

**BAYVIEW SERVICES, INC.
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INJURY AND ILLNESS PREVENTION PROGRAM

BAYVIEW SERVICES, INC. & SUBSIDIARIES:

**BAYVIEW ENVIRONMENTAL SERVICES (BES)
BAYVIEW DEMOLITION SERVICES (BDS)
BAYVIEW INDUSTRIAL SERVICES (BIS)**

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1. INTRODUCTION

Every California employer must establish, implement and maintain a written Injury and Illness Prevention (IIP) Program and a copy must be maintained at each workplace or at a central worksite if the employer has non-fixed worksites. The requirements for establishing, implementing and maintaining an effective written injury and illness prevention program are contained in Title 8 of the California Code of Regulations, Section 3203 (T8 CCR 3203) and consist of the following eight elements:

- Responsibility
- Compliance
- Communication
- Hazard Assessment
- Accident/Exposure Investigation
- Hazard Correction
- Training and Instruction
- Recordkeeping

2. POLICY STATEMENT

We will maintain a safety and health program conforming to the best practices of organizations of this type. To be successful, such a program must embody proper attitudes toward injury and illness prevention on the part of supervisors and employees. It also requires cooperation in all safety and health matters, not only between supervisor and employee, but also between each employee and his/her co-workers. Only through such a cooperative effort can a safety program in the best interest of all be established and preserved.

Our safety and health program will include:

- Providing mechanical and physical safeguards to the maximum extent possible.
- Conducting safety and health inspections to find, eliminate or control safety and health hazards as well as unsafe working conditions and practices, and to comply fully with the safety and health standards for every job.
- Training all employees in good safety and health practices.
- Providing necessary personal protective equipment, and instructions for use and care.
- Developing and enforcing safety and health rules, and requiring that employees cooperate with these rules as a condition of employment.
- Investigating, promptly and thoroughly, every accident to find out what caused it and correct the problem so it will not happen again.
- Setting up a system of recognition and awards for outstanding safety service or performance.

We recognize that the responsibilities for safety and health are shared:

- The employer accepts the responsibilities for leadership of the safety and health program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe conditions.
- Supervisors are responsible for developing proper attitude toward safety and health within themselves and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves.
- Employees are responsible for wholehearted, genuine operation of all aspects of the safety and health program-including compliance with all rules and regulations and for continuously practicing safety while performing their duties. Employees can rest assured that they can report safety hazards or concerns without any fear of reprisal.

3. RESPONSIBILITY

Program Administrator

The Chief Safety Officer has the authority and responsibility for developing the provisions of this program and its implementation by the Operations division of the company. The Operations Managers, General Superintendents, Superintendents, and Foremen are responsible for maintaining compliance to the IIPP in their work areas and for answering any employee's questions about the IIPP. A copy of this IIPP is available at all company work locations via request to the supervisor on site.

4. COMPLIANCE

Management is responsible for ensuring that all safety and health policies and procedures are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the rules fairly and uniformly. All employees are responsible for using safe work practices, for following all directives, policies and procedures, and for assisting in maintaining a safe work environment. Bayview Services Inc. will not apply discipline to employees solely as a result of an employee filing a worker's compensation claim or notifying management of a safety or health hazard.

In accordance with T8 CCR 3203, all employees or their designated representatives have the right to review and receive a copy of our written IIP Program. Bayview Services Inc. will provide access by ensuring a copy of the IIPP is available at the main office and at every active worksite. Upon request, a printed or electronic copy will be provided to the employee within five (5) business days at no cost.

Our system of ensuring that all workers comply with the rules and maintain a safe work environment include:

- Informing workers of the provisions of our IIP Program;
- Evaluating the safety performance of all workers;
- Recognizing employees who perform safe and healthful work practices;
- Providing training to workers whose safety performance is deficient;
- Disciplining workers for failure to comply with safe and healthful work practices.
 - A first-time offense of low severity may result in formal counseling in lieu of discipline at the discretion of the appropriate supervisor.
 - Discipline will be progressive in nature and appropriate to the severity of the offense.
 - Discipline ranges from formal reprimand, to suspension, and ultimately dismissal from the company.
 - All discipline will be documented in the employee's personnel file.
 - A safety violation that merits discipline is constituted as a willful violation of direction that results in an unsafe condition, failure to follow safety related protocols to which the employee has been sufficiently trained or made aware of, and any act that the employee should have reasonably known would have the ability to pose an undue risk to the health of the employee or others.

5. COMMUNICATION

We recognize that open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of safety and health information between management and staff in a form that is readily understandable and consists of one or more of the following items:

- New worker orientation including a discussion of safety and health policies and procedures.
- Review of our IIP Program.
- Workplace safety and health training programs.
- Regularly scheduled safety meetings.
- Effective communication of safety and health concerns between workers and supervisors, including translation where appropriate.
- Posted or distributed safety information.

- A system for workers to anonymously inform management about workplace hazards.
- Our establishment has disciplinary procedures and communicates the actions taken for employees violating our safety policy and procedures.

6. HAZARD ASSESSMENT

Periodic inspections to identify and evaluate workplace hazards shall be performed by any or all of the following competent observers in all areas of work:

1. Site Safety Officers
2. Safety Technicians
3. Regional Safety Managers
4. Corporate Safety Director
5. Operations Managers
6. General Superintendents

Periodic inspections are performed according to the following schedule:

- At the beginning of each project and then daily;
- When we initially established our IIPP;
- When new substances, processes, procedures or equipment which present potential new hazards are introduced into our workplace;
- When new, previously unidentified hazards are recognized;
- When occupational injuries and illnesses occur;
- When we hire and/or reassign permanent or intermittent workers to processes, operations, or tasks for which a hazard evaluation has not been previously conducted; and
- Whenever workplace conditions warrant an inspection.

Periodic inspections consist of identification and evaluation of workplace hazards utilizing the JHA, applicable sections of the attached inspection checklists, and other effective methods to identify/ evaluate workplace hazards. The JHA process in order to identify risks and mitigation measures shall take place for all company projects, no matter how small. All affected employees and / or subcontractors shall participate in this process. On the JHA, hazards will be classified and ranked according to risk. Once risks are identified, appropriate mitigation measures to reduce the risk of harm will be identified and chosen utilizing the hierarchy of controls. All company workers are trained on hazard identification and risk assessment. Company foremen and above are further trained on how to properly complete JHAs.

Management initiated inspection shall be performed on a periodic basis as noted above using the safety inspection form found in section 14.

7. ACCIDENT/EXPOSURE INVESTIGATIONS

Procedures for investigating workplace accidents and hazardous substance exposures include:

- Visiting the accident scene as soon as possible;
- Interviewing injured workers and witnesses;
- Examining the workplace for factors associated with the accident/exposure;
- Determining the cause of the accident/exposure;
- Taking corrective action to prevent the accident/exposure from reoccurring; and
- Recording the findings and corrective actions taken in attached Incident and or accident investigation form (15.0, 16.0)

8. HAZARD CORRECTION

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

- When observed or discovered;

- When an imminent hazard exists, which cannot be immediately abated without endangering employee(s) and/or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection; and
- All such actions taken and dates they are completed shall be documented on the appropriate forms.

9. TRAINING AND INSTRUCTION

All workers, including managers and supervisors, shall have training and instruction on general and job-specific health and safety practices. Training and instruction shall be provided as follows:

- When the IIPP is first established and whenever it is significantly amended.
- To all newly hired workers.
- To all workers given a new job assignments for which training has not previously provided.
- Whenever new substances, processes, procedures or equipment are introduced to the workplace and present a new hazard.
- Whenever the company is made aware of a new or previously unrecognized hazard.
- To all workers with respect to hazards specific to their unique job assignment.

Supervisors will receive additional training as follows:

- American Red Cross First Aid / CPR / AED
- Hazard Assessment and the JHA process
- Site specific information to familiarize them with the health and/or safety hazards to which workers under their immediate direction and control may be exposed.
- Ongoing trainings specific to their assigned supervisory duties.

All employees will be instructed on workplace practices for the following topics:

- The contents of the IIPP.
- The emergency action plan.
- The fire prevention plan.
- The procedures for reporting any unsafe conditions or work practices.
- How to report injuries.
- Additional topics of instruction as needed.
- The use of work appropriate attire and PPE (including gloves, footwear, etc.).
- The safe handling and/or precautions associated with chemical hazards to which employees could be exposed as well as other hazard communication program information.
- The availability of toilet, hand-washing and drinking water facilities.
- The provisions for medical services and first aid administration, including emergency procedures.

