"> When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes. 		
14	Small drivable milling machines (less than half-lane)	<ul style="list-style-type: none"> Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions. 	None	None
15a	Large drivable milling machines (half-lane and larger) for cuts of any depth on asphalt only	<ul style="list-style-type: none"> Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. Operate and maintain machine to minimize dust emissions. 	None	None
15b	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	<ul style="list-style-type: none"> Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. Operate and maintain machine to minimize dust emissions. 	None	None
15c	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	<ul style="list-style-type: none"> Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions. 	None	None
16	Crushing machines	<ul style="list-style-type: none"> Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points). Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions. Use a ventilated booth that provides fresh, climate-controlled 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		air to the operator, or a remote control station.		
17a	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	<ul style="list-style-type: none"> Operate equipment from within an enclosed cab. 	None	None
17b	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	<ul style="list-style-type: none"> When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions. 	None	None
18a	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	<ul style="list-style-type: none"> Apply water and/or dust suppressants as necessary to minimize dust emissions. 	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
18b	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	<ul style="list-style-type: none"> When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab. 	None	None

When implementing the control measures specified in Table 1, the City shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:
 - Is maintained as free as practicable from settled dust;
 - Has door seals and closing mechanisms that work properly;
 - Has gaskets and seals that are in good condition and working properly;
 - Is under positive pressure maintained through continuous delivery of fresh air;
 - Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better); and
 - Has heating and cooling capabilities.
- Where an employee performs more than one task included on OSHA's Construction Standard Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

B. Alternative Exposure Control Methods

No alternative exposure control methods to OSHA's Construction Standard Table 1 are acceptable under the City's RCSP. All assigned work tasks or equipment operation shall conform to Table 1 – no exceptions.

VII. Respiratory Protection

Where respiratory protection is required by Table 1, the City will provide each employee an appropriate respirator that complies with the requirements the OSHA Respiratory Protection Standard (29 CFR 1910.134) and the City's Respiratory Protection Plan (IIPP Appendix 19).

VIII. Housekeeping

The City does not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to RCS.

The City does not allow compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to RCS unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air.

IX. Hazard Communication

The City will include Respirable Crystalline Silica in its Hazard Communication Program established to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The City will ensure that each employee has access to labels on containers of Crystalline Silica and those containers respective Safety Data Sheets (SDS's).

All employees will be trained in accordance with the provisions of the OSHA Hazard Communication Standard.

The City will make a copy of the OSHA Respirable Crystalline Silica Construction Standard readily available without cost to any employee who requests it.

X. Training

The City will ensure that each employee has training in connection with its RCSP. This training will cover concerns relating to cancer, lung effects, immune system effects, and kidney effects.

The City will ensure that each employee can demonstrate knowledge and understanding of:

- The health hazards associated with exposure to RCS;
- Specific tasks in the workplace that could result in exposure to RCS; and
- The contents of the OSHA Respirable Crystalline Silica Construction Standard.

XI. Recordkeeping

The City will maintain accurate records of all exposure measurements taken to assess employee exposure to RCS.

The City will ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020. Exposure records will be kept for at least 30 years.

The City shall maintain accurate records of all objective data relied upon to comply with the requirements of the OSHA Respirable Crystalline Silica Construction Standard.

The City will ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020. Objective data records will be kept for at least 30 years.

The City will make and maintain accurate medical records for each employee participating in the Respiratory Protection Program (see IIPP Appendix 19).

XII. Program Evaluation

This program will be reviewed and evaluated on an annual basis by Risk Management. The review by Risk Management may be conducted at an earlier date due to changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard.

XIII. Deviations

Deviations from the requirements of this program are not permitted, except where regulations are more stringent.

APPENDIX 40

WILDFIRE SMOKE PROTECTION PROGRAM

I. Scope

This Wildfire Smoke Protection Program (WSPP) outlines the procedures for City employees to follow to prevent injury and illness from wildfire smoke.

II. Purpose

This WSPP specifies safe work practices when the air quality equals or exceeds the Air Quality Index (AQI) of 151 for particulate matter (PM) 2.5 or smaller, due to wildfire smoke and applies to employees exposed to such conditions for greater than one (1) cumulative hour per work shift.

