

**PLATTE CANYON
WATER & SANITATION DISTRICT**

**SAFETY
MANUAL**

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SAFETY POLICY AND PRACTICES

A. PURPOSE

The Platte Canyon Water and Sanitation District’s safety manual provides a guiding vision and general policy by which we conduct business and safety together every day. This manual is a guideline of the ideals the District would like to achieve in safety.

B. DISTRICT SAFETY PHILOSOPHY

We believe that the safety of employees is of utmost importance, along with quality, productivity, and cost-control. Maintenance of safe operating procedures at all times is of both monetary and human value, with the human value being far greater to the District and the employee. The following principles support this philosophy:

1. All injuries and accidents are preventable through establishment and compliance with safe work procedures.
2. The prevention of bodily injury and safeguarding the health are the first considerations in all workplace actions and are the responsibility of every employee at every level.
3. Written safety plans describing the safe work practices and procedures to be practiced in all workplace actions are an essential element of the overall workplace safety program. All employees at every level are responsible for knowing and following the safety practices described in the written safety plans.
4. Off the job, all employees should be similarly safe and demonstrate awareness of potential hazards.

C. DISTRICT RESPONSIBILITIES

It is the policy of the District to provide a place of employment reasonably free from hazards which may cause illness, injury, or death to employees.

It is also District policy to establish and maintain an effective and continuous safety program incorporating educational and monitoring procedures to teach safety, correct deficiencies, and provide a safe, clean working environment.

The District directors, managers, safety manager and supervisors are all responsible for the enforcement of safety policies and practices. They must ensure that:

1. Staff members are trained in appropriate safety procedures, including job-specific training as required.

2. Post incident training is performed at the next safety session for all safety violations or incidents.
3. Individual safety files are maintained in personnel files for all employees.
4. The safety manager is notified, and all necessary forms are completed if an accident or work-related health problem occurs.
5. Equipment and property within their area of responsibility is maintained in a safe, hazard-free condition.
6. The District complies with all applicable federal, state, and local safety laws and regulations.

D. EMPLOYEE RESPONSIBILITIES

All employees have a responsibility to themselves and to the District for their safety and the safety of coworkers. All employees are required to:

1. Comply with all federal, state, and local rules and regulations applicable to the District and relevant to their work.
2. Observe all District rules and regulations related to the efficient and safe performance of their work.
3. Integrate safety into each job function and live by this philosophy in the performance of job duties.
4. Report unsafe equipment and practices to their supervisor and correct in a timely manner.
5. Report any accident to their supervisor that occurs while on the job.
6. Participate in regularly scheduled workplace safety inspections and safety meetings.

E. SAFETY CHAMPION

The Safety Champion is responsible for ensuring operations employees are complying with all safety policies and procedures. They will also be responsible for the following duties:

1. Reporting workplace injuries, violations, or other safety concerns to the Safety Manager.
2. Recommend new or improved safety policies and equipment.
3. Calibration of gas detectors every 6 months.
4. Planning, preparing, and conducting ongoing safety training sessions.

5. Meeting with Safety Manager and Assistant Manager for monthly safety meetings.

F. SAFETY MANAGER RESPONSIBILITIES

The safety manager is responsible for the overall administration of the District's safety plan. Specific duties and responsibilities include:

1. Administration of the written safety program and general training of all employees.
2. Scheduling and conducting regular workplace safety inspections with designated employees under their supervision.
3. Maintaining the SDS binder and ensuring that it is kept up to date.
4. Calibration of gas detectors every 6 months.
5. Planning, preparing, and conducting ongoing safety training sessions.
6. Meeting with Safety Champion and Assistant Manager for monthly safety meetings.

G. SUPERVISOR RESPONSIBILITIES

Supervisors are directly responsible for enforcement of all District safety policies and practices for their department. Specific duties and responsibilities include:

1. Ensuring that employees under their direct supervision are trained in appropriate safety practices and procedures, and that they always follow safe work practices in their daily work.
2. Disciplining employees in situations where safe work practices and procedures have been violated and reinforcing the correct method of work.
3. Reporting workplace injuries to the safety manager in accordance with prescribed procedures.

H. ASSISTANT MANAGER

The Assistant Manager oversees the overall safety program. Specific duties include:

1. Developing, completing, and filing out all necessary documentation and/or reports to meet local, state, and federal reporting and record keeping requirements, and working with local and state agencies as needed.
2. Ensure administrative staff are complying with all safety procedures and policies and participating in scheduled safety training sessions.

3. Tracking and recording completed safety trainings for incentive program.
4. Planning, preparing, and conducting ongoing safety training sessions.
5. Meeting with Safety Champion and Safety Manager for monthly safety meetings.

ACCIDENT REPORTING & INVESTIGATION PLAN

A. PURPOSE

The District's Accident Reporting and Investigation Plan prescribes methods and practices for reporting and investigating accidents. The Plan provides a means to ensure compliance with workplace and vehicle/equipment accidents in a standardized way. In addition, the Plan provides a means to ensure compliance with all workman's compensation laws and regulations.

The Accident Reporting and Investigation Plan contains two sections. The first section describes the reporting and investigation procedures for work related injury accidents while the second section describes reporting and investigation procedures for vehicle and equipment accidents which do not result in injury to a District employee.

B. WORK RELATED INJURIES

The District has designated Colorado Special Districts Property and Liability Pool as its workman's compensation insurance provider. The District has also designated a medical provider to be used for all work-related injuries. All work-related accidents resulting in injury, or potential injury will be reported and investigated in accordance with the following procedures.

1. Accident Reporting Procedures

- i) Employees injured on the job are to report the injury to their immediate supervisor and the Safety Manager the same day as the accident, if possible, but no later than forty-eight (48) hours.
- ii) Any employee witnessing an accident at work is to immediately call for emergency help and provide any assistance required. If the witnessing employee cannot directly contact emergency help, they are to notify the District office to contact emergency help as needed at the accident. The witnessing employee is to give detailed information regarding the accident and the location of the accident. In addition, the injured employee or witnessing employee is to report the accident to their immediate supervisor.
- iii) The injured employee's immediate supervisor is to complete the District's Accident Report and Preliminary Injury Report with the employee and any witnesses as soon after the accident as possible, but no later than forty-eight (48) hours after receiving notification of the injury.
- iv) The injured employee's immediate supervisor is to notify the Safety Manager and the Assistant Manager of the injury and provide a copy of the Accident Report and the Preliminary Injury Report within the same day he or she has been notified.

- v) The Assistant Manager is to notify Colorado Special Districts Property and Liability Pool (CSD Pool) within twenty-four (24) hours of the accident, if possible, but no later than forty-eight (48) hours after the occurrence. If the investigation is not complete within twenty-four hours of the accident, the investigation report will be sent to CSD Pool as soon as it is completed to follow up with the first report of the injury. The Safety Manager is to complete the First Injury Report for all reported injuries and attach doctor statements and forms if applicable.
- vi) Injured employees in need of medical attention, **must** report to the District's designated medical provider with an Authorization for Medical Treatment form prepared by the Assistant Manager. In case of an emergency in which the Assistant Manager is not available, the employee is to go directly to the designated medical provider.
- vii) The designated medical provider must have authorization from the District before any treatment for a work-related injury can be performed. Authorization is to be given by the Assistant Manager, or in the absence or unavailability of the Assistant Manager, the District Manager, or the employee's immediate supervisor. The Safety Manager and Assistant Manager **must** be notified as soon as practical, but no later than forty-eight (48) hours after treatment is processed in this manner.
- viii) All doctor statements and forms must be submitted to the Assistant Manager as soon as possible, but no later than twenty-four (24) hours after treatment is performed.
- ix) Employees with a workplace injury resulting in lost time from work shall be enrolled into the District's Return to Work program.

2. Accident Investigation Procedures

Thorough accident investigations will help the District determine why accidents occur, where they happen, and any trends that may be developing. Such identification is critical to preventing and controlling hazards and potential accidents.

- i) The immediate supervisor is to conduct an accident investigation with the Safety Manager, if possible, at the scene of the accident as soon as possible after the occurrence. The employee will be asked to make a detailed report of the events that led up to and resulted in the injury accident. All witnesses to the accident will be interviewed separately.
- ii) The immediate supervisor is to complete the Investigation Report and submit it to the Safety Manager along with the Accident Report.
- iii) The Safety Manager and the immediate supervisor are to review the accident and investigation reports to determine the cause of the accident and remedial actions to prevent a reoccurrence.

3. Return to Work

- i) It is the policy of the District, when possible, to modify work assignments for a limited period to assist employees who are temporarily restricted from performing their regularly assigned duties due to an on-the-job injury.

(Note: This policy should not be construed as recognition that an employee has a disability as defined by the Americans with Disabilities Act (ADA) of 1990.

This policy applies to all District employees.

ii) Definitions:

- (1) **Return to Work (RTW) (Modified Duty)** position is a temporary position to which an employee is assigned when he/she is unable to return to his/her regular position following an on-the-job injury or illness. The Return-to-Work position temporarily addresses the restrictions placed on an individual by the employee's treating doctor.
- (2) **Employment related injury** is an injury or occupational disease, which arises out of the course and scope of employment and is a compensable injury or illness, as defined under the state of Colorado Workers' Compensation Plan.
- (3) **Physician** in this policy means a Doctor of Medicine, osteopathic medicine, optometry, dentistry, podiatry, or chiropractic who is licensed and authorized to practice as defined in the State Workers' Compensation Rules.

iii) Eligibility

- (1) To be eligible for participation in the RTW Program, an employee must provide a written statement from his/her treating physician that he/she is:
 - (a) Temporarily unable to perform his/her essential duties, following an employment related injury or illness.

And

 - (b) Capable of carrying out work of a lighter or modified nature from his/her regular duties and is expected to return to his/her regular duties within calendar days.

iv) Process

- (1) Once notified of an on-the-job injury or illness, the Assistant Manager must complete a First Report of Injury for Workers' Compensation and inform the employee in writing of the Return-to-Work Program.

- (2) The employee must be seen and evaluated by a physician, adhering to the physician choice rules in this state, to determine if the employee is able to return to work, and if so, with or without restrictions.

At the time of the evaluation, the employee must inform the physician of the Return-to-Work Program and provide him/her with a copy of the employee's regular job description that identifies the essential functions of the job and its requirements.

- (3) When the employee is able to return to work with restrictions, the employee's physician must complete the Work Status Report, indicating the specific restrictions, and the duration of those restrictions. Clarification regarding temporary restrictions may be requested of the treating physician.
- (4) Taking into consideration the information provided by the physician, the employee's supervisor or manager, in consultation with the Safety Manager, will determine if a temporary Modified Duty assignment can be offered. It should be understood that there may be instances in which the employer will not be able to offer a Modified Duty assignment.

If the employee's regular department is unable to meet the employees need for Modified Duty, the employee's department is responsible for payment of the employee's salary and benefits while performing a Modified Duty position in a different department which has been able to meet the employees' need for Modified Duty.

v) Compensation

- (1) In most cases, there will not be an adjustment in the compensation of the employee that is placed in a Modified Duty position. However, the employee placed in a Modified Duty position will be paid a salary that is equivalent to the salary of other employees holding the same position.
- (2) The salary and benefits of the employee will remain the responsibility of the original employing department, including during any period of temporary placement external to the department.

vi) Offer of Modified Duties Position

- (1) Once the employee has been approved to participate in the Return-to-Work Program, the employer must provide a Return to Work (Modified Duty) job offer letter. This letter shall include:
 - (a) The position offered.
 - (b) The location and duties of the position offered.
 - (c) The wages and schedule of the position offered.

- (d) The duration of the temporary work assignment.
- (e) A statement that the employer will only assign a position/duty consistent with the employee's knowledge and skills and will provide training if necessary.
- (f) A statement acknowledging that the employer is knowledgeable about and will abide by the limitations under which the treating physician has authorized the return to work.

vii) Refusal of Modified Duties Offer

- (1) An employee may choose to accept or refuse the Return to Work (Modified Duty) job offer. However, an employee who refuses a Modified Duty job offer is subject to termination. Rejection of the job offer might also result in cancellation of income benefits under Workers' Compensation Insurance.

viii) Duration of Modified Duty

- (1) A Return to Work with Modified Duty offer will be extended for an initial period not to exceed 90 calendar days. The duration of approved time will be based upon the information provided by the employee's physician. If the employee is unable to return to work at full duty after the initial approved time, he/she may request a continuation of Modified Duty not to exceed a total of 90 calendar days in a Modified Duty capacity.
- (2) An employee requesting an extension of Modified Duty, beyond the originally approved amount of time in the Return to Work with Modified Duty offer letter, must submit documentation to the employer from his/her treating physician. This document should include what limitations continue to exist and the probable duration of those limitations.
- (3) If an employee is unable to return to work at full duty after 90 calendar days, he/she may request a continuation of Modified Duty not to exceed a total of 180 calendar days in a modified capacity. Approval beyond 90 calendar days will be based upon the assessment of the employee's ability to return to full duty within the immediate future. An employee requesting an extension beyond 90 calendar days must submit updated information from his/her treating physician.

ix) End of Modified Duty

- (1) An employee who is unable to return to his/her regularly assigned duties at the end of the Modified Duty agreement may request a leave of absence through his/her employer or may elect to terminate his/her employment with the company.

- (2) Provided the employee has exhausted any entitlement under the Family and Medical Leave Act, the employer has the option to approve or deny the leave of absence request. If Leave Without Pay is denied, employment with the District will be terminated

C. VEHICLE AND EQUIPMENT ACCIDENTS

The following steps are to be taken in the case of a vehicle or equipment accident resulting in property damage.

1. Accident Reporting Procedures

- i) Employees involved in a vehicle or equipment accident should first check for injuries to anyone involved in the accident. In the case of injuries, the employee is to call for emergency help and provide assistance if required. If the employee cannot directly contact emergency help, they are to notify the District office to contact whatever assistance is needed at the accident. The witnessing employee is to give detailed information of the accident and location of the accident. In addition, the employee is to report the accident to their immediate supervisor.
- ii) If a vehicle accident involves another party, the employee is not to admit any liability involving the accident. The employee is to contact the appropriate policing authority as soon as possible. Employees involved in an accident while driving any district vehicle or personal vehicle during working hours (meetings, conferences, etc.) are to immediately notify their supervisor and Safety Manager and submit themselves to a mandatory post-accident drug and alcohol test as specified in the District's Alcohol and Drug Policy in Compliance with the Federal Omnibus Transportation Employee Testing Act of 1991.
- iii) The employee is to exchange information (name, address, phone number, insurance carrier, policy number, and vehicle license plate number) with the other party involved in the accident and provide that information to the immediate supervisor. While you are on the scene take lots of pictures. Take pictures of all vehicles involved and the surrounding area. Take them up close and further away.
- iv) All accidents are to be reported to the immediate supervisor immediately or as soon as practical.
- v) The employee's immediate supervisor is to complete the District's Accident Report with the employee and any witnesses as soon as possible but no later than two days after the occurrence.
- vi) The immediate supervisor is to notify the Safety Manager and submit the written Accident Report as soon as possible but no later than three days after being notified of the accident.

vii) Upon notification of an accident, the Assistant Manager will notify the appropriate insurance company of the accident. The Assistant Manager will give as much information as possible, including a copy of the Accident and Investigation Reports and any other reports requested by the insurance company.

2. Accident Investigation Procedures

Thorough accident investigations will help the District determine why accidents occur, where they happen, and any trends that may be developing. Such identification is critical to preventing and controlling hazards and potential accidents.

- i) The immediate supervisor is to conduct an accident investigation with the Safety Manager, if possible, at the scene of the accident as soon as possible after receiving notice. The employee will be asked to make a detailed report of the events that led up to and resulted in the accident. All witnesses to the accident will be interviewed separately.
- ii) The immediate supervisor is to complete the Investigation Report and submit it to the Safety Manager along with the Accident Report.
- iii) The Safety Manager is to review the Accident and Investigation Reports to determine the cause of the problem and possible remedial actions to prevent reoccurrence.

BACK SAFETY

A. PURPOSE

Platte Canyon requires that the procedures in this plan be followed to provide a safe working environment. The District has implemented these procedures on safe lifting practices to ensure that employees are trained to protect themselves from the hazards of improper lifting.

B. RESPONSIBILITIES

It is the responsibility of the Safety Manager to ensure that these policies are implemented and the information necessary to carry out these policies is communicated to the employees.

It is the responsibility of the employees to follow safe work practices and to comply with the practices set forth below. The effectiveness of the back safety plan depends upon the active support and involvement of all employees.

C. SAFE LIFTING TECHNIQUES

The following steps outline good lifting practices and procedures which, when properly implemented, will minimize the risk of back injury. Lifting remains an important function despite the level of mechanization found in the workplace today.

1. Practices and Procedures

- i) Size up the load. If the item weighs more than 50 pounds, get mechanical help (forklift, chain fall, equipment, etc.) or find a second person to assist.
- ii) Make sure there is a clear path to the destination.
- iii) Bend the knees. This is the most important technique to lifting.
- iv) When lifting - place your feet close together and center yourself over the load, get a good hold on the load, lift straight up, **using your legs and not your back**, and avoid overreaching and stretching to pick up the load.
- v) Do not twist or turn your body once you have lifted the load.
- vi) Set the load down properly.
- vii) Always push, not pull, the load when possible.
- viii) Change the lifting situation if possible - get help, split the load into smaller loads, and avoid lifting loads below the knees

Alternative techniques for carrying or moving loads are to be used whenever possible to minimize lifting and bending. These alternative techniques include the use of hoists, dollies, carts, overhead cranes, and other mechanical devices. Back braces are available to all employees upon request to the Safety Manager. Back braces do not aid in lifting or carrying of a load but can be used in conjunction with the steps listed above. Employees are cautioned against relying on back braces to protect against strain or injury.

D. OTHER SAFE WORK TECHNIQUES

The following are other issues related to back safety and the use of proper techniques to avoid back injury.

1. **Extended sitting or standing** - These conditions can create back troubles. When sitting, keep your knees slightly higher than your hips and your shoulders and upper back straight. Get up and stretch frequently and if standing, change foot positions, placing one foot on a rail or ledge. However, keep your weight evenly balanced, do not lean to one side.
2. **Housekeeping** - Clean work areas and aisles help eliminate tripping hazards. Respecting “wet floor” signs and immediately cleaning up spills prevents slipping injuries. Keeping storage areas uncluttered reduces the chances of disease and fire as well as slips, trips, and falls. Accumulated debris can cause fires, and clutter slows movement of personnel and equipment during fires.

Other housekeeping practices include keeping tools and equipment clean and in good shape or keeping hoses and cables or wires bundled when not in use. Broken glass should be picked up immediately with a broom and dustpan, never with bare hands. Be aware of open cabinet drawers, electric wires, sharp corners, or protruding nails. Either correct the unsafe condition if you are able and it is safe to do so or notify the person responsible for overall maintenance that something should be done.

CONFINED SPACES

A. POLICY

It is the policy of the District that no confined space shall be entered until the nature of the entry environment has been assessed and precautions have been taken to ensure the safety of the employees during the entry.

In accordance with this policy, District personnel shall conduct a risk assessment of each confined space before entry, applying appropriate precautionary measures to address those risks identified, communicating these risks to all entrants, providing for a timely rescue in the event of an emergency situation, and obtaining proper approvals before an entry is allowed to commence.

B. PURPOSE

Historically, one of the most dangerous job tasks is the entry into confined spaces and the rescue of employees who have lost consciousness or been injured in these spaces. This policy is intended to reduce the likelihood of such an event by attempting to monitor the atmosphere of permit required confined spaces that are to be entered, address the precautions necessary to accomplish a safe entry, ensure that a trained rescue team with necessary rescue equipment is available to affect a timely rescue, and ensure proper management approval before an entry may proceed.

C. SCOPE

This policy applies to all District employees who: enter confined spaces; manage contracts involving confined space entry; manage facilities with confined spaces; or are directors, managers, or supervisors of personnel who perform the duties.

D. RESPONSIBILITIES

It is the responsibility of every director, manager, and supervisor to ensure compliance with the minimum requirements of this policy. This shall include the use of Entry Permits where required and the atmospheric testing and monitoring of all permits required confined space entries.

E. DEFINITIONS

1. Confined space – A space that: is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and is not designed for continuous employee occupancy.
2. Entry into a confined space - When any part of a person's body breaks the entry plane of a confined space.

3. Entry Permit - A risk assessment and notification form which must be completed, communicated to entrants, and signed by the Entry Supervisor before all entries into PRCs's, and maintained on-site throughout the entry time period
4. Entry Supervisor – A trained employee designated by management who is 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 policy.
5. Exposure Limit's - The maximum allowable level of contaminants in the air of the workplace for an eight (8) hour time weighted average. These may be Permissible Exposure Limits (PEL's), Threshold Limit Values (TLV's), or internal Occupational Exposure Limits (OEL's).
6. Hazardous atmosphere – An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes: flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL); airborne combustible dust at a concentration that meets or exceeds its LFL; atmospheric oxygen concentration below 19.5 percent or above 23.5 percent; or atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in OSHA Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or permissible exposure limit (PEL).
7. 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.
8. Lower Flammability Limit (LFL) - The lower limit of flammability of a gas or vapor at ordinary ambient temperature expressed in percent of the gas or vapor in air by volume. Lower Explosive Limit (LEL) is considered an interchangeable term for LFL.
9. Non-Permit Required Confined Space – A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain, any hazard capable of causing death or serious physical harm.
10. Permit Required Confined Space (PRCS) – A confined space that has one or more of the following characteristics: contains or has a 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.

11. Permit required confined space decision flow chart – A decision flow chart developed by OSHA to aid in permit required confined spaces entries (Exhibit A).
12. Short Term Exposure Limit (STEL) - The maximum concentration to which persons can be exposed for a period of fifteen (15) minutes continuously without suffering irritation, tissue change, or dizziness of sufficient degree to cause reduced reaction time.

F. MINIMUM REQUIREMENTS

1. Entry Permits

- i) An Entry Permit shall be required for all entries into Permit Required Confined Spaces (PRCS) by either District or contractor personnel working on the behalf of District.

2. Risk Assessment

- i) The Entry Supervisor authorizing the entry will complete the Entry Permit in conformance with this procedure.
- ii) The Entry Supervisor completing the Entry Permit shall personally inspect the confined space work area and verify that the necessary equipment, tests, and precautionary measures identified on the Entry Permit are in place before an entry is allowed.
- iii) If the Entry Supervisor conducting the risk assessment feels the conditions of the entry are complex to the degree that additional expertise is required, then the entry shall be delayed until the appropriate expertise has been obtained to conduct a competent risk assessment of the space to be entered.
- iv) Once the Entry Supervisor is satisfied the identified risks have been properly addressed, he/she will sign the Entry Permit and cover the information on the Entry Permit with the employees who will be performing the entry.
- v) All permit required confined spaces at District fixed locations shall be identified and shall have warning signs/labels posted at the entrance which read “Confined Space – Permit Required for Entry” or similar wording. Where such posting is impractical, measures shall be taken to inform employees who might inadvertently enter the confined space of the requirements of this policy, along with securing the confined space sufficiently to ensure personnel cannot inadvertently enter the space.

3. Blanking/Blinding/Plugging

- i) Before entry into permit required confined spaces, the Entry Supervisor authorizing the entry is responsible for assuring all pipelines connected to the confined space which could introduce a hazardous material shall be disconnected, blanked, blinded,

plugged, locked out/tagged out, or secured in such a manner that material cannot be introduced into the space during the entry.

4. **Lockout**

- i) The Entry Supervisor authorizing the entry is responsible to verify that all equipment that could be inadvertently energized during an entry is locked out in accordance with approved lockout/tagout procedures.

5. **Cleaning**

- i) The Entry Supervisor authorizing the entry is responsible to assure all confined spaces are cleaned, ventilated, and/or decontaminated to the extent consistent with the hazard of the material, or personal protective equipment is used sufficient for the hazard.

6. **Atmospheric Conditions: Testing and Retesting**

- i) The Entry Supervisor authorizing the entry will ensure that the atmosphere in the space is tested for oxygen and flammability immediately before the entry. Where the potential exists for a change of atmosphere in the space as a result of either work being conducted or by the conditions in the space, continuous monitoring for Oxygen/LFL/LEL shall be conducted during the entry.