Bayview workers receive a multitude of training specific to their unique job assignment and work location. Among these topics are the following training subjects:

- The employer's Code of Safe Practices
- Safe access to working areas
- Electrical hazards
- Proper use of powered tools
- Lock-out/tag-out procedures
- Driver safety
- Slips, falls, and back injuries, and how to prevent them
- Personal protective equipment (how to select, inspect, and properly utilize)
- Respiratory hazards and respiratory protection equipment.
- Hazard communication
- Environmental hazards (such as high heat, cold temperatures, and noise exposure)
- Ergonomic hazards and best practices (including proper lifting techniques, working on ladders, working in a stooped posture for prolonged periods)
- Best practices for good housekeeping

- Fire prevention / hot work
- Safe practices for operating any construction equipment to which the employee is assigned
- Health considerations respective to asbestos, lead, silica, PCBs, and/or mold/fungi
- And training specific to any other job-specific hazards that the worker may be subject to during the course of their assignments

10. RECORDKEEPING

The company's subsidiaries are on a designated high hazard industry list. Specific documents and records associated to these hazards have extended periods of time prescribed by law for which they must be maintained. The company will adhere to all of these respective requirements. Additionally:

- Records of hazard assessment inspections (including the person(s) conducting the inspection, the unsafe conditions and work practices that have been identified, and the action taken to correct the identified unsafe conditions and work practices) are recorded on a hazard assessment form and/or safety inspection checklist that are placed in the job files.
- Documentation of safety and health training for each worker (including the worker's name, training dates, type of training, and training provider) are kept in each worker's personnel file. Training records relating to the worker's duties provided by a construction industry expert outside on the company (union provided trainings, etc.) are also kept in the personnel file to the extent the supporting documents are provided to the company.
- All inspection records and training documentation will be maintained for the periods of time specified by law.

11. HAZARD ASSESSMENT CHECKLIST

GENERAL WORK ENVIRONMENT

- Are all worksites clean and orderly?
- Are work surfaces kept dry or appropriate means taken to assure the surfaces are slip-resistant?
- Are all spilled materials or liquids cleaned up immediately?
- Is combustible scrap, debris and waste stored safely and removed from the worksite promptly?
- Is accumulated combustible dust routinely removed from elevated surfaces, including the overhead structure of buildings?
- Is combustible dust cleaned up with a vacuum system to prevent the dust going into suspension?
- Is metallic or conductive dust prevented from entering or accumulation on or around electrical enclosures or equipment?
- Are covered metal waste cans used for oily and paint-soaked waste?
- Are all oil and gas fired devices equipped with flame failure controls that will prevent flow of fuel if pilots or main burners are not working?
- Are paint spray booths, dip tanks and the like cleaned regularly?
- Are the minimum number of toilets and washing facilities provided?
- Are all toilets and washing facilities clean and sanitary?
- Are all work areas adequately illuminated?
- Are pits and floor openings covered or otherwise guarded?

PERSONAL PROTECTIVE EQUIPMENT & CLOTHING

- Are protective goggles or face shields provided and worn where there is any danger of flying particles or corrosive materials?
- Are approved safety glasses required to be worn at all times in areas where there is a risk of eye injuries such as punctures, abrasions, contusions or burns?
- Are employees who need corrective lenses (glasses or contacts lenses) in working environments with harmful exposures, required to wear only approved safety glasses, protective goggles, or use other medically approved precautionary procedures?
- Are protective gloves, aprons, shields, or other means provided against cuts, corrosive liquids and chemicals?
- Are hard hats provided and worn where danger of falling objects exists?
- Are hard hats inspected periodically for damage to the shell and suspension system?

- Is appropriate foot protection required where there is the risk of foot injuries from hot, corrosive, poisonous substances, falling objects, crushing or penetrating actions?
- Are approved respirators provided for regular or emergency use where needed?
- Is all protective equipment maintained in a sanitary condition and ready for use?
- Do you have eye wash facilities and a quick drench shower within the work area where employees are exposed to injurious corrosive materials?
- Where special equipment is needed for electrical workers, is it available?
- When lunches are eaten on the premises, are they eaten in areas where there is no exposure to toxic materials or other health hazards?
- Is protection against the effects of occupational noise exposure provided when sound levels exceed those of the Cal/OSHA noise standard?

WALKWAYS

- Are aisles and passageways kept clear?
- Are aisles and walkways marked as appropriate?
- Are wet surfaces covered with non-slip materials?
- Are holes in the floor, sidewalk or other walking surface repaired properly, covered or otherwise made safe?
- Is there safe clearance for walking in aisles where motorized or mechanical handling equipment is operating.
- Are spilled materials cleaned up immediately?
- Are materials or equipment stored in such a way that sharp projectiles will not interfere with the walkway?
- Are changes of direction or elevations readily identifiable?
- Are aisles or walkways that pass near moving or operating machinery, welding operations or similar operations arranged so employees will not be subjected to potential hazards?
- Is adequate headroom provided for the entire length of any aisle or walkway?
- Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground?
- Are bridges provided over conveyors and similar hazards?

FLOOR & WALL OPENINGS

- Are all floor openings guarded by a cover, guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?
- Are toe boards installed around the edges of a permanent floor opening (where persons may pass below the opening)?
- Are skylight screens of such construction and mounting that they will withstand a load of at least 200 pounds?
- Is the glass in windows, doors, glass walls that are subject to human impact, of sufficient thickness and type for the condition of use?
- Are grates or similar type covers over floor openings such as floor drains, of such design that foot traffic or rolling equipment will not be affected by the grate spacing?
- Are unused portions of service pits and pits not actually in use either covered or protected by guardrails or equivalent?
- Are manhole covers, trench covers and similar covers, plus their supports, designed to carry a truck rear axle load of at least 20,000 pounds when located in roadways and subject to vehicle traffic?
- Are floor or wall openings in fire resistive construction provided with doors or covers compatible with the fire rating of the structure and provided with self-closing feature when appropriate?

STAIRS & STAIRWAYS

- Are standard stair rails or handrails on all stairways having four or more risers?
- Are all stairways at least 22 inches wide?
- Do stairs have at least a 6'6" overhead clearance?
- Do stairs angle no more than 50 and no less than 30 degrees?
- Are stairs of hollow-pan type treads and landings filled to noising level with solid material?

- Are step risers on stairs uniform from top to bottom, with no riser spacing greater than 7-1/2 inches?
- Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?
- Are stairway handrails located between 30 and 34 inches above the leading edge of stair treads?
- Do stairway handrails have a least 1-1/2 inches of clearance between the handrails and the wall or surface they are mounted on?
- Are stairway handrails capable of withstanding a load of 200 pounds, applied in any direction?
- Where stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees stepping into the path of traffic?
- Do stairway landings have a dimension measured in the direction of travel, at least equal to width of the stairway?
- Is the vertical distance between stairway landings limited to 12 feet or less?

ELEVATED SURFACES

- Are signs posted, when appropriate, showing the elevated surface load capacity?
- Are surfaces elevated more than 30 inches above the floor or ground provided with standard guardrails?
- Are all elevated surfaces (beneath which people or machinery could be exposed to falling objects) provided with standard 4-inch toe boards?
- Is a permanent means of access and egress provided to elevated storage and work surfaces?
- Is required headroom provided where necessary?
- Is material on elevated surfaces piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading?
- Are dock boards or bridge plates used when transferring materials between docks and trucks or rail cars?

EXITING OR EGRESS

- Are all exits marked with an exit sign and illuminated by a reliable light source?
- Are the directions to exits, when not immediately apparent, marked with visible signs?
- Are doors, passageways or stairways, that are neither exits nor access to exits and which could be mistaken for exits, appropriately marked "NOT AN EXIT", "TO BASEMENT", "STOREROOM", and the like?
- Are exit signs provided with the word "EXIT" in lettering at least 5 inches high and the stroke of the lettering at least 1/2-inch wide?
- Are exit doors side-hinged?
- Are all exits kept free of obstructions?
- Are at least two means of egress provided from elevated platforms, pits or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
- Are there sufficient exits to permit prompt escape in case of emergency?
- Are special precautions taken to protect employees during construction and repair operations?
- Is the number of exits from each floor of a building, and the number of exits from the building itself, appropriate for the building occupancy load?
- Are exit stairways which are required to be separated from other parts of a building enclosed by at least two-hour fire-resistive construction in buildings more than four stories in height, and not less than one-hour fire resistive construction elsewhere?
- When ramps are used as part of required exiting from a building, is the ramp slope limited to 1-foot vertical and 12 feet horizontal?
- Where exiting will be through frameless glass doors, glass exit doors, storm doors, and such are the doors fully tempered and meet the safety requirements for human impact?

PORTABLE LADDERS

- Are all ladders maintained in good condition, joints between steps and side rails tight, all hardware and fittings securely attached, and moveable parts operating freely without binding or undue play?

- Are non-slip safety feet provided on each ladder?
- Are non-slip safety feet provided on each metal or rung ladder?
- Are ladder rungs and steps free of grease and oil?
- Is it prohibited to place a ladder in front of doors opening toward the ladder except when the door is blocked open, locked or guarded?
- Is it prohibited to place ladders on boxes, barrels, or other unstable bases to obtain additional height?
- Are employees instructed to face the ladder when ascending or descending?
- Are employees prohibited from using ladders that are broken, missing steps, rungs, or cleats, broken side rails or other faulty equipment?
- Are employees instructed not to use the top 2 steps of ordinary stepladders as a step?
- When portable rung ladders are used to gain access to elevated platforms, roofs, and the like does the ladder always extend at least 3 feet above the elevated surface?
- Is it required that when portable rung or cleat type ladders are used the base is so placed that slipping will not occur, or it is lashed or otherwise held in place?
- Are portable metal ladders legibly marked with signs reading "CAUTION" "Do Not Use Around Electrical Equipment" or equivalent wording?
- Are employees prohibited from using ladders as guys, braces, skids, gin poles, or for other than their intended purposes?
- Are employees instructed to only adjust extension ladders while standing at a base (not while standing on the ladder or from a position above the ladder)?
- Are metal ladders inspected for damage?
- Are the rungs of ladders uniformly spaced at 12 inches, center to center?