III. Authority

- California Code of Regulations Title 8, § 5141.1 (Effective 7/29/19)
- California Code of Regulations Title 8, § 3203

IV. Definitions

Air Quality Index The method used by the U.S. Environmental Protection Agency (U.S. EPA) to report air quality on a real-time basis. Current AQI is also referred to as the “NowCast”, and represents data collected over time periods of varying length in order to reflect present conditions as accurately as possible. The current AQI is divided into six categories as shown in the table below, adapted from Table 2 of Title 40 Code of Federal Regulations, Part 58 Appendix G.

Air Quality Index (AQI) for Particulate Matter (PM) 2.5 Microns in Diameter or less	Levels of Health Concern
<u>0 to 50</u>	<u>Good</u>
<u>51 to 100</u>	<u>Moderate</u>
<u>101 to 150</u>	<u>Unhealthy for Sensitive Groups</u>
<u>151 to 200</u>	<u>Unhealthy</u>
<u>201 to 300</u>	<u>Very Unhealthy</u>
<u>301 to 500</u>	<u>Hazardous</u>
<u>Note: 1 Micron = 1/25,000th inch</u>	

NIOSH	The National Institute for Occupational Safety and Health of the U.S. Centers for Disease Control and Prevention. NIOSH tests and approves respirators for use in the workplace.
PM 2.5	Solid particles and liquid droplets suspended in air, known as Particulate Matter (PM), with an aerodynamic diameter of 2.5 micrometers or smaller.
Wildfire Smoke	Emissions from fires in wildlands; i.e. sparsely populated areas covered primarily by grass, brush, trees, crops, or a combination thereof.

V. Responsibilities

A. Department Head

It is the responsibility of each Department Head to:

1. Provide the necessary resources to ensure the health and safety of employees.
2. Confirm that departmental tasks have been evaluated for potential exposure to wildfire smoke.
3. Ensure departmental compliance with the City's WSPP policies and procedures.
4. Ensure that Managers, Supervisors, and Lead Workers with supervisory duties are trained on their responsibilities under the WSPP.

B. Manager

It is the responsibility of each Manager to:

1. Ensure the elements of this program are followed by all affected employees, personal service contractors, interns, and volunteers.
2. Ensure employees are provided the resources and training necessary to safely implement the WSPP.
3. Ensure all potentially exposed departmental job classifications and tasks affected by the WSPP are identified.
4. Ensure periodic audits and inspections of the workplace are conducted to maintain compliance with this and all other departmental safety programs.

C. Supervisor

It is the responsibility of each Supervisor to:

1. Ensure training is provided for all affected employees under their supervision.

2. Maintain accurate training records.
3. Ensure effective two-way communication exists between employees and supervisory personnel.
4. Monitor employee exposure to unhealthy AQI of 151 or greater during the work shift.
5. Ensure adequate supplies of approved particulate respirators are readily available at the worksite.
6. Periodically monitor the AQI when the index is equal to or exceeds 151 and ensure this information is effectively communicated in a form readily understandable to all employees.
7. Ensure employees have access to prompt medical care without fear of reprisal.

D. Employees

It is the responsibility of each Employee to:

1. Follow the procedures and safe work practices of the WSPP.
2. Inform their supervisor if they notice air quality is getting worse or they are suffering symptoms due to poor air quality.
3. Attend safety training on the application of the WSPP and inform supervisors if they did not understand any of the provisions herein.

VI. Policy

When a City employee may be exposed to wildfire smoke, the City is required to find out the current AQI applicable to the employee's worksite. If the current AQI for PM2.5 is 151 or greater, the City is required to:

1. Check the current AQI before and periodically during each shift.
2. Provide training to the employee.
3. Lower the employee's exposure.
4. Provide the employee a respirator and encourage its use.

VII. Identification of Harmful Exposures

For worksites covered by this WSPP, Departments shall determine employee exposure to PM 2.5 prior to each shift and, at a minimum, hourly thereafter. Air Quality Index (AQI) forecasts and current AQI for PM 2.5 shall be obtained by inputting the appropriate worksite zip code, using the U.S. EPA AIRNOW website at <https://www.airnow.gov/>. As an alternative, employees can contact the Santa Barbara County Air Pollution Control District at: (805) 961-8800 or visit their website at <https://www.ourair.org/> for current AQI information.