Note: Testing may only be conducted by an employee trained in the use of the Four Gas – LEL/H₂S/O₂/CO Meter.

- ii) When there is a possibility for toxic contaminants within the Confined Space, testing for the contamination will be performed prior to entry and at a frequency consistent with the degree of hazard.
- iii) Monitoring equipment shall be calibrated at least annually and maintained according to manufacturer's recommendations.

7. **Hazardous Atmosphere Conditions: Risk Assessment**

- i) If the testing of the atmosphere or knowledge of the contaminants of the confined space indicates a contaminated atmosphere is present, the Entry Supervisor authorizing the entry must:
 - (1) Determine the cause or source of the contamination.
 - (2) Determine that the source or cause of the contamination will not contribute to an increase in contaminants in the confined space while an entry is in progress; and
 - (3) Ensure procedures addressing the possibility of any increases in contaminants are addressed in the Entry Permit.

- ii) If the possibility of a hazardous atmosphere exists, ventilation equipment shall be on-site and prepared for use. Entry supervisors shall consider requiring the use of ventilation equipment on all permit required confined space entries to mitigate any possibility of a hazardous atmosphere and for the comfort of entry personnel.

8. Allowable Limits

- i) The Entry Supervisor authorizing the entry is responsible to assure the Confined Space is within the following atmospheric conditions:
 - (1) Within 19.5% and 23.5% Oxygen.
 - (2) To flammable levels less than 10% of LFL/LEL.
 - (3) To less than the allowable exposure limits for hazardous atmospheres, i.e., PEL's, TLV's, STEL's, OEL's etc.

9. Personal Protective Equipment (PPE)

- i) The Entry Supervisor authorizing the entry is responsible to assure that entrants use the proper PPE; that such PPE is based on the test results or other knowledge of the content of the confined space; and the personnel using the PPE are properly trained in its use.
- ii) If allowable PEL's, TLV's, OEL's or STEL's cannot be attained, proper PPE shall be provided to, and used by, entrants to protect them against such contaminants
- iii) All entrants into permit required confined spaces shall wear a full body harness with a connection point for a retrieval line at the center of their backs near shoulder level.

10. Conditions Prohibiting Entry or Requiring an Immediate Exit

- i) Except during a rescue by trained EMS/Fire/Rescue personnel, no entry shall be made into a confined space:
 - (1) Containing flammable gases or vapors greater than 10% of the LFL/LEL.
 - (2) Containing Oxygen deficient or enriched atmospheres.
 - (3) Containing an IDLH atmosphere.
- ii) When weather forecasts indicate the probability of weather conditions rapidly changing, developing, or existing that would jeopardize entrants or significantly hinder rescue.
- iii) If any of the above conditions develop, entry personnel shall immediately exit the confined space.

11. Attendant

- i) An attendant shall be continuously present during the entry into the confined space.
- ii) Confined space attendants:
 - (1) Shall not participate in the confined space entry.
 - (2) Shall have a continuous means of contact with those in the confined space.
 - (3) Shall have adequate communications to immediately summon help if needed.
 - (4) Shall have appropriate safety equipment on hand as determined by the Entry Supervisor and be qualified in the use of the equipment.
 - (5) May be the Entry Supervisor

12. Rescue Equipment and Procedures

- i) Measures shall be in place to ensure the timely rescue of entrants in permit required confined spaces.
- ii) For entries into confined spaces over six (6) feet in depth, rescue winches must be available. When practical, the winch line will be attached to the entrant.
- iii) On horizontal entries where attachment to a winch line is not feasible or would not be effective, a retrieval line attached to a fixed point outside the confined space by be used instead.
- iv) Rescue personnel will be trained on an annual basis and must have CPR and First Aid training.
- v) Personnel conducting a permit required confined space shall notify EMS/Fire/Rescue dispatch directly prior to commencement of entry, and directly at the conclusion of entry, regarding the details of the entry and time of conclusion.
- vi) The attendant shall maintain the ability to communicate directly with Fire/EMS/Rescue, preferably by radio, or alternately through cellular telephone.
- vii) EMS/Fire/Rescue maintains a network of stations with trained confined space rescue personnel, and augmented by regional and statewide mutual aid partners, are able to immediately respond to any permitted confined space rescue in a timely manner.
- viii) Entry personnel in a permit required confined space entry who are notified to cease the entry and exit immediately shall do so without delay.

13. Safe Access

- i) Safe access must be provided to all confined spaces. For entry into vertical spaces over six (6) feet in depth, a safe means of descent shall be provided.

- ii) Horizontal entries shall not exceed three hundred (300) feet from the point of entry due to rescue limitations unless closer direct access entry points are identified on the entry permit.

14. Contractors

- i) Outside contractors are responsible for complying with OSHA Confined Space Regulations and must have their own confined space program that meets or exceeds the OSHA requirements.
- ii) When a contractor is hired to perform work in permit- required confined spaces, the District department administrating the contract shall notify the contractors of the following:
 - (1) The facility contains permit-required confined spaces, and a permit-required confined space entry is allowable only through compliance with a program that, as a minimum, complies with 29 CFR 1920.146 OSHA's Permit Required Confined Space regulations.
 - (2) The elements, including the hazards identified and the department's experience with the space, which make the space in question a permit-required confined space.
 - (3) Any precautions or procedures that the department has implemented for the protection of employees in or near permit-required confined spaces where contractor personnel will be working.
 - (4) If the District employees will enter with contractor(s), or multiple contractors are involved, the entry permit will identify the steps taken so that employees of one employer do not endanger the employees of any other employer.
 - (5) At the conclusion of the entry, the contractor shall be debriefed regarding the permit space program followed and regarding any hazards confronted or created in the permit spaces during entry operations.

15. Training

- i) All employees who are expected to enter or assist in entry into confined spaces shall be trained on the minimum requirements of this policy.
- ii) Employees who will be filling out entry permits shall be trained on how to conduct a risk assessment and the requirements of filling out an Entry Permit.
- iii) Entry Supervisors and employees who actually enter spaces shall be trained on the use of Entry Permits and the use of personal protective and other equipment which

will be utilized in entries. They shall also be trained how to recognize the hazards associated with confined space entries.

- iv) Employees who will be testing the atmosphere of confined spaces will be trained in how to conduct atmospheric testing.
- v) Rescue personnel shall be trained in confined space rescue techniques, use of rescue equipment, CPR, and first aid.

G. NON-PERMIT REQUIRED CONFINED SPACES (NPRCS's)

1. Spaces that are configured as confined spaces, yet do not meet the definition of a Permit Required Confined Space, may be classified as a Non-Permit Required Confined Space.
2. For District fixed locations, such clearance must be obtained through the District Safety Manager.
3. Non-Permit Required Confined Spaces do not require Entry Permits but may require atmosphere testing and/or full body harnesses, as directed by the Safety Manager.

H. RECLASSIFICATION OF A PERMIT REQUIRED CONFINED SPACE TO A NON-PERMIT REQUIRED CONFINED SPACE

1. Spaces that require maintenance over multiple shifts or multiple days may be reclassified to non-permit required confined space when all of the following conditions are met.
2. The initial entry to evaluate the space and/or eliminate hazards follows all permit required confined space procedures.
3. All hazards and atmospheric hazards are eliminated through procedures such as lockout/tagout, blocking, blanking, blinding, plugging, and cleaning.
4. An entry permit is prominently posted indicating the steps taken to eliminate the hazards.
5. Lockout/tagout, blocking, blanking, blinding, or plugging procedures shall be inspected whenever there is a break in work that leaves the confined space unattended.
6. The District Safety Officer has approved the reclassification.
7. Personnel shall immediately exit the space and reevaluate should any permit required confined space hazard develop.
8. Reclassification permits shall be faxed or delivered to the District Safety Officer for approval prior to commencement of work and shall be valid for no more than thirty days without re-approval.

ELECTRICAL SAFETY

A. PURPOSE

The purpose of this section is to explain the procedures to be followed during work on or near electric equipment or exposes an employee to any electrical hazard. Electric equipment that has been de-energized but has not been locked out or tagged in accordance with these procedures shall be treated as energized parts.

B. LOCKOUT AND TAGOUT PROCEDURES

While any employee is exposed to contact with parts of fixed electrical equipment or circuits which have been de-energized, the circuits energizing the parts shall be locked, tagged, or both in accordance with the Lockout/Tagout section. Fixed equipment refers to equipment fastened in place or connected by permanent wiring methods.

C. GENERAL PROCEDURES

1. De-energizing equipment must follow the steps listed below.
2. Safe procedures for de-energizing circuits and equipment must be determined before circuits or equipment are de-energized.
3. The circuits and equipment to be worked on shall be disconnected from all electric energy sources. Control circuit devices, such as push buttons, selector switches, and interlocks, may not be used as the sole means for de-energizing circuits or equipment.
4. Stored electrical energy which might endanger personnel shall be released. Capacitors shall be discharged, and high capacitance elements shall be short circuited and grounded, if the stored electrical energy might endanger personnel.

D. APPLICATION OF LOCKS AND TAGS

1. A lock and a tag shall be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed. The lock shall be attached so as to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.
2. Each tag shall contain a statement prohibiting unauthorized operation, the disconnecting means and removal of the tag.
3. If a lock cannot be applied, or if the employee can demonstrate that tagging procedures will provide a level of safety equivalent to that obtained by the use of a lock, a tag may be used without a lock.

4. A tag used without a lock shall be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by the use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.
5. A lock may be placed without a tag only under the following conditions:
 - i) Only one circuit or piece of equipment is de-energized, and
 - ii) the lockout period does not extend beyond the work shift, and
 - iii) employees exposed to the hazards associated with re-energizing the circuit or equipment are familiar with the procedure.

E. VERIFICATION OF DE-ENERGIZED CONDITION

The requirements of this paragraph shall be met before any circuits or equipment can be considered and worked as de-energized.

1. A qualified person shall operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.
2. A qualified person shall use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and shall verify that the circuit elements and equipment parts are de-energized. The test shall also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage feedback.

F. RE-ENERGIZING EQUIPMENT

These requirements shall be met, in order given, before circuits or equipment are re-energized, even temporarily.

1. A qualified person shall conduct tests and visual inspections, as necessary, to verify that all tools, electrical jumpers, shorts, grounds, and other such devices have been removed, so that the circuits and equipment can be safely energized.
2. Employees exposed to the hazards associated with re-energizing the circuit or equipment shall be warned to stay clear of circuits and equipment.
3. Each lock and tag shall be removed by the employee who applied it or under their supervision. However, if this employee is absent from the workplace, then the lock or tag may be removed by a qualified person designated to perform this task provided that:
 - i) the employer ensures that the employee who applied the lock or tag is not available at the workplace, and
 - ii) the employer ensures that the employee is aware that the lock or tag has been removed before the employee returns to the workplace.

4. There shall be a visual determination that all employees are clear of the circuits and equipment.

ENVIRONMENTAL HAZARDS

A. PURPOSE

It is the policy of the District to ensure all employees are provided a workplace free of known safety hazards. Natural hazards in the workplace include but are not limited to excessive heat, extreme cold, insects, plants and reptiles.

B. HEAT

1. When heat and humidity rise and the physical demands of the job progress throughout the day, it's important to recognize and counteract the additional demands heat stress puts on the body's natural process.

i) The following are signs of possible **dehydration**:

- (1) Urine color – urine color is one of the first warning signs of dehydration. Please use the charts posted in each restroom to help monitor your level.
- (2) Feeling thirsty
- (3) Headaches
- (4) Fatigue
- (5) Lightheadedness or dizziness

Drink plenty of water and/or electrolyte-containing fluids. Wear lightweight, reflective clothing, cooling neck wraps or other cooling equipment.

ii) The following are warning signs of **heat exhaustion**:

- (1) Headache
- (2) Nausea
- (3) Vertigo
- (4) Weakness
- (5) Thirst
- (6) Heavy sweating
- (7) Giddiness

If an employee shows the above symptoms, move them to a cooler area, loosen their clothing, have them sip cool water. If the symptoms do not improve, call 9-1-1.

iii) The following are warning signs of **heart stroke**:

- (1) Confusion
- (2) Irrational behavior
- (3) Loss of consciousness
- (4) Convulsions
- (5) A lack of sweating
- (6) Hot, dry skin
- (7) Abnormally high body temperature

If an employee shows the above symptoms, call 9-1-1 immediately, move the person to a cooler area, loosen clothing and remove extra layers, and cool with water or ice.

2. All employees working outdoors in the heat shall return to the office once the heat index reaches 95 degrees. Employees should take regular breaks from the heat in a cool location (vehicle, building, etc.) and drink plenty of fluids throughout the workday.

C. COLD

1. Winter weather presents hazards including slippery roads/surfaces, strong winds and environmental cold. It is the District's responsibility to prevent illnesses, injuries, or fatalities, by controlling these hazards in workplaces impacted by winter weather.
 - i) The following tips will help prevent a slip, trip or fall in winter weather conditions:
 - (1) Clear snow and ice from walking surfaces, and spread deicer, as quickly as possible after a winter storm.
 - (2) Wear footwear that has good traction and insulation (e.g. insulated and water resistant boots or rubber over-shoes with good rubber treads).
 - (3) Take short steps and walk at a slower pace to react quickly to changes in traction.
 - ii) Cold stress occurs by driving down the skin temperature, and eventually the internal body temperature. When the body is unable to warm itself, serious cold-related

illnesses and injuries may occur, and permanent tissue damage and death may result. Below are a list and symptoms of cold stress illnesses or injuries:

- (1) **Immersion/Trench Foot** - Trench foot is a non-freezing injury of the feet caused by prolonged exposure to wet and cold conditions. It can occur in temperatures as high as 60°F if feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet.
 - (a) Reddening skin
 - (b) Tingling
 - (c) Pain
 - (d) Swelling
 - (e) Leg cramps
 - (f) Numbness
 - (g) Blisters

If you or a co-worker suspect you have trench foot, call 9-1-1 immediately in an emergency; otherwise seek medical assistance as soon as possible. Remove wet shoes/boots and wet socks, dry the feet, and avoid working on them. Keep the affected feet elevated and avoid walking. Get medical attention.

- (2) **Frostbite** - Frostbite is caused by the freezing of the skin and tissues. Frostbite can cause permanent damage to the body, and in severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures.
 - (a) Reddened skin develops gray/white patches in the fingers, toes, nose, or ear lobes.
 - (b) Aching
 - (c) Loss of feeling
 - (d) Firm/hard
 - (e) Blisters may occur in affected area.

If you or a co-worker suspect you have frostbite, call 9-1-1 immediately and move to a warm dry area. Protect the frostbitten area by wrapping loosely in a dry cloth and protect the area from contact until medical help arrives. DO NOT rub the affected area, because rubbing causes damage to the skin and tissue. Do not apply snow or water, do not break blisters, DO NOT try to re-warm the frostbitten area before getting medical help, for example, do not use heating pads or place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals. Give warm sweetened drinks if alert (no alcohol).

(3) **Hypothermia** - Hypothermia occurs when the normal body temperature (98.6°F) drops to less than 95°F. Exposure to cold temperatures causes the body to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up the body's stored energy. The result is hypothermia, or abnormally low body temperature. Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or immersion in cold water.

- (a) An important mild symptom of hypothermia is uncontrollable shivering, which should not be ignored. Although shivering indicates that the body is losing heat, it also helps the body to rewarm itself.
- (b) Moderate to severe symptoms of hypothermia are loss of coordination, confusion, slurred speech, heart rate/breathing slow, unconsciousness and possibly death.

Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know what is happening and won't be able to do anything about it. If you or a co-worker suspect you have hypothermia call 9-1-1 immediately. Remove any wet clothing and replace with dry clothing. Wrap the entire body (including the head and neck) in layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag) Do not cover the face. If medical help is more than 30 minutes away, give warm sweetened drinks if alert (no alcohol), to help increase the body temperature (never try to give a drink to an unconscious person). Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 9-1-1 for additional rewarming instructions.

- 2. All employees working outdoors in the cold shall return to the office once the cold index drops to 25 degrees. Employees should take regular breaks from the cold in a warm location (vehicle, building, etc.) and drink plenty of warm, sweet fluids throughout the workday. Other tips to help prevent cold stress are:
 - i) wear at least three layers of loose-fitting wear clothing. Layering provides better insulation.
 - ii) wear a knit mask to cover face and mouth (if needed)

- iii) wear a hat that will cover your ears as well. A hat will help keep your whole body warmer.
- iv) insulated gloves (water resistant if necessary), to protect the hands and insulated and waterproof boots to protect feet.
- v) keep extra clothing in case you get wet

D. INSECTS, REPTILES AND PLANTS

1. Outdoor workers can be exposed to various species, such as snakes with venomous bites, insects that sting and toxic plants, which can result in a visit to the emergency department after only a moment of physical contact. Exposure may cause an allergic reaction that is mildly uncomfortable or debilitating pain requiring immediate medical attention.

- i) **Snakes** – the most common snake employees will find while working in the field are Rattlesnakes. While walking through fields, be sure to look ahead several yards in front of you not just where you are stepping. Snakes often blend into the environment, so they won't be easy to spot. You can use a long stick or other tool to sweep grasses away before entering. Avoid jumping over logs, turning over rocks or putting your hands in rock crevices without first checking carefully for snakes. If you do encounter a snake, give it plenty of room. The best course of action is to back away from the area the snake is in and either go around or change your route altogether. Be sure to wear long pants, boots and gloves while working in the field.

If you are bitten by a snake, don't wait for symptoms to appear, seek immediate medical attention. Call 9-1-1 and inform your supervisor. Keep still and calm to slow the spread of venom and lay or sit down with the bite below the level of the heart. Don't slash the wound with a knife and don't suck out the venom.

Symptoms of a snake bite include:

- Severe pain
- Redness
- Swelling and puncture marks at the wound
- Nausea and vomiting
- Slowed breathing
- Blurry vision
- Increased salivation and sweating
- Numbness or tingling around your face and/or limbs.

- ii) **Wasps and Bees** - these stings are the most common to cause life threatening allergic reactions. Workers with a history of severe allergic reactions to insect bites or stings should carry an epinephrine auto-injector (Epi-Pen) and wear medical ID jewelry stating their allergy. Routinely check the trees, ceilings of open buildings, under roof eaves and on equipment such as ladders for wasp/bee nests. They can form quickly, within a day. Remain calm and still if a single stinging insect is flying around,

swatting may cause it to sting, but if attacked by several stinging insects, run to get away. Bees release a chemical when they sting, which attracts other bees. If being attacked by bees or wasps, don't jump into water. They are known to hover above the water. If an insect is inside your vehicle, stop slowly, and open all the windows.

If you are stung, immediately wash the sting area with soap and water. Remove the stinger with tweezers. Apply a cold pack, calamine lotion, or hydrocortisone cream to the skin to reduce itching and swelling. Over-the-counter pain relievers and antihistamines such as Benadryl can be taken to help relieve itching. If you have an allergic reaction, call 9-1-1.

Symptoms of a wasp or bee sting include:

- Sharp pain and burning at the sting site
- Redness, swelling, itching and welts
- Allergic reactions include severe swelling of the face, lips or throat
- Breathing difficulties
- Lightheadedness
- Fainting
- Nausea or vomiting

iii) **Spiders** - all spiders can leave a painful bite, but only a few are harmful to humans, such as the black widow and brown recluse, which are found in Colorado. Spiders can be found everywhere, including offices, factories, warehouses, and confined spaces. Always wear gloves and other protective clothing when picking up boxes or other objects in an open area. Watch where you place your hands and feet when removing debris. If possible, don't place your fingers under debris you are moving

If you suspect a spider has bitten you, try to bring it with you to the doctor so they can determine the best course of treatment based on the species. Clean the site of the spider bite well with soap and water. Take over the counter pain relievers and antihistamines to relieve minor signs and spider bite symptoms.

Symptoms of a severe spider bite include:

- Redness spreading away from the bite
- Drainage from the bite
- Increase in pain
- Numbness/tingling
- Discoloration around the bite that looks like a halo or bull's-eye.

iv) **Plants** – Poison Ivy, Poison Oak and Sumac are the 3 most common poisonous plants found in Colorado. These plants are often hard to recognize because they tend to be interspersed among other types of plants. Avoid touching plants, especially vines, with bare hands, and keep arms and legs covered when doing lawn maintenance or clearing an area of plants. Clean tools that come into contact with plants after every use with rubbing alcohol or soap and water. Be sure to wear disposable gloves while doing so, as not to get infected. If plants are suspected to be poisonous, don't burn

them. Burning these poisonous plants can be very dangerous because the allergens can be inhaled, causing lung irritation.

If you suspect you have touched a poisonous plant, immediately rinse skin with rubbing alcohol, specialized poison plant washes, degreasing soap (such as dishwashing soap) or detergent, and lots of water, rinsing frequently, and scrubbing under nails with a brush. Apply a cold pack, calamine lotion, or hydrocortisone cream to the skin to reduce itching and blistering. Don't apply creams and lotions to broken skin, such as open blisters. An antihistamine such as Benadryl can be taken to help relieve itching. In severe cases or if the rash is on the face or genitals, go to a doctor or clinic. Call 9-1-1 or go to a hospital emergency room if the worker is suffering a severe allergic reaction, such as swelling or difficulty breathing, or has had a severe reaction in the past.

Symptoms of poison plant contact include:

- Itching
- Swelling
- Red rash within a few days of contact
- Bumps or blisters

EQUIPMENT AND TOOL SAFETY AND USAGE

A. PURPOSE

It is the policy of the District to permit only trained and authorized employees to operate equipment or tools. This policy is applicable to both daily operators of the equipment or tools and those who only occasionally use the equipment or tools.

1. All hand tools and equipment require daily inspection; protection guards; recommended use, repair, alteration or modification by manufacturer's specification; planning and executing company Hazard Analyses; and utilizing a Lockout/Tag Out Program when taken out of service.
2. OSHA regulations state that all tools must be maintained in good, safe working condition. That handles on hand tools to be free of defects (splitting or splintering); that tool heads be secured to avoid slipping down or flying off; and that broken or defective tools must be repaired immediately or removed from service. OSHA further requires that guards be in place and serviceable, Personal Protective Equipment (PPE) worn where warranted, and switches on all handheld power tools have positive "on/off" control.

The following section discusses safe procedures for operating small tools and equipment.

B. GUARDING

1. Power operated tools are designed to accommodate guards and shall be equipped accordingly when in use to protect employees from exposed moving parts. These include belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, and chains or other reciprocating, rotating, or moving parts of equipment. Portable power tools are difficult to guard completely and because of their mobility the potential for accidental contact with the operator's body is increased. Extra precautions must be taken when using this type of equipment.
2. Employees who are exposed to hazards of falling, flying, abrasive and splashing objects or are exposed to harmful dusts, fumes, mists, vapors, or gases while using hand and power tools shall be provided with the appropriate personal protective equipment necessary to protect them from these hazards. All personal protective equipment shall meet the OSHA standards and be maintained properly.

C. MANUFACTURE'S OPERATION/INSTRUCTION BOOK

1. All hand tools and equipment must be used in accordance with the manufacturers' recommendation. Refer to the Operation Manual / Instruction Book before using, repairing, altering, or modifying any tool or piece of equipment. Always select the right tool for the job.

D. ASSURED GROUNDING PROGRAM

1. All electrically powered tools, equipment and cords must be periodically tested to assure proper grounding as per the Assured Grounding Program. Double insulated tools must have a legible manufacturers label on the equipment. If the tool is not double insulated, the tool must have a ground plug in place. If the ground plug is missing, the tool is to be taken out of service.