HAND TOOLS & EQUIPMENT

- Are all tools and equipment (both, company and employee-owned) used by employees at their workplace in good condition?
- Are hand tools such as chisels, punches, which develop mushroomed heads during use, reconditioned or replaced as necessary?
- Are broken or fractured handles on hammers, axes and similar equipment replaced promptly?
- Are worn or bent wrenches replaced regularly?
- Are appropriate handles used on files and similar tools?
- Are employees made aware of the hazards caused by faulty or improperly used hand tools?
- Are appropriate safety glasses, face shields, and similar equipment used while using hand tools or equipment that might produce flying materials or be subject to breakage?
- Are jacks checked periodically to assure they are in good operating condition?
- Are tool handles wedged tightly in the head of all tools?
- Are tools' cutting edges kept sharp so the tool will move smoothly without binding or skipping?
- Are tools stored in dry, secure location where they won't be tampered with?
- Is eye and face protection used when driving hardened or tempered spuds or nails?

PORTABLE (POWER OPERATED) TOOLS & EQUIPMENT

- Are grinders, saws, and similar equipment provided with appropriate safety guards?
- Are power tools used with the correct shield, guard or attachment recommended by the manufacturer?
- Are portable circular saws equipped with guards above and below the base shoe?
- Are circular saw guards checked to assure they are not wedged up, thus leaving the lower portion of the blade unguarded?
- Are rotating or moving parts of equipment guarded to prevent physical contact?
- Are all cord-connected, electrically operated tools and equipment effectively grounded or of the approved double insulated type?
- Are effective guards in place over belts, pulleys, chains, and sprockets, on equipment such as concrete mixers, air compressors, and the like?
- Are portable fans provided with full guards or screens having openings 1/2 inch or less?
- Is hoisting equipment available and used for lifting heavy objects, and are hoist ratings and characteristics appropriate for the task?

- Are ground-fault circuit interrupters provided on all temporary electrical 15 and 20 ampere circuits, used during periods of construction?
- Are pneumatic and hydraulic hoses on power-operated tools checked regularly for deterioration or damage?

LOCKOUT TAGOUT PROCEDURES

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

ENVIRONMENTAL CONTROLS

- Are all work areas properly illuminated?
- Are employees instructed in proper first aid and other emergency procedures?
- Are hazardous substances identified which may cause harm by inhalation, ingestion, skin absorption or contact?
- Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, and caustics?
- Is employee exposure to chemicals in the workplace kept within acceptable levels?
- Can a less harmful method or product be used?
- Is the work area's ventilation system appropriate for the work being performed?
- Are spray painting operations done in spray rooms or booths equipped with an appropriate exhaust system?
- Is employee exposure to welding fumes controlled by ventilation, use of respirators, exposure time, or other means?
- Are welders and other workers nearby provided with flash shields during welding operations?
- If forklifts and other vehicles are used in buildings or other enclosed areas, are the carbon monoxide levels kept below maximum acceptable concentration?
- Has there been a determination that noise levels in the facilities are within acceptable levels?
- Are steps being taken to use engineering controls to reduce excessive noise levels?
- Are proper precautions being taken when handling asbestos and other fibrous materials?
- Are caution labels and signs used to warn of asbestos?
- Are wet methods used, when practicable, to prevent the emission of airborne asbestos fibers, silica dust and similar hazardous materials?
- Is vacuuming with appropriate equipment used whenever possible rather than blowing or sweeping dust?
- Are grinders, saws, and other machines that produce Respirable dusts vented to an industrial collector or central exhaust system?
- Are all local exhaust ventilation systems designed and operating properly such as airflow and volume necessary for the application? Are the ducts free of obstructions or the belts slipping?
- Is personal protective equipment provided, used and maintained wherever required?
- Are there written standard operating procedures for the selection and use of respirators where needed?
- Are restrooms and washrooms kept clean and sanitary?

- Is all water provided for drinking, washing, and cooking potable?
- Are all outlets for water not suitable for drinking clearly identified?
- Are employees' physical capacities assessed before being assigned to jobs requiring heavy work?
- Are employees instructed in the proper manner of lifting heavy objects?
- Where heat is a problem, have all fixed work areas been provided with spot cooling or air conditioning?
- Are employees screened before assignment to areas of high heat to determine if their health condition might make them more susceptible to having an adverse reaction?
- Are employees working on streets and roadways where they are exposed to the hazards of traffic, required to wear bright colored (traffic orange) warning vest?
- Are exhaust stacks and air intakes located that contaminated air will not be recirculated within a building or other enclosed area?
- Is equipment producing ultra-violet radiation properly shielded?

FLAMMABLE & COMBUSTIBLE MATERIALS

- Are combustible scrap, debris and waste materials (i.e. oily rags) stored in covered metal receptacles and removed from the worksite promptly?
- Are materials properly stored to minimize the risk of fire including spontaneous combustion?
- Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?
- Are all connections on drums and combustible liquid piping, vapor and liquid tight?
- Are all flammable liquids kept in closed containers when not in use (e.g. parts cleaning tanks, pans)?
- Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- Do storage rooms for flammable and combustible liquids have explosion-proof lights?
- Do storage rooms for flammable and combustible liquids have mechanical or gravity ventilation?
- Is liquefied petroleum gas stored, handled, and used in accordance with safe practices and standards?
- Are liquefied petroleum storage tanks guarded to prevent damage from vehicles?
- Are all solvent wastes and flammable liquids kept in fire-resistant covered containers until they are removed from the worksite?
- Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?
- Are fire separators placed between containers of combustibles or flammables, when stacked one upon another, to assure their support and stability?
- Are fuel gas cylinders and oxygen cylinders separated by distance, fire resistant barriers or other means while in storage?
- Are fire extinguishers selected and provided for the types of materials in areas where they are to be used?
- Class A: Ordinary combustible material fires.
- Class B: Flammable liquid, gas or grease fires.
- Class C: Energized-electrical equipment fires.
- If a Halon 1301 fire extinguisher is used, can employees evacuate within the specified time for that extinguisher?
- Are appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials?
- Is the transfer/withdrawal of flammable or combustible liquids performed by trained personnel?
- Are fire extinguishers mounted so that employees do not have to travel more than 75 feet for a class "A" fire or 50 feet for a class "B" fire?
- Are employees trained in the use of fire extinguishers?
- Are extinguishers free from obstructions or blockage?
- Are all extinguishers serviced, maintained and tagged at intervals not to exceed one year?
- Are all extinguishers fully charged and in their designated places?
- Is a record maintained of required monthly checks of extinguishers?

- Where sprinkler systems are permanently installed, are the nozzle heads directed or arranged so that water will not be sprayed into operating electrical switchboards and equipment?
- Are "NO SMOKING" signs posted where appropriate in areas where flammable or combustible materials are used or stored?
- Are "NO SMOKING" signs posted on liquefied petroleum gas tanks?
- Are "NO SMOKING" rules enforced in areas involving storage and use of flammable materials?
- Are safety cans used for dispensing flammable or combustible liquids at a point of use?
- Are all spills of flammable or combustible liquids cleaned up promptly?
- Are storage tanks adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes?
- Are storage tanks equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure?
- Are spare portable or butane tanks, which are used by industrial trucks stored in accord with regulations?

HAZARDOUS CHEMICAL EXPOSURES

- Are employees trained in the safe handling practices of hazardous chemicals such as acids, caustics, and the like?
- Are employees aware of the potential hazards involving various chemicals stored or used in the workplace--such as acids, bases, caustics, epoxies, and phenols?
- Is employee exposure to chemicals kept within acceptable levels?
- Are eye wash fountains and safety showers provided in areas where corrosive chemicals are handled?
- Are all containers, such as vats and storage tanks labeled as to their contents--e.g. "CAUSTICS"?
- Are all employees required to use personal protective clothing and equipment when handling chemicals (i.e. gloves, eye protection, and respirators)?
- Are flammable or toxic chemicals kept in closed containers when not in use?
- Are chemical piping systems clearly marked as to their content?
- Where corrosive liquids are frequently handled in open containers, or drawn from storage vessels or pipelines, is adequate means readily available for neutralizing or disposing of spills or overflows properly and safely?
- Have standard operating procedures been established and are they being followed when cleaning up chemical spills?
- Where needed for emergency use, are respirators stored in a convenient, clean and sanitary location?
- Are respirators intended for emergency use adequate for the various uses for which they may be needed?
- Are employees prohibited from eating in areas where hazardous chemicals are present?
- Is personal protective equipment provided, used and maintained whenever necessary?
- Are there written standard operating procedures for the selection and use of respirators where needed?
- If you have a respirator protection program, are your employees instructed on the correct usage and limitations of the respirators?
- Are the respirators NIOSH approved for this particular application?
- Are they regularly inspected and cleaned, sanitized and maintained?
- If hazardous substances are used in your processes, do you have a medical or biological monitoring system in operation?
- Are you familiar with the Threshold Limit Values or Permissible Exposure Limits of airborne contaminants and physical agents used in your workplace?
- Have control procedures been instituted for hazardous materials, where appropriate, such as respirators, ventilation systems, handling practices, and the like?
- Whenever possible, are hazardous substances handled in properly designed and exhausted booths or similar locations?
- Do you use general dilution or local exhaust ventilation systems to control dusts, vapors, gases, fumes, smoke, solvents or mists which may be generated in your workplace?