It is also highly recommended that employees download the EPA 'AIRNow' application for iPhone and Android which allows for immediate access to current and forecasted AQI.

Note: Worksites covered by this policy include any site where it can be reasonably anticipated that employees may be exposed to wildfire smoke.

The following City workplaces are exempt from this policy:

- A. Enclosed buildings or structures in which the air is filtered by a mechanical ventilation system and the Department ensures that windows, doors, bays, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- B. Enclosed vehicles in which the air is filtered by a cabin air filter and the department ensures that windows, doors, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.

VIII. Communication

As required by CCR § 3203, Departments shall implement a system for communicating wildfire smoke hazards to affected employees. Methods of communication shall include, but not be limited to, pre-job/pre-task planning meetings, daily briefings, emails, text messaging, conference calls, or by other effective means.

Employees shall be encouraged to report any worsening outdoor conditions, as well as to report any adverse symptoms resulting from wildfire exposure without fear of reprisal. Departments, through managing or supervisory personnel, shall alert employees when the air quality is harmful and what protective measures are available to employees.

IX. Hazard Control Methods for Employee Exposures

- A. **Engineering Controls:** Departments shall reduce employee exposure to PM2.5 to less than a current AQI of 151 by engineering controls, whenever feasible, for instance, by providing enclosed buildings, structures, or vehicles where the air is filtered. If engineering controls are not enough to reduce exposure to PM2.5 to less than a current AQI OF 151, then the Department shall reduce employee exposures as much as feasible.
- B. **Administrative Controls:** Whenever engineering controls are not feasible, or do not reduce employee exposures to PM2.5 to less than a current AQI of 151, the Department shall implement administrative controls, if practicable, such as relocating work to a location where the current AQI for PM2.5 is lower, changing work schedules, reducing work intensity, or providing additional rest periods.
- C. **Personal Protective Equipment (N95 particulate respirators)**

Where the current AQI for PM2.5 is equal to or greater than 151, but does not exceed 500, the Department shall provide N95 particulate respirators to all affected employees for voluntary use in accordance with Title 8 CCR, §5144 and encourage

employees to use the respirators issued. Respirators shall be National Institute for Occupational Safety and Health (NIOSH) approved devices that effectively protect the wearers from inhalation of PM_{2.5}. The N95 particulate respirator is the minimum level of protection required for wildfire smoke. In addition to N class respirators, R and P class units with efficiency ratings of 95, 99, and 100 are also acceptable under NIOSH guidelines.

Respirators shall be cleaned, stored, maintained, and replaced so that they do not present a health hazard to users. Respirators must be replaced at least every eight hours, or sooner if the respirator becomes damaged, soiled, or breathing becomes difficult. An adequate supply of N95 particulate respirators shall be made readily available at each affected worksite when necessary.

NOTE: For voluntary use of filtering facepiece respirators, such as N95 particulate respirators, fit testing and medical evaluations will not be required. However, any employee who is not currently participating in the City's Respiratory Protection Program must review and sign Attachment A to this Appendix, N95 For Voluntary Use, before use.

Where the current AQI for PM_{2.5} exceeds 500, a higher level of respirator use is required in accordance with Title 8 CCR, §5144 and the City's Respiratory Protection Program. Refer to the City's Respiratory Protection Program or contact Risk Management for assistance in such a circumstance.

To get the most protection from a respirator, there must be a tight seal around the face. A respirator will provide much less protection if facial hair interferes with the seal. The proper way to put on a respirator depends on the type and model of the respirator.

X. How to Properly Don, Use, and Maintain Particulate Respirators

- Step 1. Place the mask over the nose and under the chin, with one strap placed below the ears and one strap above.
- Step 2. Pinch the metal sealing strip (if there is one) of the respirator over the top of the nose so it fits securely.



NOTE: Shaving is not required for voluntary respirator use, however, it is recommended for a proper facial seal.