E. POWERED HAND TOOLS

1. All handheld power tools must be equipped with a momentary contact or constant pressure “on/off” control switch that will shut off power when the pressure is released.
2. If the power tool is equipped with a trigger lock, it must be disabled.
3. All electrically powered tools shall either be of the approved, double-insulated type or grounded in accordance with the electrical standards. Use three wire plugs, twist lock connectors, or approved double-insulated type wire. Disconnect the tool from the power source before making any adjustments, repairs or changing a bit or accessory.
4. Cords are 12/3 with a 600-volt jacket and can be purchased in 25’ and 50’ lengths.
5. Replacement cord caps and plugs: Repairs must be made by a qualified person and tested for assured grounding before putting back to use.
6. Electric cords shall not be used for hoisting or lowering the tool.
7. Do not use a power tool with broken or defective insulation on the cord, broken or defective plugs, or loose or broken switches.
8. Before starting an operation, remove the chuck or adjusting key. Whenever possible, secure the work with clamps or put it in a vise.
9. Once an operation begins, make sure that the piece you are working on is self-supporting and is not supported by any part of your body. In the case of sawing, all cutting **must** be done on a suitable cutting surface, which will not inhibit blade movement - a wooden surface is preferable. Plunge cuts **must** be made with both hands on the saw and without “walking” into the cut.
10. When working in wet areas, make sure your tool is designed for work in this environment. Wear rubber insulated boots and gloves.
11. Never tip a drill and bit sideways to enlarge a hole. Use a larger bit or reamer.
12. Never store a bit in the drill motor.

13. Abrasive Tools such as grinders, sanders, polishers, buffers, wire brush tools, and rotary files create specific hazards from other air powered tools. Because of these inherent hazards, the rated speed (revolutions per minute -RPM) and maximum rated air pressure (pounds per square inch - PSI) must be marked clearly in a durable manner on each abrasive tool.
- i) Grinders require wheel guards and shall be permanently marked: **Warning -- Use Recommended Guard and Use Wheels with Adequate Speed Ratings.**
 - ii) Grinding wheels should be kept away from oil and water. These factors can affect their balance. They should be stored where they are protected from contact with other tools.
 - iii) Wheels should be mounted only by properly trained employees and ring tested to make certain that an unseen crack does not exist, and that proper size flanges are used. Abrasive-type safety washers should be installed between flanges and the wheel.
 - iv) Sanders require frequent cleaning because of the accumulation of dust and will be dismantled during this process. Cleaning should be done with brushes rather than air.
14. Blow Pipes are commonly used to clean out concrete forms or a deck before a pour. High air pressures used during this procedure necessitates the following safety measures:
- i) Personal Protective Equipment
 - (1) Safety glasses or safety goggles
 - (2) Full face shield
 - (3) Hearing protection
 - (4) Respiratory protection (as necessary)
 - ii) Safety Practices
 - (1) Keep unnecessary people well away from the operation.
 - (2) Never clean clothing or point hose nozzle at others.
 - (3) Secure all hose connections and use whip checks.
 - (4) Pipe should be vented at the end so that pressure can be relieved from the pipe if it comes into contact with another employee (to prevent air in blood stream)
 - (5) Install shut off valve at the hose to pipe connection.
 - iii) Compressed Air Safety
 - (1) Use safety clips or retainers on percussion air tools to prevent attachments from being expelled.
 - (2) **Never** exceed the manufacturers' recommended operating pressure.
 - (3) Do not use compressed air for cleaning purposes (blowing dust of clothing) unless reduced to less than 30 psi, and then only with proper protective equipment.

- (4) Compressed air from portable compressors or plants will not be used as a source of breathable air unless equipped with the proper air filter to remove oil, dust and fine debris.
- (5) Air receiver tanks must be in good condition, have current inspections tags attached indicating the last inspection date and have current inspection records files along with a history of receiver maintenance.

F. BANDING

1. Flat and round steel strapping helps palletize and reinforce wood or containers during handling and shipping. Both are applied under tension: flat banding ends are overlapped and joined by a crimped metal seal; round strapping ends are twisted together to form a joint.
2. Hazards associated with steel strapping include shifting or moving loads, loose ends whipping, improper use of banding as handholds, tripping over banding and cuts from sharp edges.
 - i) **Load Movement**: Banding should be removed with caution because loads may have shifted during transport and can tumble when tension is released.
 - ii) **Loose End Whip**: When tension is released, from removal of banding or breaks caused by incorrect strapping, loose ends will whip away from the package with enough force to cause serious injury. Always use caution when working around bundles strapped under pressure.
 - iii) **Improper Use as Handholds**: Banding is not to be used as a handhold to access the load. Sharp metal edges can cause serious injury; in addition if banding comes loose, the bundle may topple.
 - iv) **Tripping and Cutting**: Tripping and cutting hazards are created when steel straps are not disposed of as soon as possible. Good housekeeping is essential when unloading bundles of material.
 - v) **Improper Use / Care of Machines**: Improperly maintained or abused tools or banding machines may malfunction during operation and increase the possibility of strap breakage. As with all equipment, banding machines must be kept in good condition and employees using the machine will be properly trained.
 - vi) **Personal Protection**: When applying or removing steel strapping, eye or face protection must be worn. If there is a break, the direction that strapping will whip is unpredictable.
 - (1) Gloves must be worn while handling steel strapping. Leather palm gloves that extend to the wrist are recommended.

- (2) When working around strapping machines, workers will not wear loose fitting clothing that might get caught.
- vii) **Safe Removal** of strapping from bound material will be with steel cutting tools designed to cut steel banding. Do not use a claw hammer, crowbar, chisel, or anything that applies leverage to a steel strap. Use of such tools will cause the band to fly apart with additional force.
- (1) Before cutting a strap, be sure other employees and/or machinery are clear of the work area to avoid being struck by flying straps or shifting loads.
 - (2) Two-hand operated strap cutters are recommended because they are designed to cut the strap and absorb the energy released when the strap is cut. If duck billed shears must be used, place a gloved hand on the strap and make the cut so the un-grasped end is too short to reach the worker. Then if the strap springs, it will fly away from the cutter's face and body, which should be positioned out of direct line of the strap.
 - (3) Straps should be cut square and not at an angle. Straps cut on an angle have sharper ends and increases potential cut hazards.

G. TORCHES

1. Torches are a common tool at the job site but can be very hazardous if not used properly. Torches, gas cylinders, regulators and hoses shall be visually inspected before each use to make sure they are in good condition and that there are no leaks in any connections. Any repairs that need to be made will be done in accordance with the manufacturer's recommendations.
2. Torch tips must be in good working condition and cleaned with suitable tip cleaners.
3. All equipment shall be clean from oil and grease or any other flammable materials. Torches will only be lit with a **striker** - no matches or lighters - and during work operations, burning goggles shall be worn, **NOT** regular safety glasses or goggles. Workers will also wear gloves while using torches and long sleeve shirts or leathers are recommended. Company policy requires a flashback arrestor be installed. The flashback arrestor must be checked, and assembly replaced annually in the month of June.
4. Acetylene pressure not more than 15 psi. In addition, acetylene valves will not be opened more than 1 ½ turns. Oxygen valves must be opened completely. If the cylinder requires a wrench to open and close the valve, the wrench must be left in place during operation. This facilitates quickly closing the cylinders if needed.
5. All gauges must be in working order. They must be taken out of service if they are not.

6. All compressed gas cylinders **will be capped**, secured in proper storage areas, and stored in an **upright** position when not in use. They will not be placed in confined spaces at any time. Storage areas (whether full or empty) must be segregated and separated by 20 feet, *or* a 5-foot-high barrier rated for one-half hour fire protection. **Fire extinguishers** must be readily available, and a fire watch implemented.
7. All cylinders **will be capped** and secured in an **upright** position when transporting, never lying down. Never pick a cylinder by its cap.
8. When cylinders are not in use (OSHA standard designates one-half hour or more fire wall or 20 feet of separation), valves will be kept closed. The pressure must be released from the hoses and gauges by opening the torch valves and gauge t-handle after the cylinder valves have been shut off.
9. Before the regulator is connected to the cylinder, the cylinder must be “cracked” (opened slightly for a short time) to clear any dust and debris.

H. CHAIN SAWS AND CUT-OFF SAWS

1. Chain Saws

- i) Always read and become familiar with the manufacturer’s instructions before using a chain saw or cut off saw. Operators shall be trained in the safe operation and maintenance of chain saws, proper tree falling procedures and use of personal protective equipment. Equipment will be inspected for defects, broken or worn chains. Any chain saw that is broken or defective must be taken out of service and repaired immediately or removed from the job.
- ii) When purchasing chain saws, always buy those with anti-kickback chains. Old style chain saws can accidentally snag on wood, causing violent kick back. Newer chain saws come with anti-kickback chains, which reduce this hazard dramatically. Regular chains should be disposed of and replaced with anti-kickback chains.
- iii) Anti-kickback chains are “low energy” chains designed to skim the surface of the work in the event the upper part of the chain comes in contact with the work. Older chains have a flat link between each of the raised cutters while newer chains have either a triple thick rake in front of each cutter or an extra raised section between the cutters.
- iv) Employees using chain saws are exposed to flying debris, dust, and noise. “Kevlar” type chaps, hard hats, safety glasses and face shields (mesh face shields are acceptable), and gloves are required when working with chain saws. No loose or ragged clothing will be allowed. Additionally, hearing protection must be worn as noise levels can reach 115 db. or more.

- v) All chain saws **shall** be equipped with a momentary contact or constant pressure “on/off” control switch that will shut off power when the pressure is released.
- vi) Electrically powered chainsaws shall be double insulated or grounded in accordance with the electrical standards, with a three-wire plug. Never use the cord to hoist or lower the tool. Disconnect the power source from the chain saw before making any adjustments or repairs.
- vii) Gasoline powered chainsaws must comply with the applicable safety requirements noted under Gasoline Powered Equipment.

2. **Chain Saw Safety**

- i) Chains shall be kept sharp, well lubricated and properly tensioned at all times. The chain needs sharpening when it must be pushed through to cut or when it throws sawdust rather than wood chips.
- ii) All saws must have spark arresting mufflers.
- iii) Chain saws shall be inspected before each day's use and during each refueling. Saws that are not in safe operating condition will not be used.
- iv) Before refueling, saws must cool to the point that spilled gas will not ignite. Keep the air cleaner, clean and use the correct fuel and oil mixture.
- v) Only spark arresting safety fuel cans that are labeled with their contents are allowed on the job site.
- vi) Fully charged 20-pound ABC or larger fire extinguishers shall be kept at all refueling areas.
- vii) Saws must be kept clean of excess oil to prevent slipping or fire hazards. Any oil spills that occur must be cleaned up immediately.
- viii) Chain saws will be carried or moved with the engine in the off position.
- ix) When starting a chain saw, place it on the ground, hold the handle with one hand and pull the starter with the other hand. **Never start a saw in the air or on your leg.**
- x) Running saws must be gripped with both hands.
- xi) Maintain a clear work area free of tripping hazards and obtain firm footing before commencing any work. Keep your weight balanced on both feet and do not overreach.
- xii) Hearing and face protection is required when using a chain saw.

xiii) Ballistic chaps are required when using a chain saw.

3. **Cut Off Saws**

- i) Cut off saws pose greater threat of injury than chain saws and therefore have stricter rules during use. A full-face shield and safety glasses are required during operation of cut off saws. Safety glasses and goggles provide only minimal protection. Chaps are mandatory for leg protection from loose objects as well as from the saw. Other protective equipment includes hard hats, gloves, hearing protection and leatherwork boots.
- ii) When starting the cut off saw, place saw on firm ground in an open area with good footing and balance. When the engine starts, the speed is sufficient enough for the clutches to engage the V-belt pulley and turn the wheel. **The cutting wheel must be clear of you and other object to prevent sudden injury.**
- iii) Cutting saws will be carried or moved with the engine in the off position. Grip the front handle and place the muffler (which may be hot) at the side away from your body.
- iv) During operation, hold the saw with both hands and adjust the disc guard so its rear section is close to the work piece. Be sure to adjust the guard to protect you from particles of material being cut, from sparks or pieces of damaged wheel. Keep rotating blade away from your body. **Do not step backwards while the cutting wheel is rotating.** Wait until the flywheel effect has stopped. Do not cut above waist height and never work from a ladder or over-reach.
- v) Chop saws have specific RPM ratings. Blades shall be inspected to assure that they are capable of handling the intended use RPM's generated by this tool. Wheels and discs must be stored on hooks to prevent damage from tools, etc. being stored on top of them.

I. **GASOLINE POWERED TOOLS**

1. **GASOLINE IS DANGEROUS!** It is to be used as a fuel only. **Never** use gasoline as a solvent or fire starter. Gasoline doesn't burn, its vapors do. The tiniest spark can ignite gasoline vapors.
2. Gasoline vapors are heavier than air and although you may not see them, be aware of their downward travel path. Refuel tools in areas away from pilot lights, non-spark proof electrical equipment, or other ignition sources in the immediate area. Gasoline's flash point is 40F. The lit end of a cigarette is about 212 F and can easily ignite gasoline vapors. Always have a fire extinguisher nearby in case of an emergency.

3. Gasoline must always be stored in safety cans. When pouring gasoline, stay away from ignition sources and funnels should be used. When filling safety can(s), they must be set on the ground, not in the back of a pickup. Doing so can lead to an explosion.
4. All containers must be labeled what is contained in them. (See Hazard Control Plan for more information on labeling containers.)
 - i) **Underwriter's Laboratory Approved Safety Cans:** These cans are equipped with positive self-closing lids and have flash arresting screens in the neck of the gasoline can. No other type of gasoline storage can is acceptable.
 - ii) **Glass Containers:** Never store gasoline in glass containers. Glass is easily broken and can cause spark when breaking.
 - iii) **Plastic Containers:** Never use plastic gas cans. The friction of gasoline flowing over plastic can create static electricity and/or sparks.
5. Gasoline powered tools shall be free of defects, such as a leaking fuel tank, to avoid the possibility of explosion or fire. Broken or defective tools must be repaired immediately or removed from the job. Be familiar with the manufacturer's instruction and follow their recommendations for use. Disconnect the spark plug from the tool before making any adjustments or repairs.
6. Employees using gasoline-powered tools must wear personal protective equipment including hard hats, hearing protection, safety glasses or goggles, face shields, gloves to protect them from hazards.
7. If using a gas-powered tool in a confined space, employees must use proper venting and monitoring equipment.

J. SANDBLASTING EQUIPMENT

1. Abrasive blasting involves the use of handheld or automatic equipment through pneumatic pressure, hydraulic pressure or centrifugal force. This force directs a blast of abrasive material (wet or dry) against a surface to clean it, remove burrs and excess surface material, or develop a surface finish. All sand blasting equipment **shall** be maintained in good, safe condition.

WHEN USING ABRASIVE MATERIAL
USE ONLY NON-SILICA ABRASIVE.

2. **Hoods and Respirators:** Make a daily visual inspection before using sandblasting equipment. Check the sandblast hood for damage, holes, and cleanliness prior to use. Clean the lens with a non-fogging glass cleaner. Some operations create large amount of dust, chemicals, and abrasive grit to become airborne and require the use of supplied air respirators. These respirators should be checked for cracks, dust filters, retaining rings, hoses and connections and air supply prior to use. Repair broken/damaged equipment

according to the manufacturer's instructions. If it cannot be repaired, remove it from service and replace it with equivalent or better equipment. For silica or slag blasting, supplied-air hoods designed for abrasive blasting are the only acceptable respiratory protection for the blaster.

In addition to respiratory hazards faced by the blaster, there are hazards to people from downwind exposure, clean up and "pot tending" who will require protection.

3. **Portable Blast Cleaning Machines:** Machine components include a source of compressed air, in the 90-100 pounds per square inch range. A container or pressure vessel to contain the abrasive, a metering device to control the air to abrasive ration and flow, a flexible hose to deliver the abrasive, and a handheld nozzle to aim the abrasive onto the blasting surface.

Hose lines that are subjected to abrasive materials should be examined on a regular basis by a suitable non-destructive testing technique. The testing schedule should be determined by the frequency of use and type of abrasive. All metal pipes, lines, valves, pressure vessel, and other parts should be inspected prior to use. Check all hose to tool, hose to air source connections for proper seating to minimize potential whipping hazards.

K. WALK BEHIND EQUIPMENT

1. Walk-behind equipment is common on construction sites and in many cases reduces the hazards that employees are exposed to. The following basic safety rules should be followed when using this type of equipment.
 - i) Only trained operators shall use walk-behind pieces of equipment.
 - ii) Operators will read and follow the owner's manual and safety warnings.
 - iii) Appropriate personal protective equipment will be worn at all times while operating walk-behind pieces of equipment.
 - iv) The operator must have control of the machine at all times. If work is on an uneven surface, the operator will be positioned on the uphill side for added protection, away from the machine.
 - v) Always maintain secure footing while operating the machine.
 - vi) Never operate a defective piece of equipment
 - vii) Never remove or disengage any safety devices.

ERGONOMICS

A. PURPOSE

The purpose of this program is to inform employees that the District is committed to protecting the employee's safety and health by identifying and correcting ergonomic risk factors on the job. The District strives for clear understanding, safe and efficient work practices, and involvement in the program from every level of the District. This program applies to all work operations, both in maintenance and office areas. It is the policy of the District to maintain an ergonomic program that:

1. Prevents the occurrence of work-related musculoskeletal disorders such as tendinitis, low back pain, and carpal tunnel syndrome, by controlling employee exposure to workplace risk factors which can cause or aggravate them.
2. Ensures that affected employees are informed about work-related musculoskeletal disorders and workplace risk factors that can cause or aggravate them.
3. Reduces the severity of work-related musculoskeletal disorders through early medical management.
4. Promotes continuous improvement in equipment and methods to control exposure to risk factors in the workplace.
5. The company is interested in preventing chronic injuries resulting from repetitive motion. To accomplish these goals, the District has instituted this plan, which covers the following areas:
 - i) Identifying problem jobs
 - ii) Exposure control
 - iii) Medical management
 - iv) Employee involvement and training
 - v) Enforcement
 - vi) Changes to plan

B. RESPONSIBILITY

The Safety Manager will be responsible for coordinating and reviewing all ergonomic programs. It will be the responsibility of the employees to evaluate jobs that they have identified as needing

an ergonomic program. Employees are to help in the development and implementation of safety measures to reduce job-related injuries.

C. IDENTIFYING PROBLEM JOBS

Identifying problem jobs involves several steps. The Safety Manager will periodically examine workplace operations to inspect for jobs where employees are exposed to risk factors including:

1. Performance of the same motion or motion pattern every few seconds for more than two hours at a time.
2. Fixed or awkward work postures for more than a total of two hours, i.e., overhead work, twisted or bent back, bent wrist, kneeling or squatting.
3. Use of vibration or impact tools or equipment for more than a total of two hours during the workday.
4. Unassisted manual lifting, lowering, or carrying of anything weighing more than 25 pounds more than once during the workday.

D. EXPOSURE CONTROL

Once problem jobs have been identified, supervisors and employees in affected areas will be notified. The Safety Manager will develop possible solutions and implement them.

E. MEDICAL MANAGEMENT AND INJURY INVESTIGATION

The District has chosen a health care provider to provide medical treatment for employees with injuries related to ergonomics. The District encourages all employees to immediately report symptoms of discomfort that may be associated with their job duties. Employees are to report injuries to their immediate supervisor.

All work procedures that result in injury or illness, regardless of their nature will be reported and investigated. It is an integral part of the District's safety program that documentation is completed as soon as possible so that the cause and means of prevention can be identified to prevent reoccurrence.

F. EMPLOYEE INVOLVEMENT AND TRAINING

The District will train each employee in a job with exposure to a specific risk factor and each employee in a job where a work-related musculoskeletal disorder is recorded. Training will consist of the following:

1. How to recognize workplace risk factors associated with work-related musculoskeletal disorders and ways to reduce exposure to those risk factors.

2. The signs and symptoms of work-related musculoskeletal disorders, the importance of early reporting, and medical management procedures.
3. Reporting procedures including the person to whom the employee is to report workplace risk factors and work-related musculoskeletal disorders.
4. The process the District is taking to address and control workplace risk factors, each employee's role in the process, and how to participate in the process.
5. Opportunity to practice and demonstrate proper use of implemented control measures and safe work methods which apply to the job.

G. ENFORCEMENT

Constant awareness of and respect for ergonomic hazards, and compliance with all safety rules and regulations are considered conditions of employment. Supervisors and the Safety Manager have the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

EXPOSURE CONTROL PLAN

A. POLICY

The District is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this goal, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

1. The ECP is a key document to assist our organization in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:
 - i) Determination of employee exposure
 - ii) Implementation of various methods of exposure control, including:
 - (1) Universal precautions
 - (2) Engineering and work practice controls Personal protective equipment
 - iii) Housekeeping
 - iv) Hepatitis B vaccination
 - v) Post-exposure evaluation and follow-up
 - vi) Communication of hazards to employees and training
 - vii) Recordkeeping
 - viii) Procedures for evaluating circumstances surrounding exposure incidents
 - ix) Implementation methods for these elements of the standard are discussed in the subsequent pages of this ECP.

B. PROGRAM ADMINISTRATION

1. The safety manager (s) is (are) responsible for implementation of the ECP. They will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.
2. Those employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.
3. The safety manager will provide and maintain all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as

required by the standard. They will ensure that adequate supplies of the equipment are available in the appropriate sizes.

4. The safety manager will be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
5. The Safety Manager will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives.

C. EMPLOYEE EXPOSURE DETERMINATION

1. The following is a list of all job classifications at our establishment in which all employees have occupational exposure:
 - i) Operators
 - ii) Operations Foreman
 - iii) Operations Supervisor
 - iv) Construction Coordinator

NOTE: Part-time, temporary, contract and per diem employees are covered by the bloodborne pathogens standard. The ECP should describe how the standard will be met for these employees.

D. METHODS OF IMPLEMENTATION AND CONTROL

1. Universal Precautions
 - i) All employees will utilize universal precautions.
2. Exposure Control Plan
 - i) Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees can review this plan at any time during their work shifts by contacting the safety manager. If requested, we will provide an employee with a copy of the ECP free of charge and within 15 days of the request.
3. Engineering Controls and Work Practices
 - i) Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens.
4. Personal Protective Equipment (PPE)

- i) PPE is provided to our employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided by the safety manager. PPE may be obtained through the operations supervisor.
- ii) All employees using PPE must observe the following precautions:
 - (1) Wash hands immediately or as soon as feasible after removing gloves or other PPE.
 - (2) Remove PPE after it becomes contaminated and before leaving the work area.
 - (3) Used PPE may be disposed of in the Bio-Hazard waste receptacle or the Sharps container. Both are located in the Unisex bathroom near the south employee door.
 - (4) Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
 - (5) Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
 - (6) Never wash or decontaminate disposable gloves for reuse.
 - (7) Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
 - (8) Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

E. HOUSEKEEPING

Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see the following section “Labels”), and closed prior to removal to prevent spillage or protrusion of contents during handling.

1. Laundry

- i) Handle contaminated laundry as little as possible, with minimal agitation.
- ii) Place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use (specify either red bags or bags marked with the biohazard symbol) for this purpose.

F. HEPATITIS B VACCINATION

The hepatitis B vaccination series is available at no cost by your health care provider through District insurance. Risk of exposure will be discussed during first aid training along with the benefit of the hepatitis B vaccination.

G. POST-EXPOSURE EVALUATION AND FOLLOW-UP

Should an exposure incident occur, contact the safety manager and immediately available confidential medical evaluation and follow-up will be conducted by a designated health care professional. Following initial first aid (clean the wound, flush eyes, or other mucous membrane, etc.), the following activities will be performed:

1. Document the routes of exposure and how the exposure occurred.
2. Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
3. Obtain consent and plan to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
4. If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
5. Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
6. After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
7. If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

H. ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

1. The safety manager ensures that health care professional(s) responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.
2. The district's safety manager ensures that the health care professional evaluating an employee after an exposure incident receives the following:
 - i) a description of the employee's job duties relevant to the exposure incident
 - ii) route(s) of exposure
 - iii) circumstances of exposure

- iv) if possible, results of the source individual's blood test
- v) relevant employee medical records, including vaccination status
- vi) The safety manager provides the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

I. PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT

1. The safety manager will review the circumstances of all exposure incidents to determine:
 - i) engineering controls in use at the time
 - ii) work practices followed
 - iii) a description of the device being used (including type and brand)
 - iv) protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
 - v) location of the incident (O.R., E.R., patient room, etc.)
 - vi) procedure being performed when the incident occurred
 - vii) employee's training
2. The safety manager will record all percutaneous injuries from contaminated sharps in a Sharps Injury Log.
3. If revisions to this ECP are necessary (Responsible person or department) will ensure that appropriate changes are made. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

J. EMPLOYEE TRAINING

1. All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by a certified medical trainer.
2. All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:
 - i) A copy and explanation of the OSHA bloodborne pathogen standard.
 - ii) An explanation of our ECP and how to obtain a copy.