- Is ventilation equipment provided for removal of contaminants from such operations as production grinding, buffing, spray painting, and/or vapor decreasing, and is it operating properly?
- Do employees complain about dizziness, headaches, nausea, irritation, or other factors of discomfort when they use solvents or other chemicals?
- Is there a dermatitis problem--do employees complain about skin dryness, irritation, or sensitization?
- Have you considered the use of an industrial hygienist or environmental health specialist to evaluate your operation?
- If internal combustion engines are used, is carbon monoxide kept within acceptable levels?
- Is vacuuming used, rather than blowing or sweeping dusts whenever possible for clean up?
- Are materials, which give off toxic asphyxiant, suffocating or anesthetic fumes, stored in remote or isolated locations when not in use?

HAZARDOUS SUBSTANCES COMMUNICATION

- Is there a list of hazardous substances used in your workplace?
- Is there a written hazard communication program dealing with Material Safety Data Sheets (MSDS) labeling, and employee training?
- Who is responsible for MSDSs, container labeling, employee training?
- Is each container for a hazardous substance (i.e. vats, bottles, storage tanks,) labeled with product identity and a hazard warning (communication of the specific health hazards and physical hazards)?
- Is there a Material Safety Data Sheet readily available for each hazardous substance used?
- How will you inform other employers whose employees share the same work area where the hazardous substances are used?
- Is there an employee training program for hazardous substances?
- Does this program include:
 - An explanation of what an MSDS is and how to use and obtain one?
 - MSDS contents for each hazardous substance or class of substances?
 - Explanation of "Right to Know"?
 - Identification of where employees can see the employer's written hazard communication program and where hazardous substances are present in their work area?
 - The physical and health hazards of substances in the work area, how to detect their presence, and specific protective measures to be used?
 - Details of the hazard communication program, including how to use the labeling system and MSDSs?
 - How employees will be informed of hazards of non-routine tasks, and hazards of unlabeled pipes?

ELECTRICAL

- Are the workplace electricians familiar with the Cal/OSHA Electrical Safety Orders?
- Do you specify compliance with Cal/OSHA for all contract electrical work?
- Are all employees required to report as soon as practicable any obvious hazard to life or property observed in connection with electrical equipment or lines?
- Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?
- When electrical equipment or lines are to be serviced, maintained or adjusted, are necessary switches opened, locked-out and tagged whenever possible?
- Are portable electrical tools and equipment grounded or of the double insulated type?
- Are electrical appliances such as vacuum cleaners, polishers, vending machines grounded?
- Do extension cords being used have a grounding conductor?
- Are multiple plug adapters prohibited?
- Are ground-fault circuit interrupters installed on each temporary 120-volt AC 15 / 20 amps circuit at locations where construction, demolition, modifications, alterations or excavations are being performed?
- Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?

- Is exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?
- Are flexible cords and cables free of splices or taps?
- Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, and equipment and is the cord jacket securely held in place?
- Are all cord, cable and raceway connections intact and secure?
- In wet or damp locations, are electrical tools and equipment appropriate for the use or location or otherwise protected?
- Is the location of electrical power lines and cables (overhead, underground, underfloor, other side of walls) determined before digging, drilling or similar work is begun?
- Are metal measuring tapes, ropes, hand-lines or similar devices with metallic thread woven into the fabric prohibited where they could come in contact with energized parts of equipment or circuit conductors?
- Is the use of metal ladders prohibited in area where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures or circuit conductors?
- Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?
- Are disconnecting means always opened before fuses are replaced?
- Do all interior wiring systems include provisions for grounding metal parts of electrical raceways, equipment and enclosures?
- Are all electrical raceways and enclosures securely fastened in place?
- Are all energized parts of electrical circuits and equipment guarded against accidental contact by approved cabinets or enclosures?
- Is sufficient access and working space provided and maintained about all electrical equipment to permit ready and safe operations and maintenance?
- Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs or plates?
- Are electrical enclosures such as switches, receptacles, junction boxes, etc., provided with tight-fitting covers or plates?
- Are disconnecting switches for electrical motors in excess of two horsepower, capable of opening the circuit when the motor is in a stalled condition, without exploding? (Switches must be horsepower rated equal to or in excess of the motor horsepower rating).
- Is low voltage protection provided in the control device of motors driving machines or equipment, which could cause probably injury from inadvertent starting?
- Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?
- Is each motor located within sight of its controller or the controller disconnecting means capable of being locked in the open position or is a separate disconnecting means installed in the circuit within sight of the motor?
- Is the controller for each motor in excess of two horsepower, rated in horsepower equal to or in excess of the rating of the motor it serves?
- Are employees who regularly work on or around energized electrical equipment or lines instructed in the cardiopulmonary resuscitation (CPR) methods?
- Are employees prohibited from working alone on energized lines or equipment over 600 volts?

TRANSPORTING EMPLOYEES & MATERIALS

- Do employees who operate vehicles on public thoroughfares have valid operator's licenses?
- Are vehicles used to transport employees, equipped with lamps, brakes, horns, mirrors, windshields and turn signals in good repair?
- Are transport vehicles provided with handrails, steps, stirrups or similar devices, so placed and arranged that employees can safely mount or dismount?
- Are employee transport vehicles equipped at all times with at least two reflective type flares?
- Is a full charged fire extinguisher, in good condition, with at least 4 B:C rating maintained in each employee transport vehicle?
- When cutting tools with sharp edges are carried in passenger compartments of employee transport vehicles, are they placed in closed boxes or containers which are secured in place?

- Are employees prohibited from riding on top of any load, which can shift, topple, or otherwise become unstable?

CONTROL OF HARMFUL SUBSTANCES BY VENTILATION

- Is the volume and velocity of air in each exhaust system sufficient to gather the dusts, fumes, mists, vapors or gases to be controlled, and to convey them to a suitable point of disposal?
- Are exhaust inlets, ducts and plenums designed, constructed, and supported to prevent collapse or failure of any part of the system?
- Are clean-out ports or doors provided at intervals not to exceed 12 feet in all horizontal runs of exhaust ducts?
- Where two or more different type of operations are being controlled through the same exhaust system, will the combination of substances being controlled, constitute a fire, explosion or chemical reaction hazard in the duct?
- Is adequate makeup air provided to areas where exhaust systems are operating?
- Is the intake for makeup air located so that only clean, fresh air, which is free of contaminants, will enter the work environment?
- Where two or more ventilation systems are serving a work area, is their operation such that one will not offset the functions of the other?

SANITIZING EQUIPMENT & CLOTHING

- Is personal protective clothing or equipment, that employees are required to wear or use, of a type capable of being easily cleaned and disinfected?
- Are employees prohibited from interchanging personal protective clothing or equipment, unless it has been properly cleaned?
- Are machines and equipment, which processes, handle or apply materials that could be injurious to employees, cleaned and/or decontaminated before being overhauled or placed in storage?
- Are employees prohibited from smoking or eating in any area where contaminants are present that could be injurious if ingested?
- When employees are required to change from street clothing into protective clothing, is a clean change room with separate storage facility for street and protective clothing provided?
- Are employees required to shower and wash their hair as soon as possible after a known contact has occurred with a carcinogen?
- When equipment, materials, or other items are taken into or removed from a carcinogen regulated area, is it done in a manner that will not contaminate non-regulated areas or the external environment?

EMERGENCY ACTION PLAN GUIDELINES

- Are you required to have an emergency action plan?
- Does the emergency action plan comply with requirements of T8CCR 3220(a)?
- Have emergency escape procedures and routes been developed and communicated to all employees?
- Do employees, who remain to operate critical plant operations before they evacuate, know the proper procedures?
- Is the employee alarm system that provides a warning for emergency action recognizable and perceptible above ambient conditions?
- Are alarm systems properly maintained and tested regularly?
- Is the emergency action plan reviewed and revised periodically?
- Do employees Know their responsibilities: For reporting emergencies? During an emergency? For conducting rescue and medical duties?

ERGONOMICS

- Can the work be performed without eyestrain or glare to the employees?
- Does the task require prolonged raising of the arms?
- Do the neck and shoulders have to be stooped to view the task?
- Are there pressure points on any parts of the body (wrists, forearms, back of thighs)?
- Can the work be done using the larger muscles of the body?