For a respirator that relies on a tight seal to the face, check how well it seals to the face by following the manufacturer's instructions for user seal checks. Adjust the respirator if air leaks between the seal and the face. The more air leaks under the seal, the less protection the user receives. Respirators must be replaced if they get damaged, deformed, dirty, or difficult to breathe through. Particulate respirators are disposable respirators that cannot be cleaned or disinfected. At a minimum, replace particulate respirators at the beginning of each shift. If you have symptoms such as difficulty breathing, dizziness, or nausea, go to an area with cleaner air, take off the respirator, and get medical help if necessary.

XI. Employee Training

Initial training shall be provided to all potentially affected employees. Retraining shall be required upon changes to the WSPP. Annual refresher training is recommended.

Departments shall ensure that all potentially affected employees are trained on the following:

A. The health effects of wildfire smoke.

Although there are many hazardous chemicals in wildfire smoke, the main harmful pollutant for people who are not very close to the fire is "particulate matter," the tiny particles suspended in the air. Particulate matter can irritate the lungs and cause persistent coughing, phlegm, wheezing, or difficulty breathing. Particulate matter can also cause more serious problems, such as reduced lung function, bronchitis, worsening of asthma, heart failure, and early death. People over 65 and people who already have heart and lung problems are the most likely to suffer from serious health effects. The smallest—and usually the most harmful—particulate matter is called PM2.5 because it has a diameter of 2.5 micrometers or smaller.

B. The right to obtain medical treatment without fear of reprisal.

Departments shall allow employees who show signs of injury or illness due to wildfire smoke exposure to seek medical treatment and may not punish affected employees for seeking such treatment. Departments shall also have effective provisions made in advance for prompt medical treatment of employees in the event of serious injury or illness caused by wildfire smoke exposure (i.e. access to contacting "911" would constitute an effective provision).

C. How employees can obtain the current Air Quality Index (AQI) for PM2.5.

The City's preferred method for finding the current and forecasted AQI for PM2.5 is to go to www.AirNow.gov and enter the zip code of the location where employees will be working. Alternatively, information about the current and forecasted AQI is available from the U.S. Forest Service at <https://tools.airfire.org/> and the Santa Barbara County Air Pollution Control District by calling: (805) 961-8800 or visit the the County's website at <https://www.ourair.org/>. Employees who do not have

access to the internet can contact their supervisor for the current AQI. The EPA website www.enviroflash.info can transmit daily and forecasted AQIs by text or email for particular cities or zip codes.

As an additional resource, the EPA 'AIRNow' application for iPhone and Android allows for immediate access to current and forecasted AQI. Departments may contact Information Technology (IT) to have the application installed on City smartphones or iPads as appropriate.

- D. The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.

Respirators can be an effective way to protect employee health by reducing exposure to wildfire smoke when they are properly selected and worn. Respirator use can be beneficial even when the AQI for PM2.5 is less than 151, to provide additional protection.

When the current AQI for PM2.5 is 151 or greater, Departments shall provide their workers with NIOSH approved particle respirators for voluntary use. If the current AQI is greater than 500, a higher level of respirator use is required. A respirator should be used properly and kept clean.

The following precautions shall be taken:

1. Departments shall select respirators certified for protection against the specific air contaminants at the workplace. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Center for Disease Control and Prevention certifies respirators. A label or statement of certification must appear on the respirator or respirator packaging. It will list what the respirator is designed for (particulates, for example).

Surgical masks or items worn over the nose and mouth such as scarves, T-shirts, and bandannas will not provide protection against wildfire smoke. An N95 particulate respirator, shown in Appendix A, is the minimum level of protection for wildfire smoke.

2. Read and follow the manufacturer's instructions on the respirator's use, maintenance, cleaning and care, along with any warnings regarding the respirator's limitations. The manufacturer's instructions for medical evaluations, fit testing, and shaving should also be followed, although doing so is not required by Title 8, section 5141.1 for voluntary use of filtering facepiece respirators.
3. Do not wear respirators in areas where the air contains contaminants for which the respirator is not designed. A respirator designed to filter particles will not protect employees against gases or vapors, and it will not supply oxygen.
4. Employees should keep track of their respirator so that they do not mistakenly use someone else's.

5. Employees who have a heart or lung problem should ask their doctor before using a respirator.

XII. Deviations

Deviations from the requirements of this WSPP are not permitted, except where regulations are more stringent.