- iii) An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- iv) An explanation of the use and limitations of engineering controls, work practices, and PPE.
- v) An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
- vi) An explanation of the basis for PPE selection.
- vii) Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
- viii) Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- ix) An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- x) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- xi) An explanation of the signs and labels and/or color coding required by the standard and used at this facility.
- xii) An opportunity for interactive questions and answers with the person conducting the training session.

K. RECORDKEEPING

1. Training Records

- i) Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at (Location of records). The training records include:
 - (1) the dates of the training sessions
 - (2) the contents or a summary of the training sessions
 - (3) the names and qualifications of persons conducting the training
 - (4) the names and job titles of all persons attending the training sessions
- ii) Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days

L. Medical Records

1. Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, “Access to Employee Exposure and Medical Records.”
2. The assistant manager is responsible for maintenance of the required medical records. These confidential records are kept in the locked personnel cabinet for at least the duration of employment plus 30 years.
3. Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days.

M. OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA’s Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by the safety manager.

FALL PROTECTION

Fall Protection is an integral part of the District's commitment to a safe work environment. Workers who are four feet or more above lower levels are at risk for serious injury or death if they should fall. Any time a worker is exposed to a fall hazard there will be a procedure and equipment to reduce and/or eliminate the hazard of working at height.

A. PURPOSE

To protect employees against the hazards related to falls. Fall protection systems will be utilized whenever a fall exposure may exist.

B. SCOPE:

The policy will establish guidelines and requirements for fall protection used by the District's employees.

The District is committed to eliminating injuries caused by fall hazards by instituting a program of 100% fall protection for all fall hazards 4 feet or greater.

1. Whenever performance of any task would allow a worker to fall a distance of 4 feet or more to a lower level, the district requires pre-planning in order that fall hazards are identified, evaluated and controlled. Workers shall be expected to assess the risks associated with a task and ensure that proper mitigation is in place to protect them while climbing and working at heights. Where a worker is unsure of the methods, equipment or procedures to reduce the risk, they are to seek direction from their supervisor or manager.

However, prior to employees utilizing any personal fall protection system, such as Personal Fall Arrest Systems (PFAS), Personal Fall Restraint Systems (PFRS), they must inform/contact a manager.

2. All work sites with fall hazards of 4 feet or more will have a site-specific fall protection work plan completed before any employee begins work. The employees performing tasks requiring fall protection will be trained in the fall hazards and the method used to implement fall protection. All employees will use fall protection when there is exposure to a fall hazard of 4 feet or more. Employees who fail to follow this policy are subject to disciplinary action, up to and including dismissal.

The evaluation of the jobsite and the completion of the fall protection work plan will be done by a designated "competent person," who understands OSHA fall protection requirements, the fall protection systems available for use, and has the authority to take corrective action to eliminate employee exposure to fall hazards.

3. Fall protection is the combination of work practices and equipment employed to reduce the likelihood of falls and the severity of injuries due to falls from buildings, structures, or other elevated walking and working surfaces. Fall protection will be provided using a fall arrest system either/or a fall restraint system.

The best way to prevent falls is to eliminate the circumstances that would allow them to occur. This positive elimination of potential falls is the absolute first line of defense we will utilize in our program.

4. There are three ways to eliminate or otherwise protect our employees from fall hazards, all having pros and cons. They include:
 - i) Work platforms with handrails
 - ii) Motion restraint
 - iii) Fall arrest system
5. The best way to deal with fall hazards is by eliminating the fall hazard by use of handrails. The use of proper handrails positively eliminates the need for cumbersome tie-off procedures and eliminates the risk of accidents that happen due to human error. Therefore, wherever practical, handrails must be used. A properly built handrail, mid-rail and toe-board will provide freedom of movement without restraint and is a positive elimination of fall potential.

Handrails are not always feasible or have yet been erected. The next best means of fall protection that eliminates the risk of a fall is a motion restraint. However, motion restraint does not positively eliminate the fall hazard due to the human error factor.

6. Realizing that these two methods are not always possible, we must develop work methods that will allow our people to near the fall hazard without the danger of serious injury if they do fall. Therefore, we must design and utilize fall arrest systems that will cause the least amount of injury to the fall victim using the best arrest system available for your application. Fall arrest systems neither eliminate the fall hazard or the human error factor nor therefore are the least attractive way to deal with fall hazards.

Fall protection systems such as handrails, motion restraints and fall arrest systems require supervisor and employee training. The following three rules must be followed at all times regarding fall protection system.

- i) Fall arrest systems that include retractable lanyards must be used at all times when work is performed at heights of 4 feet and less than 18 feet above the working surface below the work.
 - ii) Retractable lanyards shall be worn at all times while working from all types of aerial lifting system.
 - iii) All lanyard used onsite will be no longer than 4ft in length.
7. Many times, we must perform tasks in areas where a handrail cannot be provided. This is our area of greatest exposure to falls. In these cases, a workable system of tie off procedures both with a primary and secondary fall protection must be used. The design of these systems is the key to the use of their success. A poorly designed, cumbersome system of hooking, unhooking, and re-hooking is likely to be shortcut and not provide the

level of protection we are trying to achieve. The “human element” is the variable to this system that controls its effectiveness.

D. Safety Belt, Harness and Lanyard Inspection and Maintenance

1. *ANSI Classification:*

- i) Class I Body belts – used to restrain a person from falling.
- ii) Class II Chest harness – used for restraint purposes (NOT for vertical free fall hazards).
- iii) Class III Full body harness – used for fall arrest purposes. Can also be used for fall restraint.
- iv) Class IV Suspension/position belt – used to suspend or support the worker. If a fall arrest hazard exists, this must be supplemented by use of a safety harness.

2. When utilized, a fall protection harness, lanyard, or retractable shall meet the following criteria.

- i) All users must be trained.
- ii) Anchors used to attach a Personal Fall Arrest System shall be capable of supporting at least 5,000 pounds per person attached.
- iii) Must be rigged so that employees can neither free fall more than 6 feet or contact any lower level below. – Tie off above your head.
- iv) Must be inspected by the user prior to each use for wear, damage, or other deterioration.
- v) Any defective components must be removed from service.
- vi) If anchors are installed, they shall be designed under the supervision of a Qualified Person.
- vii) Must be inspected annually by a Competent Person.

3. To maintain their service life and high performance, all harnesses must be inspected prior to each use for mildew, wear, damage and other deteriorations. Periodic tests by a trained inspector for wear, damage or corrosion should be part of the safety program. Inspect your equipment daily and replace it if any of the defective conditions in this manual are found.

Harness Inspection:

- i) Beginning at one end, holding the body side of the belt toward you, grasp the belt with your hands six to eight inches apart. Bend the belt in an inverted “U”. The resulting surface tension makes damaged fibers or cuts easier to see.
- ii) Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, or chemical damage.
- iii) Special attention should be given to the attachment of buckles and Dee Rings to webbing. Note any unusual wear, frayed or cut fibers, or distortion of the buckles or Dees.
- iv) Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burned stitches will be readily seen.
- v) Rivets should be tight and immovable with fingers. Body side rivet base and outside rivet burr should be flat against the material. Bent rivets will fail under stress. specially note condition of Dee Ring rivets and Dee Ring metal wear pads (if any). Discolored, pitted or cracked rivets indicate chemical corrosion.
- vi) The tongue, or billet, of the belt receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets. Belts using punched holes without grommets should be checked for torn or elongated holes, causing slippage of the buckle tongue.
- vii) Tongue Buckle: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges.
- viii) Friction Buckle: Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment to points of the center bar.
- ix) Sliding Bar Buckle: Inspect buckle frame and sliding bar for cracks, distortions, or sharp edges. Sling bar should move freely. Knurled edge will slip if worn smooth. Pay special attention to corners and ends of sliding bar.

Lanyard inspection:

4. When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Hardware should be examined under procedures also detailed below, i.e., Snaps, Dee Ring, and Thimbles.
 - i) While rotating the steel lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyards.

- ii) While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discolorations, cracks, and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.
- iii) Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in-period.

D. Fall Protection Rescue Plan

1. Fall protection rescue should take as little time as possible to bring a fallen worker to safety. When a fall occurs, any number of factors can create challenges to the effective rescue of the victim. Weather conditions, physical obstacles, and the condition of the victim can consume time and create hindrances for rescue personnel. All rescue plans should be reviewed by the employees doing the work to ensure that the procedures are manageable and realistic.
2. If positioning device system and/or fall-arrest system is not used, then the Fall Protection Hazard Assessment Plan form must be used. All employees involved with any part of the fall protection system must be informed of the plan.
3. Rescue Guidelines to consider:
 - i) Rescue suspended workers as quickly as possible
 - ii) Be aware of the potentially life-threatening risks of orthostatic intolerance and suspension trauma.
 - iii) Be aware of signs and symptoms of orthostatic intolerance.
 - iv) Be aware suspended workers who are unconscious or have head injuries are particularly at risk for orthostatic intolerance.
 - v) Be aware of the factors that can increase the risk of suspension trauma.

For more information on orthostatic intolerance go to:
<https://www.osha.gov/dts/shib/shib032404.html>

FIRE PROTECTION

A. PURPOSE

The purpose of the Fire Prevention Plan is to inform District employees of the procedures to be taken to prevent fires and the actions to be taken in the event a fire occurs. The Plan lists safety precautions as well as actions which are prohibited and will result in safety violations being filed against responsible individuals.

1. The Fire Protection Plan consists of the following sections:
 - i) **Classifications of Fires** - explains the three most common fires.
 - ii) **Fire Prevention Plan** - explains practices and procedures for prevention of fires.
 - iii) **Emergency Action Plan** - explains procedures and guidelines to be taken if a fire occurs.

Safety is a major concern for all people occupying the District buildings. Compliance with this Fire Protection Plan will greatly reduce the risk of injury or death and reduce loss of assets if a fire occurs.

A. CLASSIFICATIONS OF FIRES

Four general classifications of fires have been adopted by the National Fire Protection Agency (N.F.P.A.). These classifications are based on the type(s) of combustible materials, and the extinguishing agent needed to combat each type of fire. Three of the four fire classifications are defined below. The fourth class pertains to metal fires to which District property and/or employees will most likely never be exposed.

1. **Class A Fires** - These fires occur in ordinary materials such as wood, paper, excelsior, rags, and rubbish. The quenching and cooling effects of water, or of solutions containing large percentages of water, are of first importance in extinguishing these fires. Dry-chemical agents provide both rapid knockdown of the flames and the formation of a coating that tends to retard further combustion. Where total extinguishment is mandatory, follow-up with water.
2. **Class B Fires** - These fires occur in the vapor-air mixture over surface flammable liquids, such as gasoline, oil, grease, paints, and thinners. The limiting of air (oxygen) or combustion inhibiting effect is of primary importance to stop fires of this class. Solid streams of water are likely to spread the fire. However, under certain circumstances, water-fog nozzles may prove effective in the control, but not the extinguishment of these fires. Generally, use dry chemicals, multipurpose dry chemicals, CO₂ foam, or halogenated agents for such fires.

3. **Class C Fires** - These fires occur in or near energized electrical equipment where nonconducting - extinguishing agents must be used. Use dry chemicals, CO₂, or halogenated extinguishing agents for such fires. Do not use foam or a stream of water because both are good electrical conductors and may result in shock or electrocution.

B. FIRE PREVENTION PLAN

The following Fire Prevention Plan evaluates hazards and describes procedures to prevent hazardous conditions which could result in a fire.

1. **Potential Workplace Fire Hazard:** The objective of the Fire Prevention Plan is to eliminate potentially hazardous situations that may exist or occur in, on, or around District facilities. A few examples of such situations are as follows:
 - i) An area or areas where flammable and combustible materials are stored.
 - ii) An unsafe area arising from the prohibited accumulation of hazardous materials such as rags saturated with a combustible material, paper, wood, etc.
 - iii) Improperly disposing of a cigarette which may come in contact with combustible materials or liquids.
2. **Housekeeping** - Housekeeping is extremely important to maintain a safe workplace. All areas of the District building, and facilities shall be continually cleaned and kept in an orderly fashion. This reduces the chance of a fire occurring.
3. **Storing and Handling of Flammable and/or Combustible Liquids** - Extreme care must be taken when using combustible and/or flammable materials.
 - i) **Handling** - Liquids are not to be left exposed to heat either by direct sunlight or open flame. If transporting any flammable and/or combustible liquid in a vehicle, it must be secured in the vehicle with rope or bungee cords. It must be tied or hooked to the vehicle to prevent the liquid container from rolling and spilling. It will only be transported when needed and must be stored in its proper place after use.

When dispensing new, or disposing of used oils or lubricants, spills shall be cleaned, and the containers sealed properly. Rags used to clean any spills will be placed in the fireproof waste receptacle and not in the ordinary waste bins.

When vehicles and equipment are being refueled, the engine must be turned off before fueling. There is a possibility that the fuel could contact the exhaust and cause an explosion or fire.
 - ii) **Smoking** - Smoking is prohibited in all District buildings and is only allowed on District property in designated areas. Smoking is prohibited when or where combustible and/or flammable liquids are being handled or dispensed.

- iii) **Storage** - Flammable and combustible liquids must be stored in a designated storage cabinet when not in use. No combustible or flammable liquids, such as thinners, fuels, lubricants, or other combustible or flammable materials will be left in a vehicle or the garage area. They shall be returned to their designated area after each use.
 - iv) **Housekeeping** - Housekeeping is essential for a safe environment and workplace. All rags saturated with combustible material shall be placed in the fireproof waste receptacle after use and not the regular waste bins. All potential fire hazard materials will be cleaned up and placed in the proper designated storage areas.
4. **Electrical Outlets** - Electrical fires can occur if any outlet is overloaded with appliances. Any outlet supplying power to more appliances than receptacles shall be protected with a circuit breaker type of extension cord.
 5. **Fire Protection Equipment** - There are several types of fire equipment and protection systems in use at District facilities.
 6. **Fire Extinguishers** - Most fire extinguishers located at District buildings are of the "ABC" type. However, the District also uses Halon chemical extinguishers in areas where those units would provide the most effective fire extinguishing capability. All District employees must become familiar with the different types of fire extinguishers, their firefighting capabilities, and their locations in District facilities. The different types of fire extinguishers located at District facilities include the following:
 - i) **ABC Dry Chemical** - This type of extinguisher can be used on class A, B, and C type fires. It is a multipurpose extinguisher that will attack any common fire in the workplace.
 - ii) **Halon Chemical** - This extinguisher is mainly intended for the office equipment, i.e., computers, printers, copiers, etc., as this type of chemical (Halon) reduces the risk of chemical reaction on valuable electrical equipment and greatly reduces the risk of shock to the operator from electrically charged equipment. This extinguisher is rated as a B and C type fire fighter.

Fire extinguisher locations, types and sizes for the District office/garage facility are shown on the attached building floor plan. Exhibit B

The **Scott J. Morse Pump Station** has one 10lb. "A,B,C" in the office in the upper level (office storage) and one 10 lb. A,B,C fire extinguisher in the pumproom, in the lower level.

The **Hogback Pump Station** has three fire extinguishers located throughout the building. There is one 10 lb. "B,C" fire extinguisher located inside the generator room, one 5 lb. "B,C" fire extinguisher located in the pump room, and one 10lb. B,C fire extinguisher located in the pump room next to the controlling units.

The **Brookhaven Lift Station** has one 10lb A,B,C located in the generator building and one 2.5 lb. located in the dry well (tube).

The **Centennial Lift Station** has one 5lb B,C located in the generator room and one 6lb B,C located in the pump room.

All District pickups contain a 2.5 lb. class A,B,C fire extinguisher. The Flatbed, sewer cleaners and CCTV Units has 5lb ABC fire extinguishers.

All District employees using the above referenced facilities and vehicles must become familiar with the type and location of each of the fire extinguishers.

7. **Alarm System** – A majority of the district’s office/garage facility is equipped with a full fire suppression system which monitors for heat, smoke and fire. If detected, the system will activate the sprinklers. However, the original building which includes the Old Garage and upstairs offices of the facility are equipped with a fire detection system for monitoring heat and smoke. The alarm system alerts the fire department and the occupants immediately after a smoke or heat sensor is tripped. The Hogback Pump Station and Scott J. Morse Pump Station alarm system are not full suppression systems. These facilities monitor for smoke or heat only. The Brookhaven Lift Station and the Centennial Lift Stations do not have fire detection systems.
8. **Maintenance** - The fire extinguishers and the alarm system must be inspected and maintained on a regular basis to confirm proper operation. It is the responsibility of the Safety Manager to have all fire extinguishers and alarm systems inspected and/or tested.
 - i) **Fire Extinguishers** - The District has all fire extinguishers tested on an annual basis by a private contractor.
 - ii) **Alarm System** - The District's alarm system is tested on a semiannual basis by the alarm company.

C. EMERGENCY ACTION PLAN

The following Emergency Action Plan provides all employees with procedures and guidelines to follow in the event a fire emergency occurs. Unless a specific District building is referenced, these procedures shall apply to all District buildings, vehicles, and equipment.

If an alarm sounds, or a fire is reported by another employee, evacuate the premises and report to the designated area discussed later in this section. There is only one situation where attempts to extinguish a fire would proceed evacuating the building, which is when a fire is caught in the very early stages and one fire extinguisher will extinguish a fire. Only one person shall attempt to extinguish a fire, all other occupants shall evacuate the premises immediately.

The office/garage facility is equipped with a fire/smoke detection system combined with the security system. There are various locations throughout the entire building where both smoke and heat sensors are placed. If any of these sensors are tripped, an alarm will sound in the lobby area and will automatically summon the fire department. None of the other District buildings are equipped with heat and smoke detector or alarm systems. Therefore, employees must be vigilant in monitoring for fire hazards.

If a fire occurs, depending on the circumstances, the following actions should be taken:

1. **Extinguish** - Many fires can be extinguished if discovered in the very early stages. If ever in doubt, or a fire extinguisher has been expelled against the fire with no success, you are required to evacuate and let the fire department fight the fire.

The procedure to be used for extinguishing a fire is as follows:

- i) Use an extinguisher approximately six feet away from the fire.
 - ii) Aim the stream at the base of the fire and not in the flames. This procedure will increase the effectiveness of the fire extinguisher.
 - iii) Be careful not to spread the fire onto combustible materials near the flames when using a fire extinguisher.
2. **Evacuate** - If a fire is not discovered in the early stages, it will most likely be impossible to extinguish it with the firefighting equipment available at District facilities. Depending upon your location in the building and the location of the fire and smoke, evacuate the building using the closest exit.
 - i) Always use the nearest fire exit. If the closest fire exit is blocked by fire or smoke immediately move to the next closest exit. Do not attempt to retrieve District or personal property before evacuating. A map identifying the fire exists and recommended exit routes is attached. Exhibit C.
 - ii) In an area where dense smoke has accumulated, get down on the floor and crawl to the nearest exit. As smoke rises there is less chance of smoke inhalation closer to the ground.
 - iii) If there is an indication of a fire on the other side of a closed door, feel the door for heat. If heat is detected from feeling the door, an alternate exit should be used. It is possible you could fuel a fire with oxygen by opening a door.
 - iv) Evacuations will be conducted in accordance with the following procedures at all District buildings unless a specific building is referenced:
3. **Verbal Warning** - Shout loudly to anyone in the vicinity that there is a fire, immediately evacuate the premises, and report to the designated area listed later in this section.

4. **Summon Emergency Equipment** - the emergency telephone number 911 will contact the authorities in case of an emergency. This call can be made from the office as long as you are not in danger of smoke inhalation or fire. If smoke or fire is present, you must evacuate and place the call from another location.
5. **Accounting for Personnel** - Accounting for personnel after an evacuation will proceed in the following manner to confirm no one is trapped inside the building.
 - i) Employees that are in the District office/garage facility should attempt to meet in the front (south) parking lot. If this is not possible, attempt to assemble somewhere near that vicinity away from danger and emergency response vehicles and operations.

In case of fire at other District buildings, employees should attempt to assemble at a location away from danger and emergency response activities.

- ii) In the event of a fire at the office/garage facility, the receptionist will be in charge of obtaining the sign-in/out sheet while evacuating, **only** if there is no danger. The receptionist will determine who was present in the building before the fire and confirm that all individuals are present.

For fires at other District facilities the employees should attempt to assemble at a safe location to determine if everyone has evacuated and no injuries have occurred.

- iii) If someone is suspected of still being in a building, no rescue attempt shall be made. You must wait for the authorities and inform them of the suspected trapped victim, and if possible, their location in the building.

6. **Medical Treatment** - After evacuation it should be determined if any personnel require medical attention. The District provides training and certification in Cardiopulmonary Resuscitation (CPR) and First Aid to all regular full-time employees.
 - i) If an employee becomes unconscious, the first available employee trained in the use of CPR shall administer CPR until the victim regains consciousness or medical personnel arrive and take over.
 - ii) If an employee is injured because of an emergency other employee(s) shall administer First-Aid until medical assistance is available.
7. **Reporting Fires** - After the above procedures have been carried out the fire should be reported to the District Manager, or in his absence, the Assistant District Manager, or in his absence the Safety Manager. It will be the responsibility of the Safety Manager to notify the District's insurance agent of the fire as soon as practical. The District's insurance agent is T. Charles Wilson.

HAZARDOUS CONTROL PLAN

A. Purpose

To communicate to all employees what hazardous materials are on site, how to handle the materials and how to protect them from exposure.

B. Objective of Program

1. Protect the health of all employees.
2. Provide employees the information on hazardous materials.
3. To comply with State and Federal Hazard Communication regulations.

C. Scope of the Program

1. List of all hazardous materials on the property.
2. Appropriate labeling on all containers used which hold hazardous materials.
3. To make available all Safety Data Sheets (SDS) of all hazardous materials being used.
4. To train all employees to properly protect themselves against potential hazards by being able to recognize and interpret labels, warnings, color coding, signs, etc. which are affixed to containers.
5. To train all employees to understand the elements of the SDS and to recognize possible risks to their health or physical harm.
6. This written program will be available to all employees, their designated representatives, the public, and to all Local, State and Federal officials who have proper authority.
7. Each job will keep a file on the SDS to cover the hazardous materials that they are using.

D. Listing of Hazardous Chemical Products

1. We will maintain a list of all hazardous materials used on each job site. We should always evaluate, to the best of our ability, the potential health exposure of a particular chemical or material before we decide to use it.
2. Provide a system, when purchasing chemicals, to obtain a SDS form the suppliers.
 - i) All supervisors, when ordering chemicals, shall request an SDS. This should be required on all Purchase Orders.

- ii) All Purchase Orders should also require that proper labeling be either attached to containers or shipped with the order.
- iii) The Hazard Communications file and SDS's will be retained with other permanent job records.

E. Container Labeling

1. Materials received by the Company shall be properly labeled. If labels are not provided, we shall contact the supplier to get the labels and document. These labels should contain the following information:
 - i) Identify the chemical product of substance.
 - ii) Hazard warnings
 - iii) Name and address of manufacturer or other responsible party.
 - iv) Labels must not be removed and shall be replaced if illegible.
2. All storage areas shall be posted to warn employees of the hazards of chemicals stored there.
3. If any empty container is to be used to store another chemical, the container shall be re-labeled to show the danger of the new chemical.

F. Employee Training

1. Each employee working with the chemicals shall be properly trained as to the dangers and what emergency steps should be taken if an employee should come in contact with the chemical.
2. Each employee shall know the location of the chemical products list and SDS's. S/he will have access to these at all times.
3. Each employee shall be properly trained on how to read the SDS.
4. Each employee shall be trained on what particular safety equipment is needed for each hazardous material.
5. Information and training shall be provided to employees at the time of their initial assignment and whenever a new hazard is introduced to the employee's work area.

G. Hazardous Non-Routine Task

1. Prior to starting a hazardous non-routine task or working in an area where chemicals are contained in unlabeled pipes employees will be made aware of the hazards involved. This information will include:
 - i) Specific chemical hazards.
 - ii) Protective/safety measures the employee can take.
 - iii) Measures the company has taken to lessen the hazards including ventilation, respirators, and presence of another employee and emergency procedures.

H. Multi-Employer Worksite

1. Other on-site employees are required to adhere to the provisions of the Hazard Communication Standard.
2. Information on hazardous chemicals known to be present will be exchanged with other employers. Employers will be responsible for providing necessary information to their employees.
3. Our Hazard Communication Program will be available at the job office.