- Can the work be done without twisting or overly bending the lower back?
- Are there sufficient rest breaks, in addition to the regular rest breaks, to relieve stress from repetitive-motion tasks?
- Are tools, instruments and machinery shaped, positioned and handled so that tasks can be performed comfortably?

12. HAZARD INSPECTION / CORRECTION (ASBESTOS WORK)

Project name:

Area:

Date:

Site Observations:

YES

NO

N/A

Work Area Isolated?

EPA, OSHA, & CA/OSHA Regulations Posted?

Warning signs at entrance to work area and on decon?

Access to controlled areas adequately restricted?

NESHAP, CA/OSHA & BAAQMD notifications posted?

Setup and Containment Inspection

Has pre-clean been performed?

Have movable items been removed from work area?

Have unmovable items been sealed?

Has electrical, gas, water, been identified?

Has lock-out/ tag-out been performed?

Is polyethylene sheeting flame retardant?

Are critical barriers installed over doors and windows?

Has HVAC system been shut down and registers sealed?

Wall and floor sealed and taped properly?

Materials used during removal approved per specifications?

Is poly adequately secured to walls and floors?

Are 2 layers of 6mil on the floor and 5 mils on walls?

Are drop cloths in place?

Has containment been smoke tested?

Are emergency exits identified?

Is there adequate lighting (200 watts per 1k sq. ft.)?

Has containment passed smoke testing?

Have temporary power systems been installed?

Is equipment and supplies in containment?

Decontamination Area

Clean room area:

Ceiling and walls covered w/poly?

Lockers/storage for street clothes?

Linens and towels?

Airlock to shower?

Entrance doors properly constructed?

Shower Unit

Soap and towels available?

Hot water available?

Floor beneath shower pan properly protected?

YES

NO

N/A

Does shower head provide good spray?

Is water being filtered through 3 stage filtration system?	_____	_____	_____
Dirty room			
Is there a bag for disposal of protective clothing?	_____	_____	_____
Is there a drop cloth on floor being removed daily?	_____	_____	_____
Is room being cleaned daily?	_____	_____	_____
Are door flaps properly constructed?	_____	_____	_____

If project is small scale (<25 square feet) or Class II, describe containment and decon setup

Equipment Decon Unit

Is the equipment decon unit separate from worker decon?

If no, explain _____

Is it constructed out of proper materials?

Are doors flaps properly constructed?

Are there an adequate number of air locks? __ How many? ____

How are materials wrapped and decontaminated as they are brought out?

Negative Pressure System

Locations of manometer and readings> _____

Is strip chart manometer required? _____ If yes, is it installed? _____

Is DOP testing required for NAMs/ _____ If yes, have they been tested? _____

Total cubic feet of room/area(s)_____. Number and size of NAMs _____

Cubic ft/min. of each NAM (20% below listed) _____ Changes per/hr. _____

Emergency and Safety Equipment

	YES	NO	N/A
Are MSDS sheets on site?	_____	_____	_____
Is there a first aid kit on site?	_____	_____	_____
Are emergency numbers posted on site?	_____	_____	_____
Are there an adequate number of fire extinguishers on site?	_____	_____	_____
Are power-cords GFI protected?	_____	_____	_____
Is electrical power in the work area shut down?	_____	_____	_____
Are power cords elevated off the floor?	_____	_____	_____
Is the electrical panel locked off or labeled?	_____	_____	_____
Is there adequate drinking water?	_____	_____	_____
What is the location of the nearest hospital?	_____		

Comments

13. SAFETY INSPECTION CHECKLIST

Job Number _____

Location _____

Date _____

Inspector: _____

A. General

Yes/No/NA

1. OSHA postings?
2. Potable water, sealed, dated?
3. Adequate sanitation facilities?
4. Confined spaces adequately posted?
5. Adequate run-off control devices in place?

/	/	/
/	/	/
/	/	/
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/	/	/

B. Documentation

1. Safety Meeting Minutes readily available?
2. JHA/THA readily available?
3. SDS readily available?
4. **Daily** Equipment Inspection readily available?
5. Type:
6. Type:
7. Type:

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C. Emergency preparedness

1. Emergency phone numbers posted?
2. Required notifications posted?
3. Fire extinguishers readily available and identified?
4. Fire extinguisher inspection current?
5. Adequate first kits available?
6. Eyewash available?
7. Spill response equipment readily available?

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D. Personnel Protective Equipment

1. Hardhats being worn?
2. Safety glasses being worn?
3. Steel toed boots worn?
4. Fall protection being utilized appropriately?
5. Hearing protection being utilized?
6. Face shields or full-face respirators utilized while grinding and chipping?
7. Respiratory protection measures appropriate?

/	/	/
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E. Walking and Working Surfaces

1. Housekeeping well maintained?
2. Work areas free of slip and trip hazards?
3. Openings protected and secured properly?
4. Guardrails provided for walkways or work surfaces where necessary?
5. Stairs with four or more risers provided with handrails?

/	/	/
/	/	/
/	/	/
/	/	/
/	/	/

F. Hand and Power Tools

1. Are tools in good condition and inspected?
2. Are guards and attachments in place?
3. Are electric tools grounded or double insulated?

/	/	/
/	/	/
/	/	/

G. Electrical Hazards

1. All temporary power provided with ground fault protection?
2. Covers in place?
3. All circuits identified at panelboards?
4. Extension cords three wired and rated for heavy use?
5. Extension cords in good condition and periodically inspected?
6. Are cords arranged such that they are protected from hazards?
7. Temporary lights guarded / secure?

/	/	/
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/	/	/

H. Chemical, Oil and Waste Storage and Handling

1. Approved metal safety containers, marked as to contents, used for

more than one gallon of flammable or combustible liquids? _/_/_

2. All flammable liquid supplies kept in sealed containers away from work areas and in flammable safety cabinets? _/_/_

3. Containers secured when transferring flammable liquids? _/_/_

4. All loose oily rags and waste removed from area and stored properly? _/_/_

5. Are containers properly labeled with name and hazard information? _/_/_

I. Ladders

1. Is the right ladder being selected for the task? _/_/_

2. Do extension ladders extend three feet above landing? _/_/_

3. Are landings adequately clear? _/_/_

4. Are extension ladders secured at both ends? _/_/_

5. Are ladders in good condition and periodically inspected? _/_/_

6. Are A-Frame ladders appropriate size for task? _/_/_

J. Torching

1. Fire extinguishers available? _/_/_

2. Is work area properly ventilated? _/_/_

3. Are necessary PPE, curtains/shields in place? _/_/_

4. Compressed gas cylinders properly stored, secured and marked? _/_/_

5. Electric welders / plasma cutters properly grounded? _/_/_

K. Asbestos Related

1. Appropriate containment methods? _/_/_

2. Clean and fully functioning decontamination area? _/_/_

3. All necessary PPE being utilized? _/_/_

4. Sufficient negative pressure? _/_/_

5. Wet methods sufficiently utilized? _/_/_

6. All logs complete and current? _/_/_

L. Heavy Equipment

1. All operators have proper training on file? _/_/_

2. Spotters are used as needed? _/_/_

3. Equipment is in good condition and inspected regularly? _/_/_

4. All attachments or accessories are appropriate and secure? _/_/_

Project Scope Summary:

Notes/Comments (please explain all NO answers):

☐ BES ☐ BDS ☐ BIS ☐ CBR

Jobsite: _____ / _____
 Street Address City Specific Area of Incident

General Contractor / Property Owner: _____

☐ First Aid/Injury ☐ Near Miss ☐ Property Damage / Loss ☐ Other: _____

<i>NAME (Printed)</i>	<i>Title</i>
-----------------------	--------------

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15. INCIDENT INVESTIGATION REPORT

☐ BES ☐ BDS ☐ BIS ☐ CBR

Job Number _____ Superintendent: _____

Classification: ☐ Near Miss ☐ First Aid/ Injury ☐ Property Damage/Loss
☐ Other: _____

Employees Injured: ☐ Yes ☐ No

Incident Date: _____ Incident Time: _____

Date Reported: _____ Time Reported: _____

Address: _____

Specific Location: _____

General Contractor: _____ Sub-Contractor: _____

Witnesses? _____ Contact Info: _____

Foreman: _____

Describe what happened:

Describe lo que Sucedió:

What act or condition caused this event?

Qué acto o Condición causó este evento?

What are the root causes of this event?

Cuáles son las causas fundamentales de este evento?

What steps have been taken to ensure this event will not happen again?

Qué medidas se han adoptado para asegurar que este evento no ocurrirá de Nuevo?