ATTACHMENT A - N95 For Voluntary Use



CITY OF SANTA BARBARA

Respiratory Protection Program

Important Information Regarding the Use of N95 Disposable Respirators



N95 respirators are the most common and basic form of disposable respirators. N95 respirators are designed to filter out particulate matter only and are meant to be discarded after a single use.



N95 BASICS

- N95 respirators are designed to filter particles 0.1-0.3 micron diameter in size with a filter efficiency of at least 95 percent.
- N95 respirators must be donned and fitted to the face properly to provide maximum protection.
- Users must perform a seal check prior to entering the work area. See the manufacturer's instructions on proper donning and seal check procedures.
- The N95 respirator must be replaced if the filter becomes soiled, damaged, or difficult to breathe through.
- After removing the N95 respirator from the face the respirator must be discarded.

N95 LIMITATIONS

- N95 respirators do not typically provide chemical protection. Facial hair between the sealing surface of the respirator and the face will decrease the respirators effectiveness.
- N95 respirators cannot be used for protection against asbestos, lead, and silica hazards.
- N95 respirators should not be used when contaminant concentrations exceed 10 times the OSHA Permissible Exposure Limit (PEL).

VOLUNTARY USE OF N95 RESPIRATORS

- N95 respirators may be used voluntarily in cases where exposures do not exceed the PEL and the department or division does not require the use of N95 respirators while performing certain work tasks.
- Employees who choose to wear N95 respirators voluntarily must be provided with a copy of [Appendix D](#) of OSHA regulation 29 CFR 1910.134.

REQUIRED USE OF N95 RESPIRATORS

- Many City employees are required by protocol or procedure to use N95 respirators as part of their normal work activities.
- Employees who are required to wear N95 respirators must fully participate in the City of Santa Barbara's Respiratory Protection Program, including medical screening, training, and fit testing.
- N95 training and fit testing is scheduled and presented by departments and divisions.
- FY 2015 medical screening for employees required to use N95 respirators will be conducted online through Industrial Hearing & Pulmonary Management. Employees who cannot be medically cleared after participating in the online medical screening will need to follow-up with Sansum SBMFC Occupational Medicine Center. Risk Management will contact those employees directly with instructions on how to obtain medical clearance through Sansum-SBMFC.

Please call Julie Ruggieri, Risk Safety Coordinator, if you have any questions regarding the City's Respiratory Protection Program or the use of N95 respirators as part of your normal work activities: (805) 564-5347.

I, _____ (print), have read the *City of Santa Barbara's Respiratory Protection Program - Important Information Regarding the Use of N95 Disposable Respirators* and I have received a copy of Appendix D of OSHA regulation 29 CFR 1910.134.

I understand that my department or division does not require the use of N95 respirators as part of my normal work activities. I also understand the limitations of the N95 respirator.

After evaluating the advantages and disadvantages of using an N95 respirator and reading Appendix D of OSHA regulation 29 CFR 1910.134, I voluntarily elect to use an N95 respirator while performing certain work tasks for my own comfort.

Signed

Dated

**MAJOR REQUIREMENTS OF OSHA'S
RESPIRATORY PROTECTION STANDARD
29 CFR 1910.134**

OSHA Office of Training and Education
Rev. December 2006

This document discusses the major requirements of OSHA's Respiratory Protection Standard, 29 CFR 1910.134.

No attempt has been made to discuss every detail of the standard. Readers are encouraged to consult OSHA's Respiratory Protection web page for the complete text.

MAJOR REQUIREMENTS OF 29 CFR 1910.134

Introduction

- This standard applies to General Industry (Part 1910), Shipyards (Part 1915), Marine Terminals (Part 1917), Longshoring (Part 1918), and Construction (Part 1926).

(a) Permissible Practice

- Paragraph (a)(1) establishes OSHA's **hierarchy of controls** by requiring the use of **feasible engineering controls** as the primary means to control air contaminants. Respirators are required when "effective engineering controls are not feasible, or while they are being instituted."
- Paragraph (a)(2) requires employers to provide employees with respirators that are "applicable and suitable" for the purpose intended "when such equipment is necessary to protect the health of the employee."