I. Health, Safety and Emergency Procedures

1. To insure that sufficient and required information is available and accessible during emergencies, the following information will be available to local health and jurisdictional authorities, if requested or required:
 - i) Safety Data Sheets (SDS)
 - ii) Location of stored chemical products.
 - iii) Special procedures for spill control and cleanup, should a spill occur.

J. Terms

1. Below are listed terms used in this program and in the preparation of SDS. Although we have not included every term found in these sources, the most important ones are defined. If you do not understand a word or one of the definitions, ask your supervisor for help.
 - i) Absorption: The movement of a hazardous chemical through the skin and into the blood stream.
 - ii) Acute: Short-term effect, usually of a temporary high-level exposure.

- iii) Boiling Point: The temperature at which a liquid boils at atmospheric pressure.
- iv) Catalyst: A chemical that, without changing itself, causes a chemical reaction to proceed faster.
- v) Ceiling Value: (C): A maximum level. No exposure should ever exceed this level.
- vi) Chronic: Long-term effect. Low-level exposure over long periods gives rise to symptoms that develop over time.
- vii) Combustible: A liquid that becomes flammable when heated above 100 degrees Fahrenheit.
- viii) Concentration: PPM and Mg/M3: PPM - Parts per million is a volume-per-volume relation of concentration. Mg/M3 - Milligrams per meter cubed is a weight-per-volume measure usually applied to dusts, mists and fumes. A cubic meter is a cube, 39.4 inches on a side. For chemical vapors, PPM and Mg/M3 are inter-convertible.
- ix) Evaporation Rate: The time it takes a given amount of material to completely dry up, compared with an equal amount of a reference material.
- x) Flammable (Explosive) Limits - LEL and UEL: A flammable material will burn in air when ignited. These materials are referred to as flammable, combustible or explosive. The range of concentration in which these materials will burn is limited by the Lower Explosive Limit (LEL). When the gas or vapor is below this concentration, the mixture is too lean to burn. The Upper Explosive Limit (UEL) above this concentration is too rich for the mixture to burn.
- xi) Flash Point: The temperature at which a flammable liquid produces enough vapors to burn.
- xii) Ingestion: Taking a material by mouth; eating it.
- xiii) Inhalation: Breathing in a material.
- xiv) Inhibitor: A chemical which, when added to another, reduces the likelihood of a chemical reaction.
- xv) Oral Dose (LD 50): The amount, usually expressed in milligrams per kilogram, which when fed to a group of animals will cause 50% of them to die.
- xvi) Oxidizing Agent: A material that gives off oxygen in a chemical reaction.
- xvii) Polymerization: A chemical reaction in which two or more small molecules form a larger molecule.

- xxviii) Reactivity: The ability of a material to undergo a reaction with release of energy or heat.
- xix) Reducing Agent: A material that accepts oxygen in a reaction.
- xx) Solubility: The tendency of a material to dissolve in water or other solvent.
- xxi) Specific Gravity: The weight per volume when compared to water.
- xxii) Spontaneous Heating: The tendency of a material to heat up without any external heating.
- xxiii) Stability: The tendency of a material to resist undesirable chemical changes during storage or transportation.
- xxiv) Thermal Decomposition: The breakdown of a material when heated.
- xxv) Threshold Limit Value - TLV and PEL: The TLV is a safe exposure level set by the American Conference of Governmental Industrial Hygienists (ACGIH). A PEL is a similar level set by OSHA. Both signify a level at which you can be exposed day after day with no adverse effects.
- xxvi) Toxicity: The degree of injury or illness caused by a poisonous material.
- xxvii) Volatile Percent: The fraction by weight or volume of solvent: or evaporable content in a mixture.

K. Types of Hazards

You encounter hazards every day, both at work and at home. When discussing hazardous materials, generally we talk about chemical, physical or infectious agents. Here is an explanation of each:

1. Chemical Agents

- i) Most chemicals you use at work are potentially hazardous. Some are hazardous because of physical reactions that can occur. Examples of such physical hazards include flammable materials that can cause burns if ignited and reactive materials that can hurt you under the wrong conditions.
- ii) Corrosive materials, when splashed on skin and eyes, cause injury to them. Some corrosive materials come as dust, mist or fumes. You may come in contact with these finely divided and airborne particles by inhalation (breathing them in) or ingestion (swallowing them). Most corrosives are very irritating. Thus, their worst effect is the injury they cause to skin and eyes. Usually, only when workers are trapped or unable

to leave the contaminated area do corrosives become important as an inhalation hazard.

- iii) Some chemical agents are toxic. They can cause injury or illness by entering the body and acting as a poison to one or more of the body systems. Usually, these materials are found in the workplace as vapors or gases. They are carried by the air to the breathing zone (that area around the head from which the breathing air is drawn) and enter the body by way of the lungs. There, they are absorbed by the blood stream and carried to one area, or they may possibly poison the entire system. Some toxic material can be absorbed through the skin and carried to other parts of the body. Unlike corrosives, toxic materials in contact with the skin usually cause no injury at the site of a splash. Toxic materials can also be swallowed with food, but only a small number of industrial toxins enter the body in this manner.

2. Physical Agents

- i) Machines usually produce physical agents, or when two or more chemical agents are mixed. Some of these hazards (like noise, heat and welding arcs) are easy to sense. Other agents (like x-rays, microwaves, and ultrasonic noise) may be hazardous but do not register on our senses. Physical agents can present an immediate hazard (like high-powered lasers), or they can cause damage over a long period of time (like exposure to too much noise.)

3. Infectious Agents

- i) Infectious agents are living microbial materials that can cause disease or create toxic wastes or by-products. They can cause illness in people or animals. Infectious hazards can be airborne in droplets or spores and thus inhaled. They can also be contracted by touching a contaminated surface or enter the body through cuts or abrasions. For example, anthrax spores can enter the skin through cuts in a hide handler's hands. Other infectious agents can also be ingested on food.

L. Hazard Classes for Chemical Agents

Some materials are hazardous because they can react with the environment in ways that hurt people. Examples of these are flammable, reactive, radioactive or pyrophoric materials. Injuries can occur when you are too close to these materials under the wrong circumstances.

Other materials are hazardous because they cause illness or disease when they are taken into the body. Examples of these are toxic, carcinogenic or corrosive materials. These materials are directly responsible for the harmful health effects you see after exposure. Some materials are hazardous because of their physical hazards and because of their health effects. For example, benzene is both flammable and toxic.

1. Physical Hazards

- i) Flammable: Flammable materials burn at room temperature, or below. Flammable gases, when mixed with the proper amount of oxygen (usually from the air) will burn when ignited. Flammable liquids and solids give off enough vapors to burn when ignited.
- ii) Explosive: Explosive material gives off sudden, almost instantaneous volumes of gas when subjected to pressure, shock or heat.
- iii) Pyrophoric: Pyrophoric materials burn on contact with air.
- iv) Oxidizer: Oxidizers are materials that supply oxygen or otherwise help or cause other materials to burn.
- v) Unstable: Unstable materials undergo changes that can be hazardous under normal storage, use or transportation conditions.
- vi) Radioactive: Radioactive materials undergo spontaneous nuclear disintegration that results in the release of particles or photons that can ionize other materials.

2. Health Hazards

- i) Toxic or Highly Toxic: Almost all materials can be hazardous under the wrong conditions. Usually, the degree of hazard depends on the dose. Even a substance as necessary to life as water can be hazardous when too much is taken in: Kidney overload can result in death. Small amounts of most materials may cause mild symptoms that disappear once the person is removed from the exposure. Still larger doses can cause more severe illnesses, with some permanent injury or even death. Each person responds differently to hazardous materials. OSHA standards limit doses of industrial materials to levels that should cause no permanent harm over a working lifetime in the average person. OSHA's definition of "toxic" and "highly toxic" applies to materials much more hazardous than the average industrial chemical. In this program, we will use the more common, broader definition of toxic: any material which can cause illness or injury.
- ii) Sensitizer: Sensitizers cause changes in the body's defense system that harm when the individual is exposed to even trace amount of the material at a later time.
- iii) Corrosive or Irritant: These materials cause injury or irritation when they come in contact with eyes, skin or the mucus membranes. Acids in high concentration eat away skin. At low concentration acids may only cause a slight reaction which goes away without treatment.
- iv) Target Organ Toxins: These materials damage one or more particular organ or body systems after exposure. These exposures can cause cumulative damage over time at low concentrations.

- v) Carcinogens, Teratogens, Mutagens and Reproductive Hazards: These materials cause changes in the body's genetic material. Carcinogens cause changes leading to cancer. Mutagens cause similar changes that do not lead to cancer. Teratogens can cause birth defects and miscarriages. Reproductive hazards can cause a variety of reproductive effects ranging from infertility to miscarriages. Genetic material is not affected.

- vi) Radioactive: Radioactive materials undergo spontaneous nuclear disintegration that results in the release of particles or photons that can ionize other materials.

INCENTIVE AND VIOLATIONS

A. Purpose

A safe work environment requires the cooperation of all employees to protect everyone involved. The written policies are for everyone's protection and must be followed by all employees. The District has developed an incentive program to encourage employees to meet and exceed safety standards in the workplace. The safety incentive program promotes existing safety protocols and highlights effective safety processes performed by employees through extensive training during the year.

B. Incentive Program

The safety incentive program is for both operations and administrative staff. The program has been developed for employees to remain active and aware of the District's safety procedures and policies.

All staff will be required to attend and actively participate in safety training courses throughout the year. The safety team which is made up of the Safety Champion, Safety Manager and Assistant Manager will meet monthly to discuss and schedule training courses appropriate for staff.

Staff will be required to participate in a minimum of 10 hours of safety-related training throughout the year. Training hours will be tracked by the safety team and used to award one safety day per year per employee for completion of the training program. If a training session is missed, staff will be provided opportunities to make up the hours through additional training as directed and approved by the Safety Team.

If all staff complete at least 12 hours of safety-related training, each employee will receive an additional team safety day.

Safety days will be awarded at the beginning of the year and must be used in the year it was awarded or they will be lost. No employee shall have more than two (2) safety days in their time off bank per calendar year.

Should an employee not make a good faith effort to comply with the training requirements of this program, they shall be subject to disciplinary action, up to and including termination.

LOCKOUT / TAGOUT PROCEDURE

A. Purpose

All energy sources of power-driven equipment will be locked and/or tagged in the off position when maintenance is being performed. Energy sources include electric, mechanic, hydraulic or pneumatic. It is the responsibility of the supervisor to ensure that the proper Lock/ Out-Tag/Out procedures are followed. All employees that perform lock/out-tag/out operations as part of their duties will be provided adequate training on the precise LO/TO procedure for each machine or piece of equipment being serviced. It is the responsibility of the person performing the maintenance to ensure that all equipment is properly locked and tagged/out before starting any maintenance work. Both the supervisor and the maintenance employee must check the equipment before restarting it to make sure it is safe to operate.

1. **A lock/out** is a method of keeping equipment from moving and endangering workers. OSHA regulations let each employer use lock/out, tag/out, or both. **The District mandates that both be used.** The District, Constructors Companies, OSHA and MSHA also require each job site, operation or mine use a lock/out and tag/out procedure, such as:
 - i) A disconnect switch, circuit breaker, valve, or other energy isolating mechanism that is placed in the **safe or off** position.
 - ii) A device placed over the energy isolating mechanism to hold it in the safe position.
 - iii) A lock attached to the '**on**' switch to ensure equipment cannot be energized without removal of the lock.
2. **Tag/out** refers to a sign or tag posted on a switch that physically cannot be locked out. Once the switch has been placed in the "**off**" position, the tag is placed over the switch and warns other employees that the equipment is under maintenance and should not be started. This tag must also identify the person who applied it. In a **tag/out**, the energy-isolating device is placed in the safe position and a written warning is attached to it. All lock/out and tag/out materials must be:
 - i) Durable enough to withstand wear.
 - ii) Substantial so they won't come off easily.
 - iii) Capable of identifying the person who applied it.
3. A lock/out or tag/out is applied whenever maintenance is performed around any machine where injury could occur:
 - i) Unexpected start-up of the equipment.
 - ii) Release of stored energy.

C. Lock Out/Tag out Policy

1. Two situations are most likely to need **lock/out – tag/out**: When a guard or other safety device must be removed; and when any part of the body is placed where it could be caught by moving machinery. Some jobs for which **lock/out – tag/out** should be used are:
 - i) Repairing electrical circuits.
 - ii) Cleaning or oiling machinery with moving parts.
 - iii) Clearing jammed mechanisms.
 - iv) Repairing water appurtenances in vaults.

D. Training and Responsibility

1. Employees performing any service or maintenance work must be trained in the **lock/out and tag/out policy**. This also applies to any vendors or subcontractors doing work on Company job sites. Employee must understand the purpose, function and his/her responsibility in performing the lock/out and tag/out. Employees need to receive periodic training to ensure they are up-to-date and knowledgeable on the lock/out and tag/out policy.
2. It is the responsibility of all employees to strictly adhere to the **lock/out and tag/out policy**. Failure to follow the policy requires disciplinary action that could include termination.

E. Lock/Out—Tag/Out Procedures

1. **The following lock/out procedures are mandatory and shall be enforced without exception.** When a piece of equipment or machinery is to be inspected, cleaned, repaired or worked on by an individual, that piece of equipment must be immobilized by the individual prior to commencing work on the equipment. The employee who will perform the maintenance or repair in accordance with the following procedures must place **“DO NOT OPERATE”** or **“DO NOT OPEN”** tags and locks at the control box or main switch. Your immediate supervisor must approve any deviations from these procedures. **ANY VIOLATION OF THE LOCK OUT PROCEDURES WILL BE CAUSE FOR DISMISSAL.**
2. Each employee shall own a personal lock with one key. Each employee must lockout at the disconnect switch and/or valve. **Do not trust someone to lockout for you.**
3. The locks are to be used to lock/out the switch gear at the circuit breaker or disconnect provided for this purpose. These locks will also be used with chains or other safety lockout devices to lock out valves or other controls.

4. If more than one person is working on the same piece of equipment at the same time, each employee is to have a personal lock on the lockout device. If the primary device will not accommodate each person's lock, multiple locking devices are to be used.
5. When multiple locking devices are required, the shank of the multiple devices must immobilize the equipment and must not merely be attached to the shank of another lock.
6. All electrical equipment involving the use of disconnect switches as a source of power for their operation will be turned off, locked out in the **"OFF"** position and tagged with a **"DO NOT OPERATE"** tag.
7. After the electrical equipment has been locked out and tagged with a **"DO NOT OPERATE"** tag, the employee will attempt to start the equipment to ensure that the proper switch has been locked out and equipment will not start.
8. All equipment operated pneumatically or hydraulically will be rendered inoperable by:
 - i) Turning off the air or hydraulic supply to that piece of equipment.
 - ii) Locking and tagging the valve with a **"DO NOT OPERATE"** or **"DO NOT OPEN"** tag.
9. After the pneumatic equipment has been locked out and tagged with a **"DO NOT OPERATE"** OR **"DO NOT OPEN"** tag, the employee will attempt to start the equipment to make sure that the proper switch and valve were locked out and the equipment will not operate.
10. Make sure the equipment will not operate with residual or accumulated pneumatic or hydraulic pressure.
11. **Gravity and pressure are often the 'forgotten' energy.** It may be necessary to lock/out-tag/out or release energy caused by gravity or pressure.
12. Where the ignition is controlled by a keyed switch, the key will be placed in the **"OFF"** position, removed, and the switch tagged with a **"DO NOT OPERATE"** tag.
13. If standard lock/out switches are not available to immobilize the machinery, fuses should be pulled, terminals disconnected, or other standard safety procedures applicable to the individual piece of equipment should be followed. **"DO NOT OPERATE"** tags will be placed at the starter button or switch.
14. In the event that tagging and removing the ignition key are not considered adequate protection, the battery cable that is connected to the starter shall be removed at the battery end and tagged with a **"DO NOT OPERATE"** tag.

15. All other necessary precautions, such as opening or closing valves, changing valves, tagging and locking valves, installing blind flanges, etc., will be performed prior to starting the job.
16. If it becomes necessary to operate the equipment during the work assignment, the following procedure will be followed:
 - i) Each employee's personal lock will be removed only after it is certain that everyone has been advised of the procedure, the entire area has been inspected, and everyone is in the clear.
 - ii) One person will be authorized or assigned to operate the equipment.
17. If employees must leave a job site, the following procedures will apply upon their return to the equipment:
 - i) Each employee's personal lock will be reinstalled to lockout equipment.
 - ii) After checking to ensure that everyone is clear of any danger, the employee will retest the equipment to ensure it is immobilized.
18. No employee will remove another person's lock, lockout device, or **“DO NOT OPERATE” OR “DO NOT OPEN”** tag. Before leaving the job for another assignment, at shift end, or upon completion of that job, each employee will personally remove his/her own lock.
19. After completing work on the equipment, the employee will notify **the Supervisor in Charge** that the equipment has been released. This will be done only after guards have been replaced and no hazardous operating or working conditions have been left.
20. If an employee fails to remove a lock, that employee will be required to return to remove it in person. If the individual is not available, the lock will not be removed until the foreman in charge has made a thorough check of the equipment. The foreman will verify and make certain the equipment is safe to operate.

F. Lock/Out--Tag/Out Checklist

1. Is all machinery or equipment capable of movement, required to be de-energized or disengaged and blocked or locked out during cleaning, servicing, adjusting or setting up operations, whenever required?
2. Is the locking-out of control circuits in lieu of locking-out main power disconnects prohibited?
3. Are all equipment control valve handles provided with a means for locking-out?

4. Does the lock/out procedure require that stored energy (i.e.: mechanical, hydraulic, air) be released or blocked before equipment is locked out for repairs?
5. Are appropriate employees provided with individually keyed personal safety locks?
6. Are employees required to keep personal control of their key(s) while they have safety locks in use?
7. Is it required that employees check the safety of the lock/out by attempting a start-up after making sure no one is exposed?
8. Where the power disconnecting means for equipment does not also disconnect the electrical control circuit:
 - i) Are the appropriate electrical enclosures identified?
 - ii) Is means provided to assure the control circuit can also be disconnected and locked out?

G. Subcontractor Responsibility

It is the responsibility of the subcontractor to develop and submit a detailed work plan and Job Hazard Analysis to cover the full range of electrical safety issues, including safety related work practices, shock and arc flash protection, maintenance, special equipment requirements and installation. The work plan shall abide by all state, EM385-1-1 and NFPA 70E standards.

Personal Protective Equipment (PPE) Employees working in the areas where electrical hazards are present will be provided with and shall utilize personal protective equipment that is designed and constructed for what the work requires in accordance with and required by NFPA 70E.

OFFICE SAFETY

A. PURPOSE

The purpose of the District's office safety policy is to inform all the employees of the general guidelines for safety in the office areas of the District office. Safe work practices apply to all employees, including office personnel. The following rules are those specifically addressing the office setting, but do not relieve the office personnel from their responsibility to follow other relevant safe work practices and procedures in addition to this section.

B. OFFICE ERGONOMICS

1. Certain work in offices has been shown to contribute to pain and/or injury due to poor ergonomic design, which include jobs involving extensive telephone usage and computer inputting. The District has taken the following measures to control these office ergonomic hazards.
2. All employees whose jobs require extensive telephone usage will be issued a headset to be used when telephone usage exceeds three hours per day. Headsets are available upon request from the safety manager.
3. All employee workstations where terminals are present shall be equipped to allow comfortable computer use, such as a wrist rest at each workstation, non-glare screens, adjustable heights chairs, standing desks and keyboard wrist supports. All the mentioned items are available upon request from the safety manager.

C. OFFICE CLEANLINESS/HOUSEKEEPING

1. Offices are to be kept in a neat order at all times, to prevent accumulation of paper, boxes, or other flammable materials on the desk or floor. Any spills or other hazards that you see are to be cleaned up immediately. If an entrance rug, boxes, or anything else creates a trip hazard in the work area, remove it or report it immediately to your supervisor for removal.

D. SECURITY

1. To protect the District and employees, certain security restrictions are in place. See the Workplace Security Plan for all the information. The material covered in that section include the following:
 - i) **Access Restrictions**
 - (1) Identification Cards
 - (2) Computer access
 - (3) Reception area/visitor procedures
 - (4) Parking issues
 - ii) **Anti-Theft Practices**

E. FIRST AID

1. First aid stations equipped with basic bandages, nonprescription pharmaceutical products, and eye wash solution are located in two areas, the universal bathroom on the main floor and the locker room. Employees should bandage their own cuts and abrasions, if at all possible, to avoid any exposing of blood or other bodily fluids.
2. In addition, the District provides CPR and First Aid training to all employees. In a serious situation, any employee to discover a situation in which they are incapable of providing adequate assistance should call emergency help immediately.

F. ELEVATOR SAFETY

1. Never load an elevator beyond its rated safety capacity.
2. Horseplay or fooling around is not permitted in elevators or anywhere else in the District office.
3. Never block elevator doors open.
4. Only qualified technicians are allowed to work on the elevator.

G. TORNADO AND FIRE SAFETY

1. In the case of a tornado emergency, emergency sirens will sound. Employees and visitors are to move immediately to the designated area inside the building and stay there until an “all clear” announcement is made.
2. In the case of a fire, fire alarms will sound. Employees are to follow the Fire Safety Plan, which includes gathering in a designated area for a “head count”. Entrance into the building is not allowed until an “all clear” announcement is made.

H. USE OF SPACE HEATERS AND SMALL APPLIANCES

1. Space heaters, fans, coffee warmers, and other small electrical appliances are allowed in District offices or work areas only with the express approval of the safety manager. These items should only be turned on and in use during working hours and when employees are in need of them.

PERSONAL PROTECTIVE EQUIPMENT

A. PURPOSE

The purpose of this section is to describe the hazard assessment plan and personal protective equipment in use at Platte Canyon Water and Sanitation District. Personal protective equipment is not to be relied on as the only means of providing protection against hazards but is used in conjunction with other safety controls and practices. If possible, hazards will be abated first through engineering controls, then with personal protective equipment to provide protection against hazards which cannot reasonably be abated otherwise.

B. HAZARD ASSESSMENT

1. Safety Manager Responsibilities

It is the responsibility of the safety manager to become familiar with each department's hazard assessment and select the proper personal protective equipment to ensure worker protection and safety.

2. Supervisor Responsibilities

It is the responsibility of each supervisor to complete an annual hazard assessment and recommend practices and equipment required to perform each job function in a safe manner, and to train employees in the proper use of personal protective equipment. Supervisors are responsible for enforcing proper use of all personal protective equipment.

3. Employee Responsibilities

It is the responsibility of all employees to learn the proper use of the personal protective equipment, use personal protective equipment as necessary and/or required, report any defects in personal protective equipment, and report any unsafe equipment, work areas, or work procedures to their immediate supervisors. It is the responsibility of the employee to keep their assigned personal protective equipment clean and properly maintained. Personal protective equipment is to be inspected, cleaned and maintained by the employee as part of their normal job duties. If a piece of equipment is in need of repair or replacement, it is the responsibility of the employee to bring it to the attention of their immediate supervisor or the safety manager.

C. PERSONAL PROTECTIVE EQUIPMENT

All work activities require different levels of protection and precautions to protect the employee and others. Some equipment is required to be available at all times regardless of the job being performed, i.e., safety shoes, safety vests, etc. Other equipment is available to provide a more comfortable and safe work atmosphere. All employees who are required to use personal protective equipment will be trained in the proper use of such equipment by their immediate supervisor. Employees will not be allowed to perform a job without the appropriate personal protective equipment to protect against potential hazards.

The District will provide the employee with the following personal protective equipment.

1. **Hand Protection**

The District requires that all employees working in designated job assignments use the proper hand protection to help protect fingers, hands, wrists, and forearms. The following are some types of hand protection available to all employees. Hand protection must be used under the conditions described below.

2. **Gloves**

Gloves are the most common hand protection against cuts, punctures, scrapes, and skin irritations from chemicals or germs. If chemical hazards may affect the hand, rely on material safety data sheets for hazard information and the appropriate required personal protective equipment.