Contributing Factors

- ☐ Human Related (Relacionado de humano)
Relacionado)
- ☐ Procedure Related (Procedimientos relacionados)
Calidad)
- ☐ Work Practice Related (Prácticas relacionadas con el trabajo)
- ☐ Equipment / Component (Equipo / Componente)
Certificación)
- ☐ Installation Related (Acerca de la instalación)
Preventivo)
- ☐ Change Control Procedure (Cambiar Procedimiento de Control)
- ☐ Contractor Related (Contratista)
- ☐ Material / Parts Quality (Material / Repuestos)
- ☐ Housekeeping (Servicio de limpieza)
- ☐ Training / Certification (Entrenamiento /
- ☐ Preventive Maintenance (Mantenimiento)
- ☐ Unclear Requirements (Requisitos no claros)

Lost or Damaged Equipment (attach list as necessary):

Management Review:

Name: _____ Title: _____
Date: _____

POST INCIDENT MEETING/CREW NOTIFICATION

AR#:	Name	Social	Date	Time
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Manager Responsible:

Date Completed

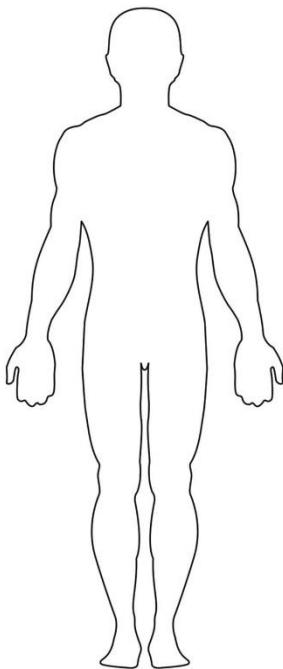
**BAYVIEW SERVICES INJURY REPORT DETAILS
SUPPLEMENTAL #1**

Directions: Mark ALL areas that have a visible injury and/or feel any pain as a result of this incident. Include all injuries, no matter how minor. Number the areas, and at the bottom indicate the injury type or primary complaint.

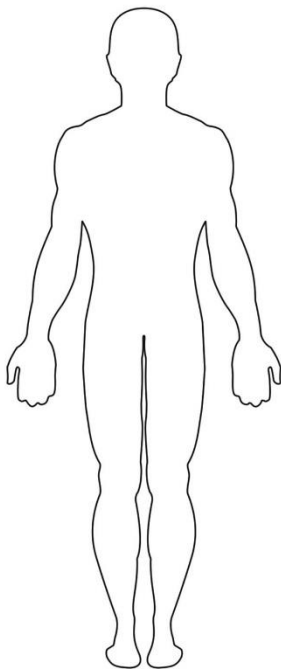
(Direcciones: Marque TODAS las áreas que tienen una lesión visible y / o siente dolor como resultado de este incidente. Incluya todas las lesiones, no importa lo menor que sea. Numere las áreas y en la parte inferior indique el tipo de lesión o la queja principal.)

Date of Injury: _____ Date Form Completed: _____ Form Completed by: _____

(FRONT)



(BACK)



COMMENTS:

Injury / Pain Location & Type:	Pre-Existing Pain / Prior Injury?
1) _____	Yes No
2) _____	Yes No
3) _____	Yes No
4) _____	Yes No
5) _____	Yes No
6) _____	Yes No
7) _____	Yes No
8) _____	Yes No

I certify that the foregoing information is true, correct, and complete. All injuries indicated were a direct result of the course of my employment, and were not pre-existing in any way unless indicated as so above.

(Certifico que la información anterior es verdadera, correcta y completa. Todas las lesiones indicadas eran un resultado directo del curso de mi empleo, y no eran preexistentes de ninguna manera a menos que se indique como arriba.)

Signed: _____ Print: _____ Date: _____

16. EMERGENCY ACTION PLAN

General

- This plan and all associated site-specific plans and documents are available to all employees for review and reference.

Emergency Evacuation Procedures

- Bayview is engaged in a wide variety of work, in a wide variety of client facilities. Evacuation plans and assembly points for offices can be found in the company HMBP.
- Evacuation plans and assembly points for client facilities can be found at the facility location and posted at the company assembly area.
- A system for audibly alerting employees of an emergency will be in place at all work locations.

Procedures to be followed by employees who remain to operate equipment.

- Bayview is not engaged in any activities that require personnel to remain behind to operate equipment.

Accounting for personnel.

- The Bayview superintendent, supervisor or foreman shall be responsible for accounting for personnel after an emergency or evacuation.
- Employees shall proceed to the established assembly point(s) and remain in these assembly points until the all clear has been given and all personnel have been accounted for.

Rescue and Medical Duties

- Employees are not trained and do not engage in rescue or emergency medical procedures (beyond First Aid/CPR).

Reporting Emergencies.

- Employees shall report all emergencies, including fire, by dialing 911 and pulling the facility fire alarm.
- If employees are working at a client facility, employees shall report emergencies by following the facilities emergency reporting procedure.

Training

Employees shall be trained on emergency procedures:

- On a yearly basis.
- When the plan changes
- When reporting to work at a client facility as part of the facility orientation.

17. FIRE PREVENTION PLAN

Purpose

The purpose of this document is to establish a fire prevention plan for Bayview Services, Inc. locations and jobsites. This plan is intended to assist with the elimination of the causes of fires and prevent loss of life and property by fire. It provides company managers, supervisors and employees with information and guidelines, which will assist them recognizing, reporting and controlling fire hazards.

Potential Fire Hazards

- Fires, like all other types of accidents, are largely preventable. Potential fire hazards include but are not limited to:
- Overloaded electrical circuits, unsafe wiring and defective extension cords.
- Appliances such as coffee pots/makers, hot plates and other heating devices left on when not in use.
- Overheated motors and other equipment not maintained properly.
- Improper use of non-electrical heating systems (space heaters).
- Improper disposal of smoking material such as emptying ash trays in trash cans and/of coming in contact with other combustible material.
- Not using an ash tray – leaving a lighted cigarette on combustible material.
- Improper use, handling, and storage of flammable material (gasoline, solvents, paints, etc.)
- Poor housekeeping which results in accumulation of combustibles such as paper, boxes, oil soaked rags, and flammable liquids.
- Improper use of welding torches and equipment.

Prevention

Fire prevention is a part of every employees' job. While the worksite supervisor is responsible for ensuring that these work practices are followed, every employee must bring to the attention of management any situation which may create a fire hazard.

The following is a list of key fire prevention safe work practices:

- Deposit waste paper and refuse in approved containers, and remove daily.
- Store used cleaning or oil/grease contaminated rags in a closed metal container placed away from other combustibles, and away from heat sources and direct sun light.
- Check all electrical equipment and cords daily or before use for signs of wear, arcing or loose plugs or fittings. Do not overload circuits. Never plug one surge protector into another.
- Extension cords may be used only for temporary wiring. They may never be used to replace permanent wiring. If an extension cord is used for temporary wiring, it must be listed by Underwriters Laboratories (UL) for another recognized testing laboratory. Measures should be taken to avoid kinking or excessive bending of the cord. Broken strands may pierce the insulated covering and become a shock or short-circuit hazard.
- Portable and stationary equipment that requires grounding shall be equipped with a grounded polarized plug and shall be plugged into a polarized receptacle.
- Welding, oxyacetylene cutting, hot riveting, grinding, chipping, soldering, brazing, and other activities that produce sparks, or use flame are all examples of activities which are considered to be "HOT WORK". See below for hot work.
- Cutting or welding will be permitted only in areas that are fire safe. The assigned area shall be free of combustible and flammable contents. While indoors, screens must be used around all welding operations.
- If the object to be welded or cut cannot be readily moved, all moveable fire hazards in the vicinity shall be taken to a safe place. If this is not possible, then guards shall be used to confine the heat, sparks and slag, and to protect the immovable fire hazards. If none of these can be done, then welding and cutting shall not be performed.
- Welders shall wear the appropriate PPE, including respiratory protection if necessary, for welding activities. Clothing should be free of oil, solvents, or frayed edges to minimize the fire hazards from sparks.

Bottled Gas Cylinders

- Cylinders shall be properly labeled with either the chemical or the trade name of the gas.
- Cylinders shall be kept away from radiators and other sources of heat.
- Cylinders shall be handled carefully.
- Cylinders should be strapped/chained to a fixed point.
- Cylinders shall be visually inspected to ensure safe condition.
- Cylinders shall be stored in a well-protected, well-ventilated, dry location at least 20 feet from highly combustible materials such as oil or wood shavings, or other similar materials. Flammable substances, such as oil and volatile liquids, should not be stored in the same area.
- Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. Empty cylinders shall have their valves closed.

Gasoline

When handling gasoline, observe the following rules:

- Never use gasoline for cleaning floors, tools, clothes or hands.
- Always store gasoline in an approved, closed container.
- Pouring gasoline from one container to another may generate a charge of static electricity. A metal-to-metal contact must be maintained or use of rubber mat for grounding purposes.
- Gasoline spills will be cleaned up immediately to prevent accumulation of vapors. Do not allow electrical switches to be turned on until the gasoline vapors have dispersed.

Flammable Cabinets

- Products that are labeled flammable will be stored in flammable cabinets.
- No more than 60 gallons of Class I or Class II liquids, and no more than 120 gallons of Class III liquids, may be stored in a flammable storage cabinet at one time.
- For storage areas of Class I or II liquids, a fire extinguisher shall be located not less than 10 feet, no more than 25 feet, from the door opening.

Smoking

- Smoking is permitted only in designated areas. Smoking is prohibited in all other areas, including within 50 feet of hazardous material storage areas. Be alert to fire hazards, and use common sense.