(b) Definitions

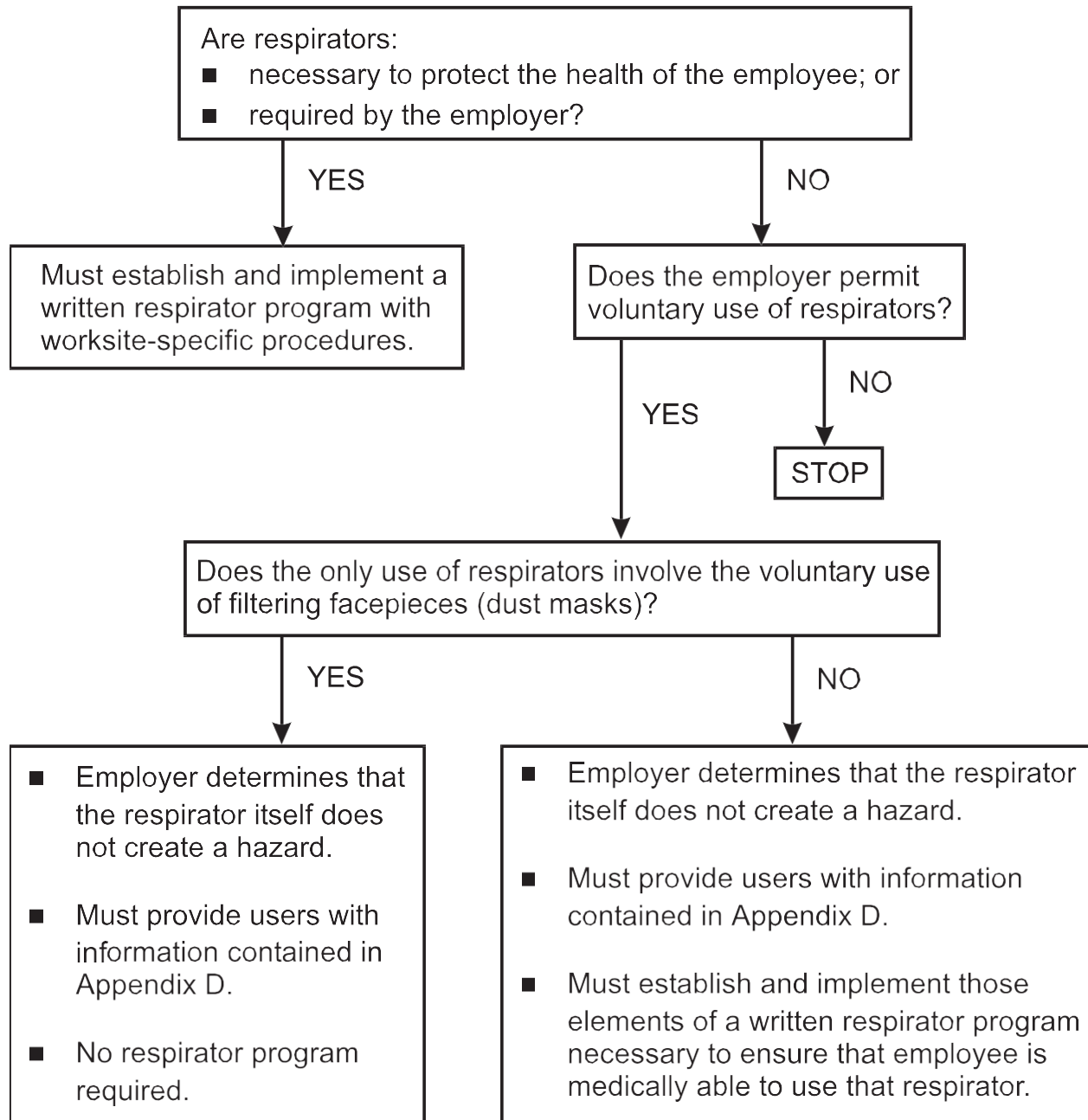
This paragraph contains definitions of important terms used in the regulatory text.