- i) Rubber - protect against corrosives, toxic chemicals, and unsanitary fluids. Rubber gloves should be worn wherever and whenever the above-mentioned conditions exist, i.e., hydraulic cleaning, root cutting, sewer main televising, handling of automobile batteries, and any lift station operations. Rubber gloves are **required** to be worn whenever handling root treatment chemicals.
- ii) Leather - protect against rough, sharp, or abrasive materials. Leather gloves must be worn wherever and whenever the above-mentioned conditions exist, i.e., hand digging, handling materials or equipment, during the use of hand tools, jack hammer or tamper, and removing manhole and valve box lids. Contamination is one of the biggest concerns when using gloves. Employees are to inspect gloves for defects, holes and cracks to ensure there will be no leaks. Clean or rinse reusable gloves. Dispose of defective gloves. Employees should always wash their hands after the use of any kind of gloves.

3. **Foot Protection**

The District requires that all employees working in designated job assignments wear foot protection to help prevent foot injuries, ankle injuries, slips and falls. The following are some types of foot protection available to all employees and must be use under the conditions described below.

4. **Safety shoes and boots**

Safety shoes and boots are the most common foot protection against cuts, punctures, scrapes, burns, and sprains.

- i) Steel-toed or hard-toed boots - are **required** to be worn at all times by all field employees, including any district related work after normal work hours. Steel toed safety shoes protect toes and feet from falling objects, and sharp metal material on the ground. Purchase and care of steel toed shoes or boots are the employee's responsibility. However, District policy provides for reimbursement of the cost of safety shoes or boots when acquired in accordance with District purchasing policies.
- ii) Rubber boots - protect against corrosives, toxic chemicals, and unsanitary fluids. Rubber boots should be worn wherever and whenever the above-mentioned

conditions exist, i.e., sewer back-ups, entering the wet well, and entering a saturated trench.

5. **Eye Protection**

The District requires that all employees working in designated job assignments wear eye protection to help prevent eye injuries. The following are some types of eye protection available to all employees and must be used under the conditions described below.

i) **Safety shields and glasses**

Safety shields and glasses are the most common eye protection against flying objects, dusts, and splashing liquids.

(1) Shields - protect face and eyes against flying objects, dust, mists, powders, and splashing liquids. Some of the District's equipment has been equipped with shields and should be used in conjunction with safety glasses, i.e., the grinder.

Face shields are **required** to be worn during any grinding, wire wheel polishing and cutting with the demo saw.

(2) Safety glasses - protect against falling and flying objects, dust, mists, powders, and splashing liquids. Safety glasses must be worn whenever or wherever these hazards exist, i.e., manhole or vault entry, soldering, sledge hammering, and vehicle maintenance. Safety glasses are required to be worn during sand blasting, any form of chipping, and handling of root treatment chemicals. Employees are **required** to inspect their glasses for defects and keep their glasses clean during every use.

ii) **Computer screen filters**

Computer screen filters are the most common protection against computer screen glare. Computer screen filters are available to all employees upon request and should be used to help reduce eye strain.

6. **Hearing Protection**

The primary goal of the District Hearing Conservation Program is to reduce, and eventually eliminate hearing loss due to workplace noise exposures. The program includes the following elements:

i) Work environments will be surveyed to identify potentially hazardous levels and personnel at risk.

ii) Environments that contain or equipment that produces potentially hazardous noise should, wherever it is technologically possible and economically feasible, be modified to reduce the noise level to acceptable levels.

iii) Where engineering controls are not feasible, administrative controls and/or the use of hearing protective devices will be employed.

- iv) Periodic hearing testing will be conducted to monitor the effectiveness of the hearing conservation program. Early detection of temporary threshold shifts will allow further protective action to be taken before permanent hearing loss occurs.
- v) Education is vital to the overall success of a hearing conservation program. An understanding by employees of the permanent nature of noise-induced hearing loss (the District's) hearing conservation program, and the employee's responsibilities under the program are all essential for program effectiveness.

The District is aware that excessive noise exposure is a potential cause of hearing loss, is establishing a hearing conservation program that is intended to meet the requirements of both the *Mine Safety and Health Administration (MSHA)* and the *Occupational Safety and Health Administration (OSHA)* noise regulations. The District will use the *Permissible Exposure Limit (PEL)* established by the OSHA and MSHA regulators, as detailed in the table below.

DURATION OF EXPOSURE, PER DAY	SOUND LEVEL (dB)
16 hours	85
8 hours	90
4 hours	95
2 hours	100
1 hour	105
½ hour	110
¼ hour	115

(OSHA - Table G-16, 29 CFR 1910.95 and MSHA Table 62-1, 30 CFR Part 62)

When the sound levels above are exceeded, feasible administrative or engineering controls will be instituted. If the controls fail to reduce the sound levels to within those listed above, hearing protection will be provided and used to reduce the sound levels to an acceptable level. In addition, both MSHA and OSHA requirements dictate that whenever employee noise exposures equal or exceed an 8 - hour time-weighted average (TWA) of 85 decibels, A-weighted (DBA), slow response, a continuing effective hearing conservation program will be instituted.

All work being conducted in areas where the dB is over 115dB the area will be a double hearing protection area. The area will be properly marked with signage alerting all persons in the area or entering the area of the hazard.

Ear plugs or muffs are the most common hearing protection. Ear plugs or muffs help protect employees hearing and should be used when around pumps and small motors. Ear plugs or muffs are **required** during the operation of the truck mounted air compressor, jack hammer or tamper, and the generators.

7. **Head Protection**

The District requires that all employees working in designated job assignments wear head protection to help prevent head injuries.

i) **Hard hat**

Hard hats are the most common protection against falling objects. All operations employees are provided hard hats and must be worn wherever and whenever the above-mentioned conditions exist. Hard hats are **required** to be worn whenever entering and working in a manhole, vault, or trench and when working with the district's emergency contractor during remedial or emergency repairs.

8. **Respiratory Protection**

It is the policy of the District to protect its employees from hazardous atmosphere through a comprehensive program of recognition, evaluation, engineering, administrative and work practice controls, and personal protective equipment including respirators. To the greatest extent feasible, hazard elimination and engineering and work practice controls shall be employed to control employee exposure to within allowable exposure limits. However, where these measures are not feasible or fully effective or are under development, the District is committed to full compliance with applicable federal and state regulations pertaining to employee respiratory protection.

i) Purpose

The purpose of this program is to protect the health of the District employees who may be exposed to hazardous atmospheres in the conduct of their work and to provide appropriate protection from these hazards, without creating new hazards. This program sets forth the work practices for respirator use, provides information and guidance on the proper selection, use, and care of respirators, and contains requirements for establishing and maintaining a respirator program

ii) Scope

- (1) Respirators must be worn in areas where the atmosphere is contaminated or oxygen deficient. Appropriate tests must be conducted when such conditions are suspected.
- (2) Employees will use the type of respiratory protection provided in accordance with instructions and training. Respiratory protection equipment, training, and medical evaluations will be provided at no cost to the employee.
- (3) Employees will not be assigned to a task requiring the use of a respirator unless it has been determined that they are physically able to perform the work while using the equipment. Medical certification of each employee's ability to wear a respirator will be maintained

iii) Medical Evaluation

- (1) An initial medical evaluation must be performed by a physician or licensed health care professional (PLHCP), using at least a medical questionnaire with a follow-up examination when considered medically necessary.
- (2) The individual responsible for respiratory program administration must ensure that the following information is developed and provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator.
- (3) The following information will be developed and provided to the PLHCP:
 - (a) The type and weight of the respirator to be used by the employee.
 - (b) The duration and frequency of respirator use.
 - (c) The expected physical work effort.
 - (d) Additional protective clothing and equipment to be worn.
 - (e) Temperature and humidity extremes that may be encountered.
- (4) The employer shall also provide the PLHCP with a copy of the written respiratory protection program and a copy of the applicable section (Medical Evaluation).
- (5) Based on a review of this questionnaire, in addition to detailed information concerning the nature of the work performed and the respiratory protective equipment used, the PLHCP will make a written recommendation regarding the employee's ability to use the respirator. Based on this written recommendation, the employer will determine whether the employee can safely wear the respirator. Additional medical evaluations must be made if an employee reports medical signs or symptoms related to the ability to use a respirator, or if a PLHCP, supervisor, or respirator program administrator informs the employer that a new evaluation is needed.

iv) Approved Respirators

The following factors will be considered in selecting a respirator:

- (1) Nature of the hazard.
- (2) Extent of the hazard.
- (3) Contaminant(s) present.
- (4) Warning properties (or the lack thereof).
- (5) Concentration of the contaminant(s).

- (6) Characteristics and limitations of the available respirators.
- (7) Expected activity of the worker.

v) Use and Limitations

An air-purifying respirator cannot be used for rescue work or for emergency work of any nature because an air-purifying respirator does not protect against possible oxygen deficiencies or high levels of contaminants (e.g., IDLH conditions). For non-IDLH atmospheres, an air-purifying respirator may be used provided that the following occur:

For protection against gases and vapors

- (1) An end-of-service-life indicator (ESLI) is certified by NIOSH for the contaminant.
- (2) The employer has implemented a change schedule for canisters and cartridges based on objective data that will ensure that canisters or cartridges are changed out before the end of their service life.

For protection against particulates,

- (1) The respirator is equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or
- (2) 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) The proper type of canister, cartridge, or filter must be specifically selected for the atmosphere and conditions to be encountered. For gases and vapors, the maximum concentration for which the air-purifying element is designed is specified by the manufacturer or is listed on labels of cartridges and canisters. A canister mask that bears the label All Service, All Purpose, Universal, or similar notations cannot be used.
- (4) An effective seal must be obtained between the face piece and face to prevent inward leakage. An air-purifying respirator, along with a demand-type respirator, operates under negative pressure when the wearer inhales; thus, some inward leakage of a contaminant is possible.
- (5) If the temple bars of eyeglasses extend through the sealing edge of a full-face mask, a proper seal cannot be obtained. Full-face masks have been developed with systems for mounting corrective lenses inside the face piece.

- (6) The wearer's eyeglasses or goggles should not interfere with a half-mask face piece.
- (7) Employee must be clean shaven between the sealing surface of the respirator and the face in order to obtain a proper seal.

vii) Precautions

The following safety precautions will be taken when using a respirator:

- (1) In noisy areas, establish an alternate form of communication between workers. Speech transmission over short distances in relatively quiet areas is usually satisfactory.
- (2) To prevent a face piece from fogging up in low temperatures, use an anti-fog compound to coat the inside of the face piece.
- (3) Never use pure oxygen in a supplied-air respirator, except in those designed for this purpose (e.g., medical uses). Use only Class D quality breathing air from cylinders or compressors that meet the requirements of OSHA 29 CFR 1910.134.
- (4) Do not work in or near the flammable range of a gas or vapor that is greater than 1 percent of the lower explosive level (LEL).
- (5) Select an air supply hose that resists chemicals to which it might be exposed.
- (6) Airline couplings must be incompatible with the outlets for other gas systems to prevent accidental servicing of airline respirators with non-respirable gases or oxygen.

viii) Inspection of Respirators

- (1) Inspect respirator before and after each use.
- (2) Inspect all self-contained breathing apparatus and other respiratory equipment used for Emergency Respiratory Protection and annotate the date on the inspection record. The inspection is required monthly or after each use.
- (3) Inspect hose mask and blower monthly.

Respirators shall be inspected as follows:

- (1) All respirators used in routine situations shall be inspected before each use and during cleaning.
- (2) Emergency, escape-only respirators shall be inspected before being carried into the workplace for use.

ix) Maintenance

- (1) Repairs will be made only by qualified personnel authorized by the manufacturer. Use only replacement parts specifically made for the respirator being repaired.
- (2) Replace air-purifying cartridges according to the ESLI (End-of-Service-Life Indicator), change out schedule, at the first indication of breakthrough (odor, irritation, etc.), leakage, or an increase in resistance in breathing.
- (3) Pre-filters will be changed daily or more often as needed.

x) Cleaning and Disinfecting

The respirator shall be cleaned and disinfected at the following intervals:

- (1) Respirators issued for exclusive use of an employee shall be cleaned as often as necessary to be maintained in a sanitary condition.
- (2) Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals.
- (3) Respirators maintained for emergency use shall be cleaned and disinfected after each use.
- (4) Respirators used in fit testing and training shall be cleaned and disinfected after each use.
- (5) All respirators are to be cleaned and disinfected according to OSHA's mandatory Respiratory Cleaning Procedures (Appendix A).

xi) Field Inspection Procedures

The respirator maintenance program must include frequent inspection of the devices. OSHA requires that all respirators be inspected before and after each use. This inspection is to include the following:

- (1) Tightness of the connections.
- (2) The face piece, valves, connecting tube, and canisters.

Face piece will be examined for:

- (1) Excessive dirt.
- (2) Cracks, tears, holes or distortion from improper storage.
- (3) Cracked or broken air-purifying element holders.
- (4) Badly worn threads.

- (5) Missing gaskets.

Head Straps or Harness will be examined for the following:

- (1) Breaks.
- (2) Loss of elasticity.
- (3) Broken or malfunctioning buckles and attachments.
- (4) Excessively worn head harness serrations that might permit slippage.

Exhalation Valve, after removing its cover, will be examined for the following:

- (1) Foreign material such as detergent residue, dust particles, or human hair under the valve seat.
- (2) Cracks, tears, or distortion in the valve material.
- (3) Improper insertion of the valve body in the face piece.
- (4) Cracks, breaks, or chips in the valve body, particularly in the sealing surface.
- (5) Defective or missing valve cover.
- (6) Improper installation of the valve into the valve body.

Air Purifying Elements will be examined for the following:

- (1) Incorrect cartridge, canister, or filter for the hazard.
- (2) Incorrect installation, loose connections, worn or missing gaskets, or cross-threading in the holder.
- (3) Expired shelf-life date on cartridge or canister.
- (4) Cracks or dents in the outside case of filter, cartridge, or canister.
- (5) Evidence of prior use of sorbent cartridge or canister, indicated by the absence of sealing material, tape, foil or the like, over inlet.

When used in coating operation, the pre-filter will be changed daily. This requires checking daily.

xii) Repair of Respirators

- (1) The employer shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service and are discarded or repaired or

adjusted. Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer, or a technician trained by the manufacturer.

xiii) Storage of Respirators

- (1) Respirators will be placed in a clean plastic bag. The bag will be sealed and initialed by the person who performed the cleaning, disinfecting, and maintenance.
- (2) Respirators will be stored so that the exhalation valve rests in a normal position and will not be impaired as a result of creasing, flattening, or other deformation.

xiv) Training

- (1) All employees who may be required to wear a respirator will be trained in the proper selection, use, and maintenance of respiratory protective equipment. The training will be on an annual basis, or more often if necessary. A record will be kept of all employees who receive the initial and annual training. Each employee will sign the form after receiving the training. The employee will be trained and will be able to demonstrate knowledge in the following:
 - (a) Proper use of the respirator. All respirators must be worn the way they were originally designed.
 - (b) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
 - (c) No alterations or modifications will be made.
 - (d) Fitting:
 - (i) All employees using a respirator will receive fitting instructions and be fit tested to ensure face piece-to-face seal.
 - (ii) Respirators will not be worn when conditions prevent a good face seal.
 - (e) Glasses are permitted only if they do not affect the function of the respirator.
 - (f) Employees must be clean shaven between the sealing surface of the respirator and the face in order to obtain a proper seal.
 - (g) For dust, mist, fume, and vapor respirators, place the bottom strap around the head, just below the ears. The top strap should be placed around the head above the ears. Make sure the straps are not twisted. Do not over tighten straps. This can distort the mask and break the face piece seal.
 - (h) For airline respirators, don the mask, first pulling the side straps, then pulling the top strap. The mask should fit securely, yet comfortably.

- (i) Why and when the particular type of respirator will be used.
- (j) The chemicals and air contaminants that this respirator can be used to protect against and the restrictions and limitations of the particular respirator.
- (k) Instructions as to where the respirator can be picked up and deposited at the beginning and end of the shift.
- (l) How to clean, inspect, and maintain the respirators.
- (m) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
- (n) The general requirements of the standard.
- (o) How to tell if breakthrough happens to occur during the use of the respirator (fumes, vapors, dust, mist, etc.).
- (p) Information concerning oxygen deficiency.

xv) Fit Testing

- (1) Employees will be fit tested before using a half-face and full-face negative pressure respirator. The new standard removes some of the more restrictive requirements of some of the substance specific standards. Fit testing must be conducted in the negative pressure mode with adapters, as may be necessary to test positive pressure/air-supplied respirators.
- (2) All fit testing is conducted on an annual basis.

xvi) General Safety and Health Protection

- (1) The District requires that all employees working in designated job assignments wear and use appropriate personal protective equipment to help prevent injuries. The following are types of personal protective equipment available to all employees and must be used if applicable.
 - (a) **Safety vest**
Safety vests are used to protect the employee in traffic areas. Safety vests are **required** to be worn at all times while the employee is working in right of way.
 - (b) **Rain gear**
Rain gear protects against rain and any other form of spraying water. This should be worn at times wherever and whenever the above-mentioned conditions exist.

(c) **Safety Belts**

Safety belts are **required** to be worn at all times while driving or riding in a District vehicle.

(d) **Fire Extinguisher**

Most fire extinguishers located at District buildings are of the "ABC" type. However, the District also uses Halon chemical extinguishers in areas where those units would provide the most effective fire extinguishing capability. All District employees must become familiar with the different types of fire extinguishers, their firefighting capabilities, and their locations in District facilities. Employees will be trained in the proper use of fire extinguishers. The different types of fire extinguishers located at District facilities include the following:

- (i) ABC Dry Chemical - This type of extinguisher can be used on classes A, B, and C type fires. It is a multipurpose extinguisher that will attack any common fire in the workplace.

- (ii) Halon - There is one Halon chemical type extinguisher in the office located on the second floor near the computer/copier area. This extinguisher is mainly intended for the computer equipment as this type of chemical reduces the risk of chemical reaction on valuable electrical equipment and greatly reduces the risk of shock to the operator from electrically charged equipment. This extinguisher is rated as a B and C type fire fighter.

- (iii) Carbon Dioxide (CO₂) - This fire extinguisher is rated type B and C firefighting equipment. This cannot be used on type A fires.

Fire extinguisher locations, types and sizes for the District office/garage building are shown on the building floor plan in the exhibit section.

(e) **Toxic gas/oxygen monitor**

Toxic gas/oxygen monitor is used to detect the potential hazard of toxic gases and/or oxygen deficiencies. Employees will be trained in the proper use and application of the District's gas monitors. Employees are **required** to use the toxic gas/oxygen monitor whenever entering a confined space.

SECURITY

A. PURPOSE

It is the District's policy to maintain a Workplace Security Plan to prevent violence and to protect against internal or external theft of information or materials. To accomplish these goals the District has implemented the following plan.

B. RESPONSIBILITY

1. The District Manager and the Safety Manager administer all programs related to security, including building security and information systems security programs. The District manager is responsible for issuing security access cards and code numbers to new employees, replacing lost or defective access cards, and other various security related functions.
2. Supervisors are responsible for ensuring that employees under their supervision abide by all security policies and procedures, as well as for notifying the safety manager of any security related problems.
3. Employees are responsible for notifying their supervisor or the District Manager immediately if a security card is lost or stolen. Employees are responsible for notifying their supervisor if they are unable to enter the building using their access code. Employees are also responsible for complying with all security policies and procedures and notifying the supervisor of any security related problems.

C. BUILDING SECURITY

1. It is the policy of the District to provide all regular full-time and part-time employees with a security access card and code number. The security access code number is used to enable and disable the District burglar alarm system. Employees are to return their security card to their supervisor upon termination.
2. The system is designed to allow authorized employees entrance to District owned buildings through designated doors during normal business and off hours. Employees must have their security access and employee identification cards with them at all times that they are on duty to provide verification of employment to the contracted security service and the local law enforcement agency. Employees are to notify their supervisor immediately upon loss or theft of their security access card so that it can be canceled and replaced by the District Manager.

Violations of the District's security policy include:

- i) Lending your security code number or using someone else's security code number to gain access into the District buildings.

- ii) Allowing an individual without a security card to enter the District office on non-business hours without the supervision of an employee with a security card.

D. EMPLOYEE IDENTIFICATION (I.D.) CARDS

1. It is the policy of the District to provide each regular full-time and part-time employee with an I.D. card. A District I.D. card is to be used when District identification is requested. I.D. cards are to be returned to the employees' supervisor upon the employee's termination.
2. Employees must have their I.D. with them during all working hours to provide verification to the contracted security service, the local law enforcement agency, and others requesting said verification of employment. Employees are to notify their supervisor immediately upon loss, theft, or damage of their card, or in the event of a name change so that their I.D. card can be replaced.

E. COMPUTER ACCESS

1. It is the policy of the District to provide all employees whose job requires the use of District computers a username and password which allow them access to the District's computer system. It is the responsibility of the IT Technician to assign an employee a username and password. If an employee's computer access codes are forgotten or do not work, it is their responsibility to notify the IT Technician as soon as possible.
2. No District data files are allowed off company property without approval of the District manager or IT Technician. Remote access to the District computer system must be approved by the District manager.

Violations of the District's computer access policy include:

- i) Allowing another employee or non-employee to use their username and password to access the District's computer system.
- ii) Loading software programs on District computers or the network server without written approval of the IT Technician.

F. RECEPTION AREA/VISITOR PROCEDURES

1. All visitation by non-employees is restricted to Monday through Friday, 8:00 a.m. to 4:30 p.m., except by special permission provided by the employee's supervisor. Visitors to the District office must register with the receptionist. Visitors to any District property or facility should be accompanied by a District employee or have appropriate supervisory permission to enter a work area. Access to any District property or facilities by individuals not employed by the District, not on District-related business and/or not having District supervisory permission is not allowed.

2. Vendors should be directed to check in with the receptionist at the District office for appointments unless prior arrangements have been made. Vendors with no appointment should be directed, by the receptionist, to the assistant manager.

G. PARKING

1. Parking is available in the District parking lot to all employees and visitors free of charge. Employees are asked to observe the following regulations.
 - i) Park in the designated employee areas.
 - ii) Handicap parking spaces are available to disabled persons only.
 - iii) Speed limit is not to exceed 10 mph in the District parking lot.
 - iv) The District takes no responsibility for items stolen from vehicles parked in the District parking lot. Vehicles should be locked.

H. ANTI-THEFT PLAN

1. It is the policy of the District to not tolerate theft, destruction, or inappropriate use of District assets, resources, and property. It is also the policy of the District to not tolerate theft and/or destruction of employees' personal property. The District is not, however, responsible for the personal property of its employees.
2. It is the responsibility of all employees to report incidents of theft, misuse, or destruction of property to their supervisor. Employees are responsible for safeguarding any personal property brought to work and kept on District premises.
3. All incidents of theft, destruction, or misuse of District assets, resources, and property and/or employees' personal property should be directed to their supervisor and/or the Assistant Manager.

SMOKING POLICY

A. PURPOSE

This smoking policy is being instituted by the District to provide clear guidelines on the rules regarding smoking in the workplace.

B. RESPONSIBILITIES

1. It is the responsibility of the safety manager to ensure that all employees are notified of the smoking policy and that the policy is followed by all the employees.
2. It is the responsibility of the employees to inform company visitors of the smoking policy and to politely inform them that there is no smoking inside the district office.

C. WHERE SMOKING IS ALLOWED

1. It is the policy of the District not to allow smoking within the District's buildings and vehicles at any time. Smoking of cigarettes, pipes, and cigars is allowed on District property outside of the District buildings.

TRAFFIC CONTROL AND WORK AREA PROTECTION PROCEDURES

A. PURPOSE

The traffic control and work area procedures section of the Safety Plan provides guidelines and requirements for conducting safe work procedures in all vehicle rights of way (ROW) for the protection of the District employees and the public.

B. RESPONSIBILITY

1. It is the responsibility of the supervisor to train all maintenance employees in the proper methods and procedures for conducting work in accordance with these procedures and the Federal Highway Administration's Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD). The supervisor is also responsible for ensuring that all applicable traffic control signs and devices are available to maintenance employees for their use in conducting traffic control operations and safe work procedures.
2. All District employees conducting work in vehicular rights of way are required to plan and carry out traffic control operations in a safe manner in compliance with these procedures and the Federal Highway Administration's MUTCD.

C. GENERAL REQUIREMENTS

1. Safety vests issued by the District must be worn in a visible manner at all times when working in or adjacent to a vehicular right of way.
2. Vehicle and equipment beacons and headlights must be used at all times when working in a vehicular right of way.
3. Whenever possible, the vehicle or equipment should be positioned between oncoming traffic and the work area.
4. Signs, flagging, and barricades must be used in accordance with the Federal Highway Administration's MUTCD for all work conducted in vehicular rights of way.
5. Any excavations or trenches which are left open during non-working hours must be isolated and protected by use of reflective fencing and lighted barricades. In general, excavations and trenches should be backfilled during non-working hours.

TRAINING AND MEETINGS

A. PURPOSE

The purpose of this section is written to notify all employees that the District will hold safety meetings and training classes to keep all employees alert and aware of safety requirements and to discuss safety procedures and policies. All employees will be trained in proper safety procedures. Safety is for each employee's benefit and protection, so any comments or changes are welcomed to make this effort as safe as possible.

B. RESPONSIBILITIES

1. It is the responsibility of the Safety Manager to schedule and conduct safety meetings and trainings.
2. Safety meetings will be held monthly between the Safety Champion, Safety Manager and Assistant Manager.
3. It is the responsibility of each employee to participate in the training classes for the safety program to be a success.

TRENCH AND EXCAVATION SAFETY

A. Purpose:

In an effort to safeguard personnel from injury or death while working in underground trenches and excavations, as well as limit liability and maintain conformity with the Occupational Safety and Health Administration (OSHA) and the Illinois Department of Labor (IDOL) regulations, the Department of Public Works has established and incorporated the following trenching and excavation procedures into a Department Standard Operating Procedure (SOP).

OSHA/IDOL requires that, in all trenching/excavations, employees exposed to danger from moving ground shall be protected by a shoring system, sloping of the ground, or some other equivalent means per OSHA regulation 29 CFR 1926.650 (See Exhibit D).

Trenching and excavation work presents serious risks to all workers. The greatest risk, of primary concern, is that of a cave-in. When cave-in accidents occur, they more than likely result in worker injury or death. The Trench and Excavation Program guidelines, when implemented and utilized properly, are set forth as a means of protecting employees from hazards that can arise from cave-ins, as well as other excavation related accidents.

B. Definitions:

1. **Aluminum hydraulic shoring**: A pre-engineered shoring system of aluminum hydraulic cylinders (cross braces) used in conjunction with vertical rails (uprights) or horizontal rails (whales). Such system is designed specifically to support the sidewalls of an excavation and a prevent cave-in.
2. **Angle of Repose**: The greatest angle above the horizontal plane at which loose material (such as soil) will lie without sliding.
3. **Backfill**: Any material used to take up space or fill gaps behind uprights and sheeting to increase surface contact area. Also referred to as fill.
4. **Benching**: A method of protecting employees from a cave-in by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.
5. **Cave-in**: The separation of a mass of soil or rock material from the side of an excavation or the loss of soil from under a trench shield or support system and its sudden movement into the excavation, either by failing or sliding in sufficient quantity so that it could entrap, bury, or otherwise injure or immobilize a person.
6. **Competent Person**: One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

7. **Cross brace:** The horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends which bear up against either wales or uprights.
8. **Excavation:** A man-made cavity or depression in the earth's surface, including its sides, walls, or faces formed by earth removal and producing unsupported earth conditions by reason of the excavation. If installed forms or similar structures reduce the depth to width relationship, an excavation may become a trench.
9. **Fissure:** A narrow opening in the ground; a crack of some length and considerable depth.
10. **Ground Pads:** Full sheets of 5/8" or 3/4" inch plywood placed adjacent to the trench lip. Ground pads distribute weight and forces over their surface area and thus minimize the possibility of rescuers creating a secondary cave-in.
11. **Shoring:** A structure such as metal hydraulic, mechanical, or timber shoring system that supports the sides of an excavation and is designed to prevent cave-ins.
12. **Sloping:** A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.
13. **Tabulated data:** Tables and charts approved by a registered professional engineer and used to design and construct a protective system.
14. **Uprights (Sheeting):** The vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights placed so that individual members are closely spaced in contact with or interconnected to each other are often called sheeting.
15. **Wales:** Horizontal members of a shoring system placed parallel to the excavation face whose sides bear against the vertical members of the shoring system or earth.

C. Policy Established

1. According to OSHA construction safety and health standards, a trench or excavation shall be defined as any man made cut, cavity, trench, or depression in the earth's surface, formed by earth-removal and is greater than or equal to five (5') feet in depth, a width not greater than fifteen (15') feet measured at the bottom or an excavation with the potential for collapse.
2. It is the policy of the District that the procedures outlined in this policy are adhered to. **Employee safety must always come first!!!**
3. It is the objective of this policy not only to protect District personnel from the dangers of entering a trench or excavation incorrectly, but also to protect any other party who would

enter a trench or excavation being performed by the member. Therefore, this policy requires all employees to notify their supervisor upon witnessing such entry into a trench or excavation being performed by a contractor not following our trench/excavation procedures immediately. The supervisor shall inspect the worksite and discuss any concerns with the contractor's representative. Should the contractor fail to correct such deficiencies, it may be necessary to stop the job and/or contact the local OSHA office.

D. Soil Classifications

1. The main danger factor involved with trenching and excavating is the soil condition in which employees are working. These conditions will indicate the type of protection you will need. Soil quality is based on its cohesiveness, and according to the United States Code of Federal Regulations, Part 1926, soil conditions are classified as follows:

- i) **Stable Rock**

- ii) **Type A**: Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (tsf) or greater. These are soils that do not break apart easily. Examples are, but not limited to, the following:

- (1) Clay
- (2) Sandy clay
- (3) Cemented soil

- iii) **Type B**: Cohesive soils with an unconfined compressive strength greater than 0.5 (tsf), but less than 1.5 (tsf) Examples are, but not limited to, the following:

- (1) Granular cohesionless soils
- (2) Crushed rock
- (3) Loam, silty
- (4) Class A soils that have been previously disturbed
- (5) Class A soils that are subject to freezing/thawing
- (6) Class A soils that are subject to vibration

- iv) **Type C**: Cohesive soils with an unconfined compressive strength of 0.5 (tsf) or less. Examples are, but not limited to the following:

- (1) Gravel
- (2) Sand
- (3) Submerged soils
- (4) Soils where water is seeping
- (5) Class B soils that have been previously disturbed
- (6) Class B soils that are subject to freezing/thawing
- (7) Class B soils that are subject to vibration

E. Adjusting Soil Classifications

1. In some cases, it may be necessary to adjust soil classifications. Some of the factors affecting soil reclassification are as follows:
 - i) Previously disturbed soil: Soil that has been previously disturbed is less stable than soil that is being cut into for the first time. Unfortunately, since most trenching operations are performed in easements, the soil is quite likely to have been dug up by someone else before.

You must drop the soil classification one (1) level if the soil has been previously disturbed.

- ii) Vibration: Vibration, commonly from highway traffic, is also responsible for many collapses. Other sources of vibration are railroads, other construction operations, and even vibration from nearby industry. If sources of vibration are present, the soil class must be dropped one (1) level.
- iii) Wet conditions: The presence of water, whether from rain, standing water, or seeping water, is extremely hazardous to trench stability. **All wet soils become Class C soils.** Special engineering must be performed if the trench must be dug where water will always be present.

In trench rescue situations, no matter what class of soil you are actually dealing with, the soil should never be classified higher than Class B. (You already know it is unstable.)

F. Other Factors Affecting Trench Stability

1. In addition to the factors for soil reclassification above, trench stability is also affected by numerous other conditions, which must be considered in determining trench safety.
 - i) Trench life: The longer a trench is allowed to stand open without shoring, the more likely it is to be undermined at the bottom. Ideally, the shoring operation should closely follow the excavation operation, with the hole also being back-filled as soon as possible.
 - ii) Underground utilities: As with any excavation, utilities must be located prior to digging to prevent personal injury and costly damage. In addition, these utilities may have to be isolated and supported during the trench operations.
 - iii) Dry conditions: Extremely dry weather can also reduce trench stability, as cracks and fissures are likely to be present and can cause wall sections to break away.
 - iv) Freezing and thawing: Freezing and thawing result in contraction and expansion of the soil and is often responsible for collapses in solid-appearing trenches. Additionally, thawing adds moisture to the soil, which further decreases stability.

- v) Adjacent structures: At times trenches must be placed in close proximity to utility poles, roadbeds, foundations, etc. These structures must also be stabilized in the shoring operations.
- vi) Superimposed loads: The spoil pile is the material that was removed from the trench. OSHA requires that it be placed no closer than two (2) feet from the edge and that it must be sloped or restrained to keep it from falling into the trench. Placing the spoil pile too close results in superimposed loads (an additional load on a wall).
- vii) Like the spoil pile, the presence of a backhoe or other equipment or material near the edge of the trench results in superimposed loads which can cause the walls to collapse.
- viii) Exposure to Falling Loads: No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.
- ix) Fall Protection:
 - (1) Walkways shall be provided where employees or equipment are required or permitted to cross over an excavation.
 - (2) Adequate barrier physical protection shall be provided at all remotely located excavations. All wells, pits, shafts, etc. shall be barricaded or covered. Upon completion of exploration and other similar operations, temporary wells, pits shafts, etc. shall be backfilled.
- x) Poor Shoring Techniques, Lack of Inspection: Obviously, the lack of shoring in a trench is hazardous, and so is improper or inadequate shoring. Shoring should meet OSHA regulations and must be inspected daily. Shoring that was good one day may be inadequate or unsafe the next day.
- xi) Digging Operations: Continuing to dig while the trench is occupied is extremely hazardous. The vibration from the backhoe is likely to cause a collapse and disaster can occur should the operator lose track of the personnel in the trench.

Trench stability can be viewed as applied common sense. In most cases, if a trench appears to be unsafe, it probably is or can become unsafe. It is our mission to assure that you can recognize potentially unsafe trenches.

G. Requirements

1. It shall be the requirement of the District, that all employees assigned to trench/excavation sites conform with the requirements outlined in this policy prior to and during entry of a trench or excavation, including the following:

- i) All surface encumbrances, i.e., curbs, sidewalks, or any structure, shall be removed or supported as necessary in order to safeguard employees.
- ii) All underground installations shall be located and safeguarded (protected, supported, or removed) as necessary to safeguard employees.
- iii) A ladder must be located in all trenches that are four feet (4') or more in depth. The ladder shall extend three feet (3') above the top of the highest trench wall or the highest point of the protective device, whichever is greater. Ladders shall be so located as to require no more than twenty-five (25') feet of lateral travel. All ladders used in trenching/excavating operations shall be wooden or fiberglass and shall remain in the trench at all times.
- iv) When performing trenching/excavating operations, employees shall wear proper safety equipment, i.e., safety shoes/boots, hard hats, eye protection, etc.
- v) When mobile equipment is being operated adjacent to a trench and the operator does not have a clear view of the trench, use the following: barricades, stop logs, or hand signals from an observer to ensure proper safety.
- vi) If a hazardous atmosphere is suspected or exists within the trench, the atmosphere must be tested for oxygen deficiency, flammability, and toxicity prior to employees entering the trench. If a hazardous or deficient atmosphere exists, employees shall utilize appropriate ventilators, and continuous atmospheric monitoring shall be required.
- vii) Rescue equipment shall be readily available on site when a hazardous condition exists or may be expected to develop. The Village of Lombard Fire Department shall also be notified of the situation.
- viii) Employees shall not work in excavations in which there is accumulated water, unless adequate precautions have been taken to protect from cave-ins, i.e., by removing such water with equipment monitored by the Competent Person as defined in Section IV below.
- ix) If the work interrupts the natural drainage of surface water, a means shall be used to prevent surface water from entering the excavation and to provide drainage to an area adjacent to the excavation.
- x) If the stability of adjacent structures is affected, systems such as bracing, or shoring must be used on such structures. Sidewalks, pavements, curbs, and all appurtenant structures shall not be undermined unless a support system is used. Sidewalks, pavements, and pavement subject to undermining shall be removed.
- xi) The spoil pile, other stationary equipment, or materials must be at least two (2) feet from the edge of the trench.

- xii) A Competent Person is to be designated for all trench and excavation operations. Daily inspections of the trench, adjacent areas and protective systems shall be made by the Competent Person prior to the start of work, throughout the shift, and after every rainstorm or as other hazards occur.
- xiii) All employees exposed to hazardous trench conditions shall be removed from these areas until safety precautions have been taken and the Competent Person has inspected the area.
- xiv) While personnel are working within a trench/excavation, a **minimum** of one (1) crewmember shall be assigned to oversee/maintain the safety needs of the personnel within the trench/excavation. This includes, but is not limited to, the following:
 - (1) Constant visual inspection of trench/excavation walls, shoring equipment, or other potential hazards.
 - (2) Maintaining constant communications abilities.
- xv) When working in any right of way, lighted barricades, cones, and signs shall be used to protect the workers and the public, meeting all applicable Federal, State, County and local requirements. All excavations/trenches on C.D.O.T. rights of way shall require all personnel to follow C.D.O.T. Traffic Control Standards as set forth in the Manual of Uniform Traffic Control Devices (MUTCD).
- xvi) All training for employees will be documented and kept on file. Training will be conducted on an annual basis.

H. Protective Methods

1. Designate an employee as the trenching and excavation "*Competent Person.*"
 - i) Competent Person: The term Competent Person designates an employee who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
 - ii) A "Competent Person" is not required to be an engineer. Supervisory personnel, an experienced excavator, or an experienced laborer can be designated as a "Competent Person." The only situation in which an engineer is required relative to the type of shoring used involves the use of screw-jack shoring equipment, and/or when the excavation is twenty (20) feet or more in depth.

I. Protection Methods

1. There are three acceptable methods of providing protection in trench and excavation work. These methods are **sloping/benching, shielding, and shoring**. See Exhibit E attached hereto for drawing of methods.

i) Sloping/benching

- (1) **Sloping**: Sloping is cutting back the sides of the trench until the soil no longer slides. The angle at which the soil will no longer slide down is called the "angle of repose" and is different for each class of soil. This is by far the safest method of protection but is also the one that is the least cost/time effective. This method is also the least likely to be performed by a contractor.

The required angle of repose is defined by how many feet you must dig away from the bottom of the trench wall for each foot the trench is deep. The angles specified by OSHA are as follows:

- (a) Class A soil: 3/4:1
- (b) Class B soil: 1:1
- (c) Class C soil: 1 1/2:1

This means that a trench that is ten feet (10') deep, four feet (4') wide, in class B soil would have to be opened twenty-four feet (24') wide at the surface. Each wall must be cut back ten feet (10'), plus the four feet (4') of trench width.

Sloping is, however, the safest method of protection and, therefore, is the method of choice for protecting rescue personnel performing a body recovery operation.

- (2) **Benching**: Benching is merely creating "steps" in the cutback walls to provide "catch areas" for any material that may slide down from the next level. Benching of the sides of the trench or excavation must be inclined away from the trench or excavation benched with four feet (4') horizontal and two and one-half feet (2 1/2') vertical steps to the surface of the trench/excavation.

ii) Shielding

- (1) The next type of trench and excavation safety protection method is the shielding and/or trench box configuration. Again, as in the case of sloping and benching, the most practical usage of the trench box or shield is in an uncluttered underground open field situation. Requirements and specifications are as follows:
 - (a) The shield must extend at least to the top of the trench. If the shield is located below the trench mouth, the trench section is to be sloped at the above noted angle.
 - (b) Employees are not allowed in shields during installation, removal, or movement of the shields within the trench.

- (c) Employees and escape ladders are only allowed within the shielded area.
- (d) All shields are to be used according to manufacturer's instructions. If multiple shields are used, they are to be connected using appropriate locking devices.

iii) Shoring

- (1) A variety of shoring systems are used for trench and excavation work site safety. They involve screw jack and pipe shoring, premature shoring, aluminum hydraulic shoring, and timber shoring. The most commonly used is aluminum hydraulic shoring; therefore, we will concentrate on this type. Regardless of the type of shoring used, the specifications, installation, and removal methods and requirements are all similar.
 - (a) Shoring equipment is to be maintained and used according to manufacturer's specifications.
 - (b) If shoring equipment is damaged, it must be examined by the Competent Person and a Supervisor to evaluate its use prior to placing it back in service.
 - (c) Backfilling is to occur immediately following the removal of support systems, when applicable.
 - (d) As shoring is installed, the trench or excavation must be shored from the top of the excavation to the bottom and must be removed in reverse order.
 - (e) Shoring uprights must not exceed a distance of four feet (4') apart, unless stipulated by manufacturer's specifications and tabulated data.
 - (f) Cross braces must be installed no more than two feet (2') from the top of the trench or excavation, unless stipulated by manufacturer's specifications and tabulated data.
 - (g) Cross braces must be installed no greater than four feet (4') apart (both vertically and horizontally) unless stipulated by manufacturer's specifications and tabulated data.
 - (h) Cross braces must be no more than two and one-half feet (2 1/2') from the bottom of the trench, unless stipulated by manufacturer's specifications and tabulated data.
 - (i) When setting shores, no worker shall be lower than waist deep to the lowest cross brace.

- (j) All shoring must be re-inspected for possible protective system failures or other hazardous conditions by the Competent Person each time the trench or excavation is left unattended (i.e., lunch, breaks, or overnight).

iv) **Emergency Safety Measures**

- (1) Our first objective is life safety. Protect yourself and your coworkers from any injury or hazard. The most effective approach to achieving this objective is to follow all operations and safety procedures. Should a trenching/excavation incident occur, the following shall apply:
 - (a) *Do not attempt to enter the trench/excavation for any reason* prior to the arrival of the emergency personnel. You may find yourself in trouble, thus compounding the rescue efforts. You are needed to communicate with the emergency personnel.
 - (b) Keep your cool; you cannot help anyone if you are not in control.
 - (c) Quickly evaluate the incident. Know exactly what is going on prior to calling for help.
 - (d) Notify 911 immediately and indicate that you have an emergency.
 - (e) Give a brief description of the incident, including the location. Speak clearly and with sufficient volume for optimum ease of communication.
 - (f) Wait for emergency personnel to arrive. Again, do not enter the trench/excavation for any reason.
 - (g) Contact a supervisor as soon as possible. Request that the supervisor respond to the incident for investigation purposes.

VEHICLE USEAGE

A. PURPOSE:

To assure the safe use and operation of all District's vehicles. For the purpose of this policy, "vehicles" include all vehicles intended primarily for use on roads and highways and all vehicles that are designed for relatively easy highway use. Vehicles include all automobiles, sport utility vehicles, pick-up trucks, flatbeds, dump trucks, water trucks and all other types of trucks.

The District has adopted a procedure to ensure that only designated employees drive or operate district equipment. This will serve to provide a safe place to work, reduce our insurance premiums, and maintain our excellent corporate image. The following information outlines the procedures required.

B. GENERAL RULES AND POLICES

Prohibited Actions:

1. The driver must not operate a vehicle at any time when his/her ability to do so is impaired, affected, influenced by alcohol, illegal drugs, prescribed or over-the-counter medication, illness, fatigue or injury.
2. The Driver and all occupants are required to wear safety belts when the vehicle is in motion. The driver is responsible for ensuring passengers wear their belts
3. Drivers must abide by the Federal, State and local motor vehicle regulations, laws and ordinances.
4. Drivers of District vehicles must not pick up or transport hitchhikers.
5. Drivers of the District's vehicles must not request or accept payment for carrying passengers or material.
6. Unless authorized, by the equipment department that the vehicle was assigned from, drivers of District's vehicles must not tow, push or pull another vehicle or trailer.
7. Unless authorized and properly permitted by a Federal, State or local regulatory agency, drivers of District vehicles must not transport any hazardous materials.

C. OFFERRING ASSISATNCE

1. If the driver of a District vehicle stops at the scene of a motor vehicle accident and is not trained to provide the level of medical care needed, then he/she must restrict his/her assistance to the notification of the proper authorities. The District employee must take care to avoid doing any harm or becoming a victim themselves.

2. District vehicles must only be driven by District employees. Spouses, girlfriends, boyfriends, children, friends and other non-district employees are not authorized to drive the District's vehicles.
3. Violation of this policy will subject the employee to whom the vehicle was assigned, or the employee who had custody of the vehicle at the time of the violation, to restriction or revocation of all vehicle privileges and to such other disciplinary action as the District deems appropriate.

D. REQUIRED REPORTING

1. Drivers and permitted users shall meet the following accident, license suspension and violation reporting criteria.
2. Accidents must be reported immediately. As soon as the scene is stabilized and there is no risk of injury, the driver must notify his/her immediate supervisor and the fleet accident management provider.
3. Any District employee who has been assigned a vehicle or been given user privilege that has their license suspended or has their driving privileges revoked, must report to their immediate supervisor the next business day, and are no longer authorized to operate a district vehicle.
4. Any District employee who has been assigned a vehicle or been given user privilege that receives a serious moving violation, in a district vehicle or a rented vehicle, must report the citation to their immediate supervisor within one day. Serious moving violations include:
 - i) Driving while impaired/intoxicated
 - ii) Reckless driving
 - iii) Leaving the scene of an accident
5. Receiving such a violation in which caused the accident, the District employee could be responsible for a \$500 accident deductible. If this is the employees' second accident in one year, he or she may be asked to pay the \$500 deductible.
6. All traffic violations including moving violations, parking tickets, etc. are the personal responsibility of the individual assigned to the vehicle that the citation is issued against. The individual who the citation is issued against has the responsibility for the citation.
7. Accidents must be reported immediately. As soon as the scene is stabilized and there is no risk of injury, the driver must notify his/her immediate supervisor. Within 24 hours of an accident, a District equipment incident form must be completed, along with photographs of the incident and forwarded to the safety department.

E. REQUIRED CORPORATION

1. Drivers and permitted users must cooperate with the District's officials and/or law enforcement agencies in matters such as violation of the District's policies and/or accident investigation.
2. All District employees involved in a motor vehicle accident may be required to complete post-accident on-line training that will relate directly with the incident.

F. Traffic State/Traffic Laws

Any District employee operating district assigned vehicles, pool vehicle or rental cars must abide by the Federal, State and local motor vehicle regulations, laws and ordinances

G. Cellular Phones, Pagers and Other Electronic Devices

1. The use of wireless communication devices, such as cell phones - including those equipped with "hands free" devices - is strongly discouraged while driving a District assigned vehicle or a rented vehicle on district business.
2. If the wireless device must be used, all employees operating district assigned vehicles, pool vehicles or rental cars are to use the hands-free attachment with their wireless communication device.
3. District's Employees must recognize when it is appropriate to use cellular phones or other devices and before doing so the following guidelines should be followed whenever using cellular phones or other devices while driving:
 - i) NEVER TEXT WHILE DRIVING
 - ii) Let the call go to voicemail.
 - iii) Is it the appropriate time to make or receive a call?
 - iv) Will this call distract me from my primary responsibility to drive safely?
 - v) When possible, safely pull off the road to place or receive a call.
 - vi) Never take notes while driving and talking.
4. Any other distraction such as eating, drinking or intense discussion with passengers should also be avoided while driving.
5. Driving should also be avoided if an employee is distracted due to fatigue, personally stressful situations or is in any way not able to focus on the task of operating the vehicle.
6. The use of any electronic device, such as - music playback devices with earphones and video playback machines or games, which may distract the driver's attention are prohibited while driving.

H. DISTRICT AND PERSONAL PROPERTY

1. Employees are expected to ensure "reasonable care" of district property under their control. The District will not reimburse the employee for the theft of personal property from a District vehicle.
2. The vehicle policies herein apply to rental vehicles as well as district-owned vehicles, except to the extent that rental agreements or any District contract with any rental car district are contrary to or different from these policies. Users of rental vehicles need not show proof of a driver's license that is valid in the person's state of residence or health insurance to the District prior to using the vehicles, but users are nonetheless expected to have a driver's license that is valid in the person's state of residence and insurance in place.
3. Use of a District vehicles is a privilege that may be restricted, modified or revoked at any time for violation of any of the policies set forth above, or for any other cause. Violation of any of the above policies may result in discipline of the employee, up to and including termination.