(c) Respiratory Protection Program

- Must designate a **qualified program administrator** to oversee the program.
- Must provide respirators, training, and medical evaluations **at no cost to the employee**.
- OSHA has prepared a *Small Entity Compliance Guide* that contains criteria for selection of a program administrator and a sample program.

Respirator-Use Requirements Flow Chart

29 CFR 1910.134(c)



(d) Selection of Respirators

- Must select a respirator **certified by the National Institute for Occupational Safety and Health (NIOSH)** which must be used in compliance with the conditions of its certification.
- Must identify and evaluate the respiratory hazards in the workplace, including a reasonable estimate of employee exposures and identification of the contaminant's chemical state and physical form.
- Where exposure cannot be identified or reasonably estimated, the atmosphere shall be considered immediately dangerous to life or health (IDLH).
- Respirators for IDLH atmospheres:
 - Y Approved respirators:
 - full facepiece pressure demand self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum service life of thirty minutes, or
 - combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.
 - Y All **oxygen-deficient atmospheres (less than 19.5% O₂ by volume)** shall be considered IDLH.

Exception: If the employer can demonstrate that, under all foreseeable conditions, oxygen levels in the work area can be maintained within the ranges specified in Table II (i.e., between 19.5% and a lower value that corresponds to an altitude-adjusted oxygen partial pressure equivalent to 16% oxygen at sea level), then *any* atmosphere-supplying respirator may be used.
- Respirators for non-IDLH atmospheres:
 - Y Employers must use the **assigned protection factors (APFs)** listed in Table 1 to select a respirator that meets or exceeds the required level of employee protection.
 - When using a combination respirator (e.g., airline respirators with an air-purifying filter), employers must ensure that the assigned protection factor is appropriate to the mode of operation in which the respirator is being used.
 - Y Must select a respirator for employee use that maintains the employee's exposure to the hazardous substance, when measured outside the respirator, at or below the **maximum use concentration (MUC)**.
 - Must not apply MUCs to conditions that are IDLH; instead must use respirators listed for IDLH conditions in paragraph (d)(2) of this standard.
 - When the calculated MUC exceeds the IDLH level or the performance limits of the cartridge or canister, then employers must set the maximum MUC at that lower limit.
 - The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

- Y For protection against gases and vapors, the employer shall provide:
- an atmosphere-supplying respirator, or
 - an air-purifying respirator, provided that:
 - the respirator is equipped with an **end-of-service-life indicator (ESLI)** certified by NIOSH for the contaminant; or
 - if there is no ESLI appropriate for conditions of the employer's workplace, the employer implements a **change schedule** for canisters and cartridges that will ensure that they are changed before the end of their service life and describes in the respirator program the information and data relied upon and basis for the change schedule and reliance on the data.
- Y For protection against particulates, the employer shall provide:
- an atmosphere-supplying respirator; or
 - an air-purifying respirator equipped with high efficiency particulate air (HEPA) filters certified by NIOSH under 30 CFR Part 11 or with filters certified for particulates under 42 CFR Part 84; or
 - an air-purifying respirator equipped with any filter certified for particulates by NIOSH for contaminants consisting primarily of particles with mass median aerodynamic diameters of at least 2 micrometers.

(e) Medical Evaluation

- Must provide a medical evaluation to determine employee's ability to use a respirator, **before fit testing and use.**
- Must identify a **physician or other licensed health care professional (PLHCP)** to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire (information required is contained in mandatory Appendix C).
- Must obtain a **written recommendation** regarding the employee's ability to use the respirator from the PLHCP.
- Additional medical evaluations are required under certain circumstances, e.g.:
 - Y employee reports medical signs or symptoms related to ability to use respirator;
 - Y PLHCP, program administrator, or supervisor recommends reevaluation;
 - Y information from the respirator program, including observations made during fit testing and program evaluation, indicates a need; or
 - Y change occurs in workplace conditions that may substantially increase the physiological burden on an employee.
- Annual review of medical status is not required.