I. VEHICLE USE POLICY

1. Prior to assignment, the employee will read and understand all the District vehicle policies and will indorse the appropriate forms. In some cases, the District will rent vehicles outside of our district to satisfy a need. It is understood that the employee assigned a District vehicle will have and maintain a driver's license that is valid in the person's state of residence.
2. The District reserves the right to amend, supplement or otherwise revise these policies at any time and for any reason. The employee acknowledges that the employee's use of any District vehicle is at the sole discretion of the District. The employee has no property rights or interest in any District vehicle. The employee's use of any District vehicle may be revoked, suspended or limited by the District at any time and for any reason.
3. Prior to employment, all employees who are required to drive District vehicles or operate "on road" rubber-tired equipment on public roads must provide a current, valid driver's license to their supervisors.
4. The District will check the driving history of all designated drivers. The District's Safety Department will notify the supervisor of employees with valid driver's license, and anyone convicted of a major violation in the past three years. Examples of major violations are:
 - i) Driving while intoxicated or under the influence of alcohol or drugs.
 - ii) Failure to stop and report an accident.

- iii) Vehicular homicide, manslaughter, or assault.
 - iv) Reckless driving.
 - v) Possession of an open container of alcoholic beverage.
 - vi) Speed contests, drag racing, or attempting to elude police.
 - vii) Making a false report.
5. Any employee convicted of two or more major violations in a three-year period and/or a suspended license will not be allowed to drive or operate “on road” district equipment.
 6. The District reserves the right to amend, supplement or otherwise revise these policies at any time and for any reason. The employee acknowledges that the employee’s use of any district vehicle is at the sole discretion of the District. The employee has no property rights or interest in any District fleet vehicle. The employee’s use of any District fleet vehicle may be revoked, suspended or limited by the District at any time and for any reason.

EXHIBIT A Permit-Required Confined Space Decision Flow Chart

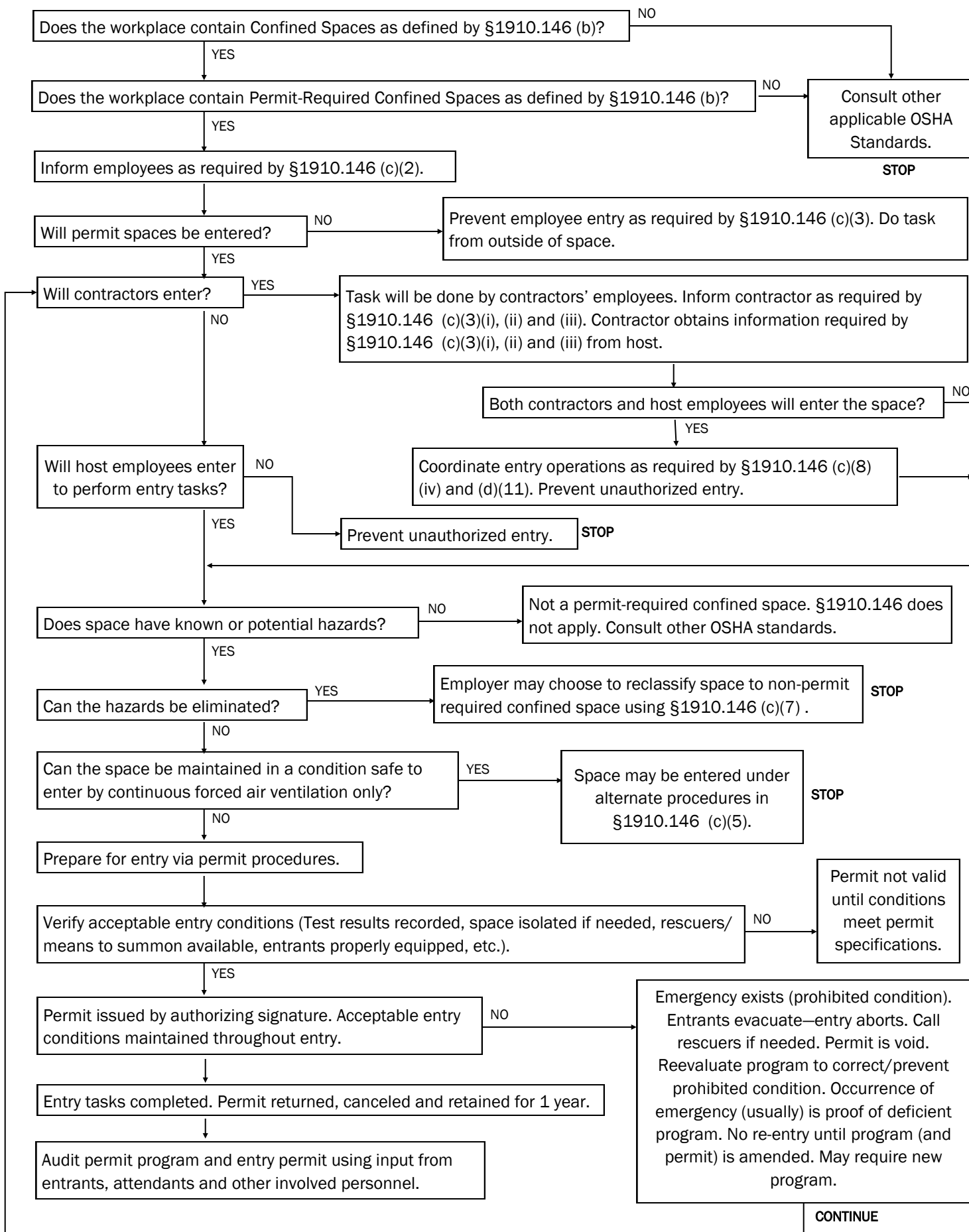


EXHIBIT B

FIRE EXTINGUISHER LOCATIONS

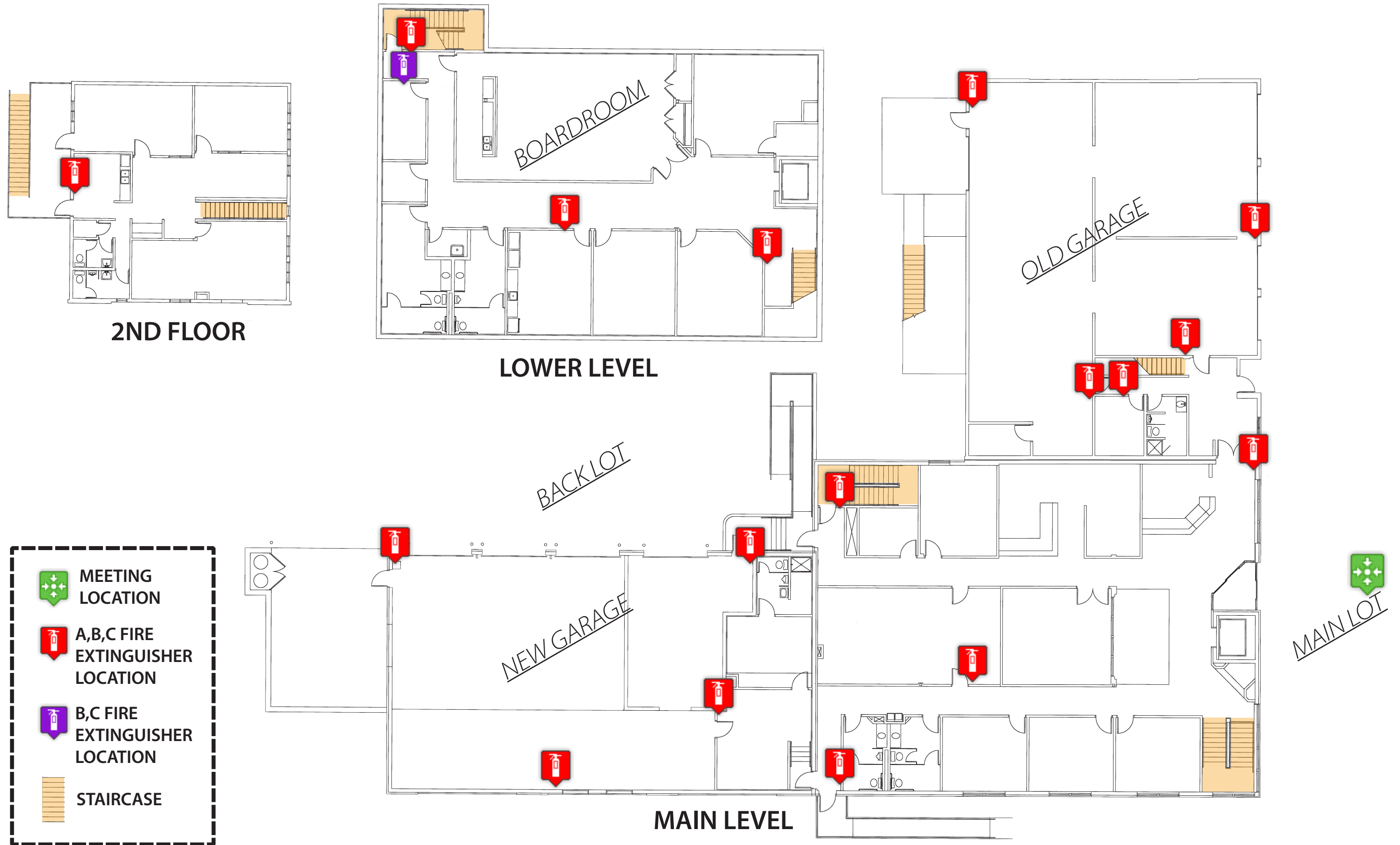


EXHIBIT C

BUILDING EXIT LOCATIONS

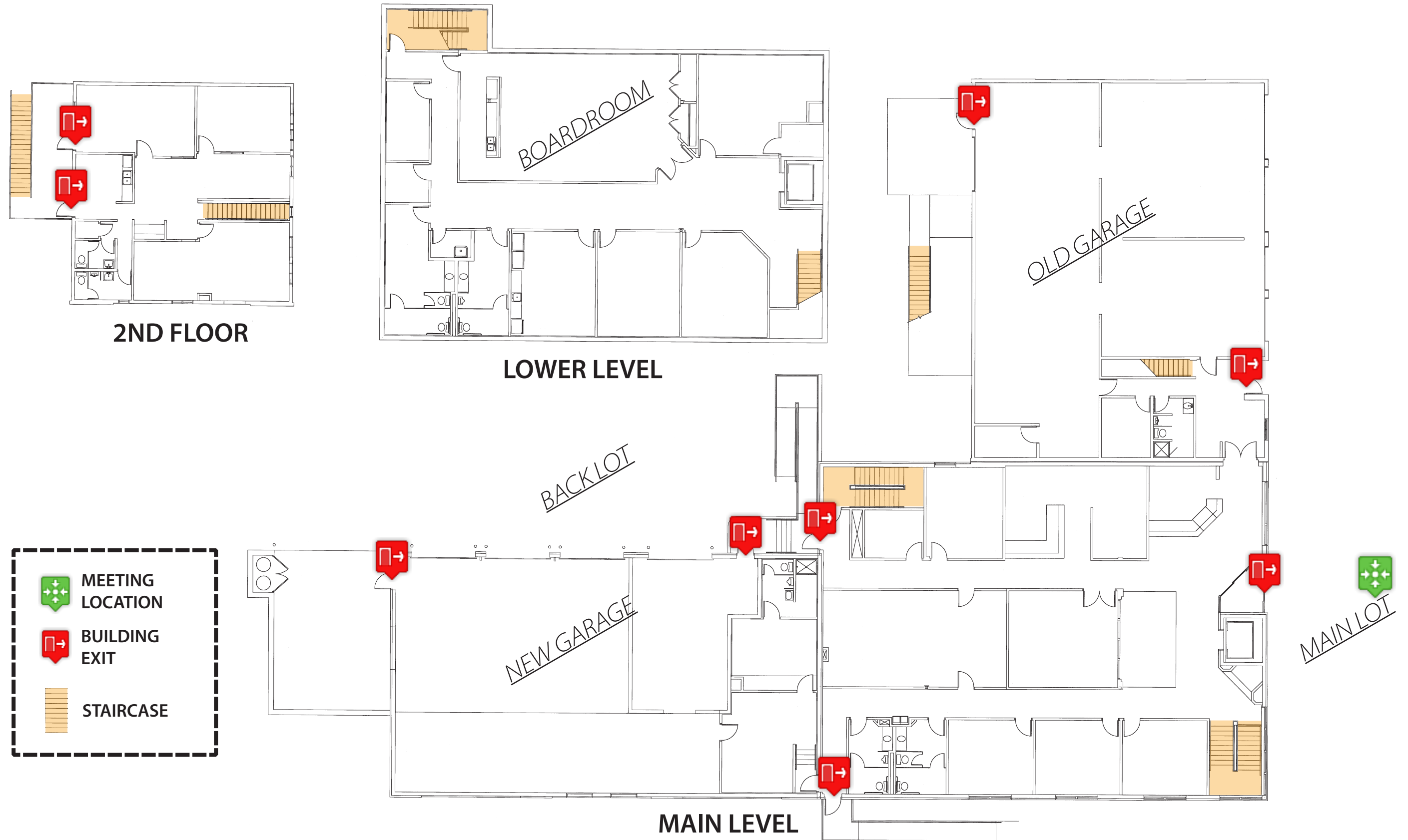


EXHIBIT D

The following OSHA regulations are applicable to this program. The regulations are available on-line at the OSHA website www.osha.gov, please obtain copies and review them or contact your division head for the related documents.

REGULATIONS (STANDARDS – 29 CFR)

1926.650	Scope, application, and definitions applicable to this subpart.
1926.651	Specific Excavation Requirements
1926.652	Requirements for protective systems
1926SubpartP	Authority for 1926 Subpart P
1926SubpartP	AppA Soil Classification
1926SubpartP	AppB Sloping and Benching
1926SubpartP	AppC Timber Shoring for Trenches
1926SubpartP	AppD Aluminum Hydraulic Shoring for Trenches

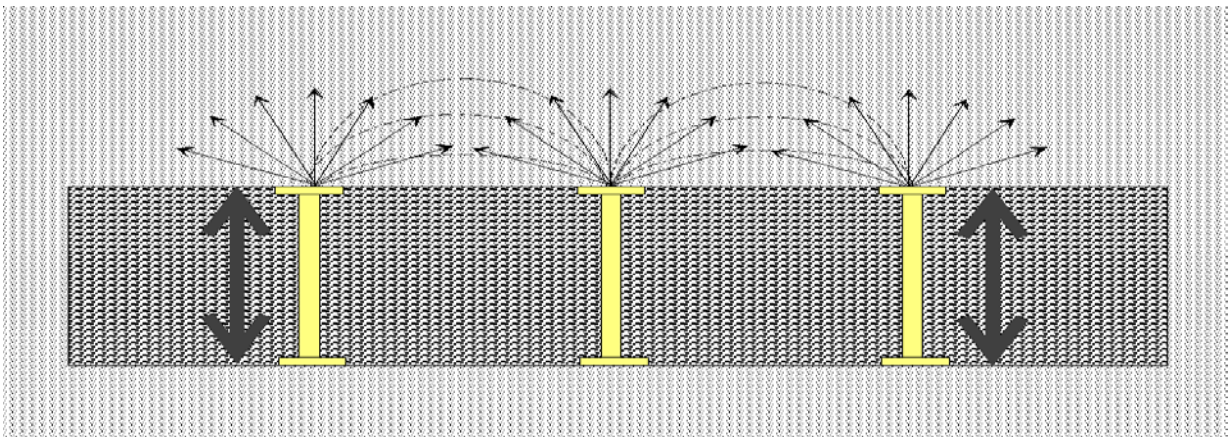
EXHIBIT E

PROTECTIVE METHODS

SHORING

Shoring is a method of protecting the worker by constructing a support system within the trench, which will pressurize the trench walls enough to create "arches" of support that will hold up the trench walls. Shoring is designed to be strong enough to stop the walls from starting to move but is not designed to be strong enough to stop moving dirt.

There are several methods of constructing shoring, all of which involve extremely strong materials. It is important to understand that it is pressure against the walls that creates safety and that materials that are merely placed into position and not pressurized have no beneficial effect. Any gaps between the shoring elements and the trench walls must be filled in so that the pressure of the shoring system will be transmitted to the trench walls.

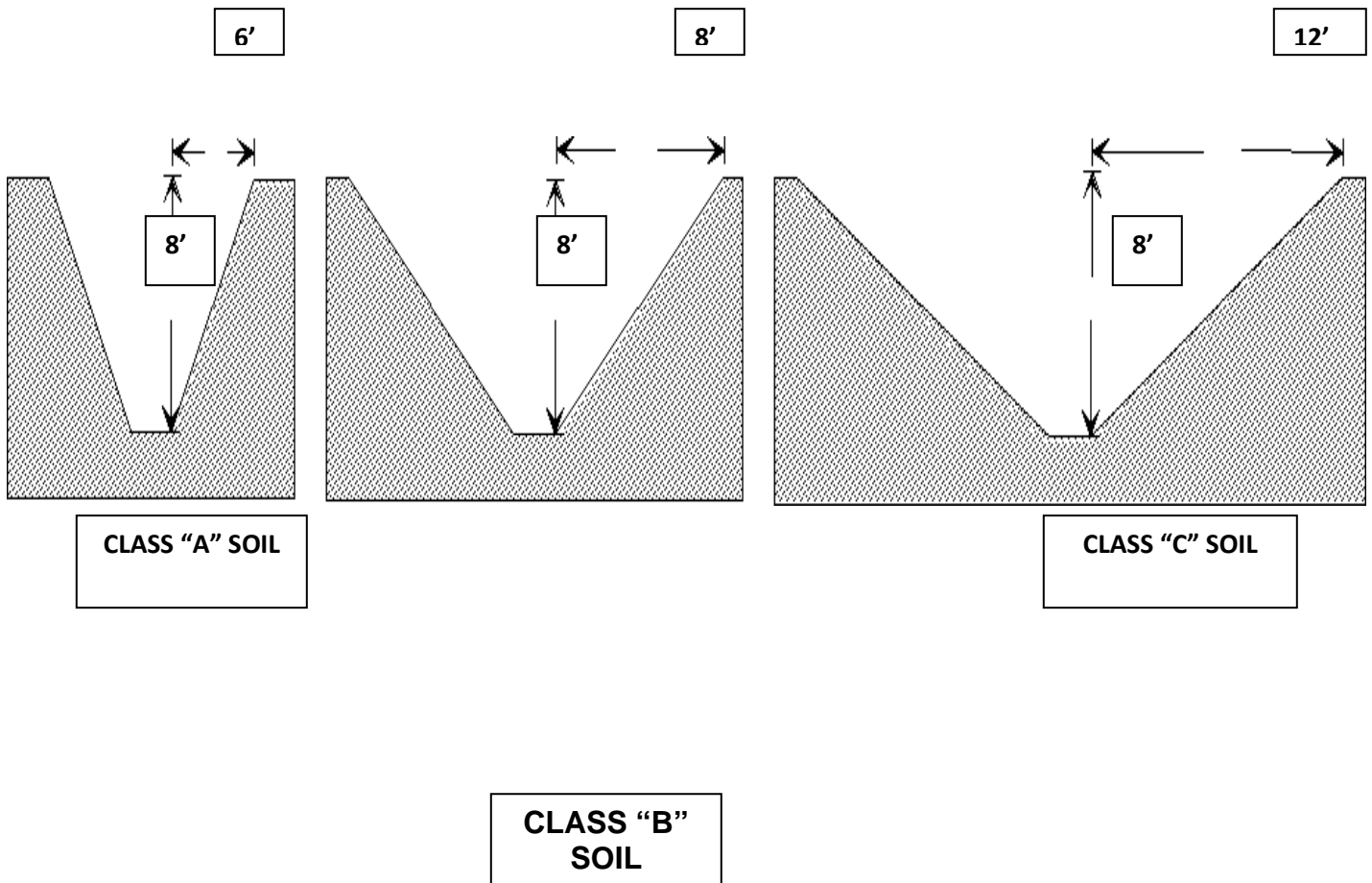


The "arch effect" created by shoring systems

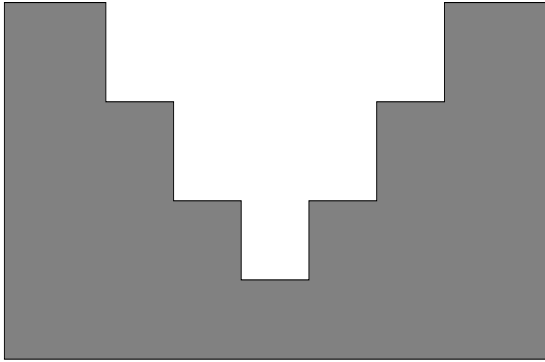
Shoring systems may be constructed with a variety of materials and may be constructed in a variety of configurations. The simplest system contains two elements: cross braces and uprights. The cross braces pressurize the walls while the uprights distribute the pressure vertically. As more strength is required, additional elements are added to strengthen the system, much like beams are added to a structure. These beam-like members are called **walers**.

The dimensions and positioning of shoring members are determined by the soil classification-and-the dimensions of the trench. O.S.H.A. provides charts for timber shoring and hydraulic shoring for dry trenches up to fifteen (15) feet wide and twenty (20) feet deep. Beyond these dimensions, or when special conditions exist, the shoring system must be designed by a registered professional engineer. Additionally, manufacturers may have their engineers design configurations for use with their equipment.

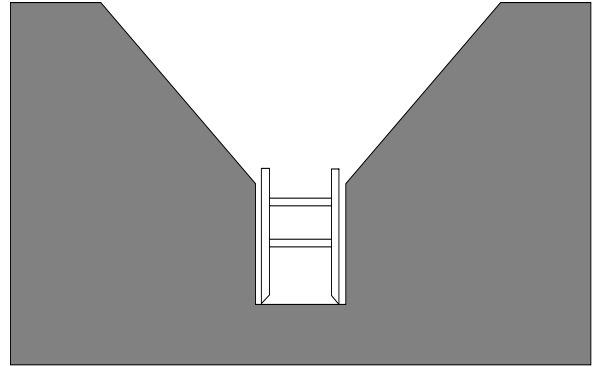
SLOPING



Sloping is a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-in. The angle of incline required to prevent a cave-in varies with differences in factors such as the soil type, environmental conditions of exposure, and application of surcharge loads.



Benching a trench



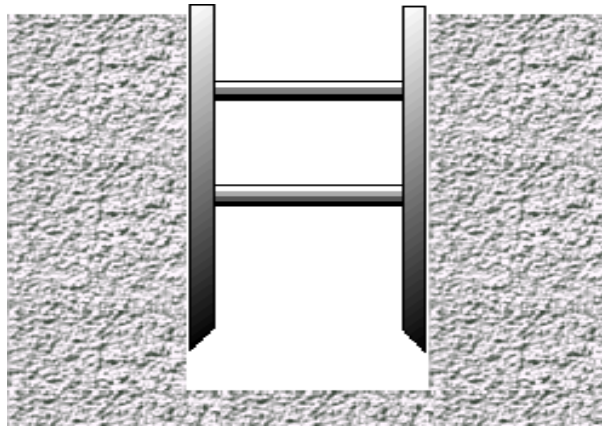
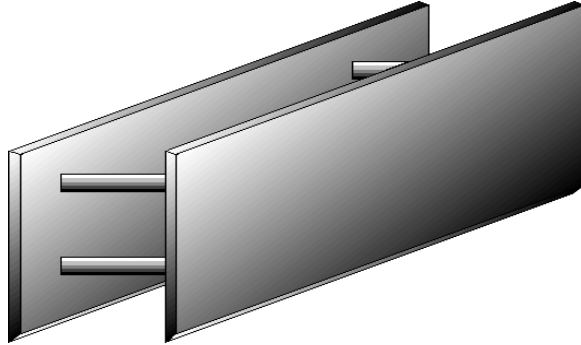
Using sloping with shielding/shoring

Benching

A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.

SHIELDING

A structure that is able to withstand the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structure or can be designed to be portable and moved along as work progresses. Shields can be pre-manufactured or job built in accordance with 1926.652 (c) (3) OR (c) (4). Shields used in trenches are usually referred to as “trench boxes” or “trench shields”.



Shield shall be a maximum of two (2) feet from bottom of trench

PROPER PLACEMENT OF TRENCH SHIELD