(f) Fit Testing

- All employees using a **negative or positive pressure tight-fitting facepiece** respirator must pass an appropriate **qualitative fit test (QLFT)** or **quantitative fit test (QNFT).**
- Fit testing is required prior to initial use, whenever a different respirator facepiece is used, and **at least annually thereafter.** An additional fit test is required whenever the employee reports, or the employer or PLHCP makes visual observations of, changes in the employee's physical condition that could affect respirator fit (e.g., facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight).
- The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol, as contained in mandatory Appendix A.
 - Y QLFT Protocols:
 - Isoamyl acetate
 - Saccharin
 - Bitrex
 - Irritant smoke
 - Y QNFT Protocols:
 - Generated Aerosol (corn oil, salt, DEHP)
 - Condensation Nuclei Counter (PortaCount)
 - Controlled Negative Pressure (Dynatech FitTester 3000)
 - Controlled Negative Pressure (CNP) REDON

- QLFT may only be used to fit test negative pressure air-purifying respirators (APRs) that must achieve a fit factor of 100 or less.
- If the fit factor determined through QNFT is ≥ 100 for tight-fitting half facepieces, or ≥ 500 for tight-fitting full facepieces, the QNFT has been passed with that respirator.

Note: If a particular OSHA standard (e.g., 29 CFR 1910.1001 Asbestos) requires the use of a full facepiece APR capable of providing protection in concentrations up to 50 times the Permissible Exposure Limit (PEL), this respirator must be QNFT. This is because a protection factor of 50 (50 X PEL) multiplied by a standard safety factor of 10 is equivalent to a fit factor of 500.

The safety factor of 10 is used because protection factors in the workplace tend to be much lower than the fit factors achieved during fit testing. The use of a safety factor is a standard practice supported by most experts to offset this limitation. This is discussed in the record at 63 FR 1225.

(g) Use of Respirators

- Tight-fitting respirators shall not be worn by employees who have facial hair or any condition that interferes with the face-to-facepiece seal or valve function.
- Personal protective equipment shall be worn in such a manner that does not interfere with the seal of the facepiece to the face of the user.
- Employees shall perform a user seal check **each time they put on a tight-fitting respirator** using the procedures in mandatory Appendix B-1 or equally effective manufacturer's procedures.
- Procedures for respirator use in IDLH atmospheres are stated. In addition to these requirements, interior structural firefighting requires the use of SCBAs and a protective practice known as "2-in/2-out" — at least two employees must enter and remain in visual or voice contact with one another at all times, and at least two employees must be located outside. (Note that this is not meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.)

(h) Maintenance and Care of Respirators

Must clean and disinfect respirators using the procedures in Appendix B-2, or equally effective manufacturer's procedures at the following intervals:

- as often as necessary to maintain a sanitary condition for exclusive use respirators,
- before being worn by different individuals when issued to more than one employee, and
- after each use for emergency use respirators **and those used in fit testing and training.**

(i) Breathing Air Quality and Use

Compressed breathing air shall meet the requirements for Type 1-Grade D breathing air as described in ANSI/CGA *Commodity Specification for Air*, G-7.1-1989.

(j) Identification of Filters, Cartridges, and Canisters

- All filters, cartridges, and canisters used in the workplace must be labeled and color coded with the NIOSH approval label.
- The label must not be removed and must remain legible.

(k) Training and Information

- Must provide effective training to respirator users, including:
 - Y why the respirator is necessary and how improper fit, use, or maintenance can compromise the protective effect of the respirator
 - Y limitations and capabilities of the respirator
 - Y use in emergency situations
 - Y how to inspect, put on and remove, use and check the seals
 - Y procedures for maintenance and storage
 - Y recognition of medical signs and symptoms that may limit or prevent effective use
 - Y general requirements of this standard
- Training required prior to initial use, unless acceptable training has been provided by another employer within the past 12 months.
- **Retraining required annually** and when:
 - Y workplace conditions change,
 - Y new types of respirator are used, or
 - Y inadequacies in the employee's knowledge or use indicates need.

- The basic advisory information in Appendix D shall be provided to employees who wear respirators when their use is not required.

(l) Program Evaluation

Employer must conduct evaluations of the workplace as necessary to ensure proper implementation of the program, and consult with employees to ensure proper use.

(m) Recordkeeping

- Records of medical evaluations must be retained and made available per 29 CFR 1910.1020.
- A record of fit tests must be established and retained until the next fit test.
- A written copy of the current program must be retained.