Fire Protection Equipment / Fire Extinguishers

The basic types of the fire protection equipment and systems used to control or extinguish fires are:

- Portable fire extinguishers
- Sprinkler systems
- Fire hoses
- Chemical type extinguishes systems, including carbon dioxide, dry chemical, and halon systems

While some worksites may have any of the above-mentioned systems, the company offices, warehouse, storeroom and most jobsites use portable fire extinguishers. These portable fire extinguishers are the ABC type and are approved for use on ordinary combustibles such as wood, cloth and paper; flammable liquids such as gasoline and oil; and electrical equipment.

All employees will be provided with annual fire extinguisher training. All company fire extinguishers that are in service will be maintenance checked annually by a qualified entity and visually inspected (documented) by a trained employee monthly.

Fire Protection Responsibility

Regional Safety Managers are responsible for ensuring compliance with this written Fire Prevention Plan and for ensuring equipment and systems are properly maintained.

All worksite supervisors are responsible for the control of flammable or combustible waste materials in their respective work areas. Supervisors are responsible for informing employees of potential fire hazards in the workplace specific to their tasks. In addition, each supervisor shall instruct employees on those parts of fire prevention plan applicable for the employees to protect themselves and respond in the event of an emergency.

Fire Protection Inspections

Fire extinguishers will be visually checked monthly by the storeroom supervisor and/or worksite supervisor to ensure they are fully charged and in a designated location and serviced annually by a contractor. If installed out of doors, the extinguisher should be protected from the elements.

All sprinkler systems, fire hose systems and chemical type extinguishing systems will be inspected and maintained so as to comply with all state and local regulatory requirements. As a minimum, these systems will be inspected annually by a properly licensed individual/contractor.

Housekeeping

Good housekeeping is basic to fire safety and should be a major concern. Good housekeeping is expected of all employees. The worksite supervisor shall control accumulation of flammable or combustible waste materials and residues so that they do not contribute to a fire emergency. The following general preventive measures apply:

- General work areas must be kept orderly and clean.
- Discarded packing material or scrap should not be accumulated.
- A sufficient number of wastebaskets or trash receptacles (noncombustible containers) should be placed in each work area.
- Adequate aisles shall be provided and maintained for unobstructed egress and movement of personal and fire protection at all times.
- Maintenance and operation practices shall control leakage and prevent spillage of liquids. Provisions shall be made to promptly and safely dispose of leakage and spills.
- Material vulnerable to water damage should be stored at least two inches off the floor, and all stored material shall be kept at least three inches away from heat-radiating sources (radiators, hot piping, ductwork, lighting fixtures, etc.).

Chemical Handling & Storage

- Leaks, spills and overflows must be avoided. Storage of flammable and combustible liquids in open containers is not permitted.
- Incompatible materials in storage areas must be segregated. Specifically, separate ignitable material from oxidizers or sources of ignition. In general, do not store different types of incompatibles in the same container.

Flammable Liquids

- The volume of flammable and combustible liquids in the areas of use shall not exceed one day's estimated requirements, and any unused amounts shall be removed from benches and other points of use for return to the designated storage facility at the end of each day.
- Ordinary combustibles shall not be stored in the vicinity of flammable and combustible liquids. Packing materials in the hazardous materials storage areas shall be kept to a minimum.

Combustible Waste Material

- Combustible waste material and residues in operating areas shall be kept to a minimum, stored in covered metal containers, and disposed of weekly or when containers are full.
- Combustible rubbish, weeds, and dry grass shall not be allowed to accumulate in outside work areas, especially near buildings or stored combustible materials. Roof areas, stair shafts, tunnels and other remote areas shall be kept free of combustible storage.

- Dust, lint, and other combustible deposits shall be removed periodically as needed from overhead pipes, ledges, beams, and other surfaces not readily accessible for normal housekeeping. Special care should be taken in all areas to keep motor and equipment bearings and heated surfaces free from such accumulations by frequent cleaning.
- Sanders, woodworking equipment, and other machines, which produce a fine dust, shall be cleaned once a week or more frequent depending on local conditions. Walls, pipes, ducts, beams, ledges, and other parts of rooms subject to such deposits shall be vacuum cleaned as often as necessary to maintain a clean workplace. Compressed air may be used sparingly to remove deposits from inaccessible areas.
- Bulk containers used for collecting scrap paper shall be covered, and emptied when full or removed from the collection area.
- When not in use, clothing stained with oil or pain shall be hung in ventilated lockers and not left in a pile. Stained gloves shall be stored in a closed metal container until cleaned or discarded.

Hot Work

Hot work is classified as any open flame or spark generating work activity that could result in a fire. Examples of this include, but are not limited to, welding / cutting torches, plasma cutters, and carbide style cutoff wheels.

- All employees assigned to a hot work task or as fire watch will receive sufficient training pertaining to their task and this program.
- Combustible materials must be moved out of the area hot work is performed. If it is not possible to move all materials, any materials left in place shall be adequately protected by guards/shields or other effective means.
- A fire watch is needed at all times when hot work is performed and for an additional 30 minutes (minimum) after hot work has ended.
- A fire extinguisher must be readily available at all times when hot work is performed. Additionally, a water source will be present for all torching activities.
- A hot work permit shall be completed prior to the start of any hot work.
- Air flow shall be considered for the work area, and proper ventilation provided.
- Respiratory protection shall be considered for protection from fumes, gases, and/or dust and implemented if any of these hazards are present.
- All hot work equipment must be inspected prior to use and constantly evaluated for defects and/or degradation developing during use. Any defective equipment will be properly flagged and removed from service.

Training

- Supervisors shall inform employees of the fire hazards of the materials and processes to which they are exposed.
- The supervisor shall review with each employee, upon initial assignment, those parts of the fire prevention plan, which the employee must know to protect the employee in the event of an emergency.
- Job Hazard Analysis (JHA) will be developed and readily available for employees to review.

18. JOB HAZARD ANALYSIS (JHA)

Regardless of project scope, time frame, and manpower, supervisors will conduct a pre-job safety meeting and complete a JHA for all work. Use this JHA to summarize tasks, associated hazards and safety measures. Amend the document as new tasks arise or tasks are completed (in multiple day events). Submit completed JHA forms weekly to payroll and operations support documents.

JOB#:
ADDRESS:
AREA:

Major Task Summary	Potential Hazards	Safety Measures
1.		
2.		
3.		
4.		
5.		

Name(s) of Persons Who Completed JHA: _____ Date: _____
Superintendent Approval: _____ Date: _____

[illegible]

19. DISCIPLINARY PROCEDURES

(Employee Handbook 18.0)

The following action can be taken for employees violating our safety policies and procedures:

First Offense: Written warning into employee's file.

Second Offense: Three (3) Days off without pay and enter into employee's file.

Third Offense: Termination

The above procedures are for general safety violations. If an employee violates a safety order that is life threatening and refuses to correct it, the employee will be terminated immediately.

The employees' immediate supervisor will determine the severity of the offense, and other factors, before initiating any form of punishment.

It is possible for an employee to receive more than one verbal or written warning. The immediate supervisor, the client, and the overall severity of the offense will be used to objectively evaluate the need for and the severity of the reprimand.

EMPLOYEE DISCIPLINARY WARNING NOTICE

NAME OF EMPLOYEE: _____
DATE OF WARNING: _____ 1ST NOTICE: _____
2ND NOTICE: _____ 3RD NOTICE: _____
DATE OF VIOLATION: _____ PLACE: _____

TYPE OF VIOLATION

- () CONDUCT ON THE JOB
() IGNORING DIRECTIONS OR WARNINGS
() SAFETY
() OTHER

EXPLANATION OF THE INFRACTION: _____

Manager: _____

20. VEHICLE ACCIDENT REPORT

Date of Accident: _____ Vehicle #: _____

Place of Accident (Street and City): _____

Road Condition: _____ Weather: _____

COMPANY VEHICLE INFORMATION:

Year: _____ Make: _____ Model: _____ Plate #: _____

VIN: _____

Driver Name: _____

Driver's Address:

Street City State Zip Code

License Number: _____

Any Damage to company vehicle? _____ Is Vehicle Drivable?: _____

Damage Explained:

OTHER VEHICLE INFORMATION

Year: _____ Make: _____ Model: _____ Plate#: _____

VIN: _____

Driver's Name: _____

Address:

Street City State Zip

Drivers License #: _____ Vehicle damaged? _____

Vehicle Drivable? _____ Tow Company Name, Phone Number: _____

Damage Explained:

OTHER PARTY INSURANCE INFORMATION:

Insurance Company: _____ Policy#: _____

Address:

Street City State Zip

Agent's Name: _____ Phone Number: _____

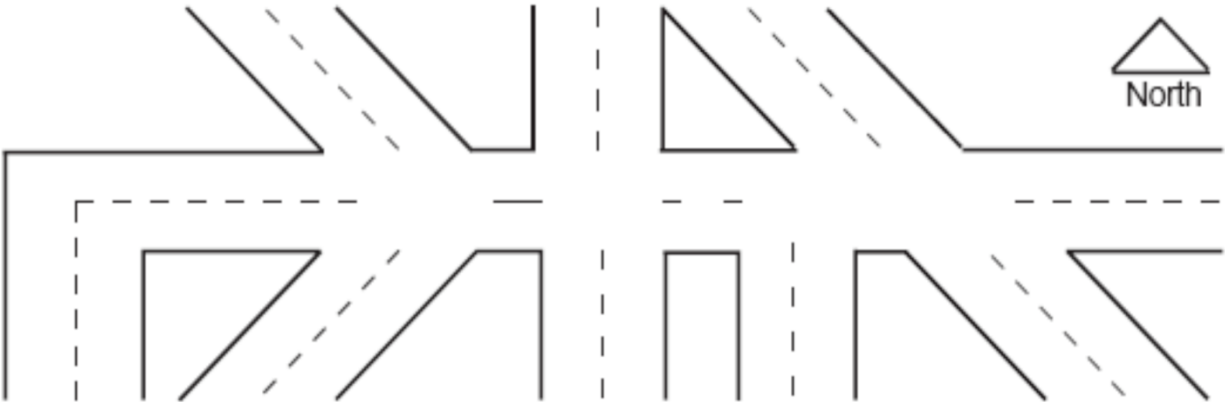
IF ANY INJURIES OR OTHER PROPERTY DAMAGE OCCURRED, ALSO FILL OUT AN INCIDENT REPORT.

Describe what happened:

Witnesses Name: _____
Number: _____

Phone

Please draw the Accident on the diagram below: Use directional arrows to show path of vehicles. Identify Vehicles by letters “A” “B” “C”- “A” being the company Vehicle. Insert street names where applicable



Signature of Preparer: _____
Date: _____

21. HEAT ILLNESS PREVENTION PROGRAM

PURPOSE

The purpose of this Heat Illness Prevention Program is to safeguard the health and well-being of all Bayview employees by implementing effective measures to prevent heat-related illnesses in compliance with California Code of Regulations, Title 8, Sections 3395 and 3396. This Heat Illness Prevention Program outlines Bayview's commitment to preventing heat-related illnesses among its employees. The program details the procedures and policies for providing adequate water, shade, cool-down areas, training, and emergency response measures. It integrates risk management strategies, emphasizes leadership accountability, and fosters communication and collaboration to ensure a safe working environment both indoors and outdoors when temperatures exceed regulatory thresholds.

SCOPE

This program applies to all Bayview employees working in environments where the temperature exceeds:

- 80°F for outdoor work areas.
- 80°F for indoor work areas (note: T.8 Sec. 3396 states 82°F).
- This applies to all activities conducted by Bayview and its subsidiaries, ensuring that preventive measures are in place regardless of the work setting.

REFERENCES

- California Code of Regulations, Title 8, Section 3395 – Heat Illness Prevention (Outdoor)
- California Code of Regulations, Title 8, Section 3396 – Heat Illness Prevention (Indoor)

DEFINITIONS

- **Acclimatization:** The physiological adaptation of an individual to high temperatures over time.
- **Cool-Down Area:** A designated space where employees can rest and reduce their core body temperature.
- **First-Aid Trained Employee:** An employee certified to administer first aid and CPR.
- **Heat Illness:** Medical conditions resulting from the body's inability to cope with heat, such as heat cramps, heat exhaustion, and heat stroke.
- **Indoor:** A space under a ceiling or overhang covering that restricts airflow and is enclosed along its entire perimeter by walls, doors, windows, dividers, or other physical barriers that restrict airflow (whether the windows, doors, or barriers are in an open or closed position).
- **Supervisor:** An individual responsible for overseeing employees and ensuring compliance with safety protocols.

POLICY

Heat illness prevention is integrated into Bayview's overall risk management strategy. This includes:

- Regular assessment of work environments for heat hazards.
- Implementation of engineering controls (e.g., ventilation, shading).
- Scheduling adjustments to minimize heat exposure during peak temperatures.
- Provision of personal protective equipment (PPE) such as cooling vests.

Leadership at all levels is accountable for:

- Enforcing heat illness prevention measures.
- Providing resources necessary for implementation (e.g., water, shade).
- Monitoring compliance and addressing any deviations promptly.

Bayview is committed to:

- Providing comprehensive training to all employees and supervisors on heat illness prevention.
- Ensuring supervisors receive additional training on monitoring weather conditions and emergency response.
- Maintaining records of training and certifications.

Effective communication channels are established to:

- Encourage employees to report symptoms of heat illness without fear of retaliation.
- Facilitate prompt response to emergencies.
- Promote teamwork in monitoring each other's well-being.

RESPONSIBILITIES

Chief Safety Officer

- Oversees the Heat Illness Prevention Program.
- Ensures regulatory compliance with Cal/OSHA standards.
- Updates policies and procedures as necessary.
- Supervises the development and delivery of training programs.

Corporate Safety Director

- Implements the Heat Illness Prevention Program across all field operations.
- Coordinates with Regional Safety Managers to ensure consistent application of safety measures.
- Reviews field reports and incident analyses related to heat illness.
- Provides guidance and resources to field personnel for effective program execution.

Regional Safety Managers

- Monitor and enforce compliance with the Heat Illness Prevention Program within their respective regions.
- Conduct regular site visits to assess heat illness prevention measures.
- Provide support and training to Site Safety Officers and supervisory staff.
- Report regional heat-related incidents and corrective actions to the Corporate Safety Director.

Site Safety Officers

- Implement the Heat Illness Prevention Program at the project or site level.
- Conduct daily assessments of environmental conditions and adjust work practices accordingly.
- Ensure availability and accessibility of water, shade, and cool-down areas.
- Monitor employees for signs of heat illness and initiate emergency response procedures when necessary.
- Maintain site-specific records, including temperature logs and training documentation.

Department Managers

- Ensure that the Heat Illness Prevention Program is integrated into departmental operations.
- Allocate resources for the implementation of heat illness prevention measures.
- Promote a culture of safety within their departments.
- Collaborate with Project Managers and Superintendents to address heat-related risks.

Project Managers

- Plan and schedule work activities to minimize heat exposure risks.
- Communicate project-specific heat illness prevention strategies to all team members.
- Ensure that subcontractors and vendors comply with Bayview's Heat Illness Prevention Program.

Project Superintendents

- Oversee on-site implementation of the Heat Illness Prevention Program.
- Ensure that supervisory staff are enforcing safety protocols.
- Coordinate with Site Safety Officers to implement preventive measures.
- Monitor work conditions and adjust operations as necessary to mitigate heat risks.
- Lead by example in promoting heat illness prevention practices among employees.

Foremen

- Monitor environmental conditions and adjust work practices accordingly.
- Ensure availability and proper storage of sufficient water supplies.
- Provide and maintain access to shade and cool-down areas.
- Observe employees for signs of heat illness.
- Facilitate training sessions and daily briefings.
- Encourage open communication regarding heat-related concerns.
- Designate individuals for emergency response roles.

- Assist in monitoring employees and enforcing safety measures.
- Assure adequate cool down breaks are being taken as outlined in this policy.

First-Aid Trained Employees

- Provide immediate care to affected individuals.
- Assist in emergency response coordination.
- Participate in monitoring employees during high-heat conditions.

All Employees

- Adhere to heat illness prevention procedures.
- Stay hydrated and take rest breaks as needed.
- Report any signs or symptoms of heat illness in themselves or others to their supervisor.
- Participate in training and apply learned practices.

PROCEDURES**Water Provisions**

- Ensure employees understand that water consumption is the first key preventative measure to be taken to reduce the risk of heat related illnesses.
- Provide clean, cool drinking water free of charge at all times.
- Ensure a minimum of one quart per hour per employee for the duration of the shift is available at the work site.
- Position water supplies as close to work areas as practical to ensure water is readily available.
- Use individual-sized disposable bottles to maintain hygiene.
- Store water away from direct sunlight.
- Use insulated coolers when necessary to maintain temperature.
- Supervisors are responsible for monitoring water supplies and storage conditions.

Access to Shade/Cool-Down Areas**Outdoor Work Areas:**

- Provide shaded areas when temperatures exceed 80°F.
- Use canopy-style tents or natural shade as close as practical to the worksite.
- Ensure areas are open to the air or provided with ventilation or cooling.
- Ensure the area is adequately sized to allow all employees to be seated in a normal posture, fully covered by the shade, and not in contact with one another

Indoor Work Areas:

- Maintain temperature regulated cool-down areas below 82°F (unless infeasible) at all times while employees are present.
- Use ventilation and cooling systems to regulate temperature.
- Ensure the area is adequately sized to allow all employees to be seated without being in contact with one another.
- Ensure a temperature regulated meal area is present and adequately sized for all employees who wish to remain on site during the meal period.

Employee Rights:

- Ensure employees understand that cooling down in a shaded (outdoor) or temperature regulated (indoor) area during breaks and cool-down periods is essential to reduce the risk of heat related illnesses.
- Employees may take cool-down breaks at any time they feel they may become overheated.
- Breaks shall last a minimum of five minutes or as long as needed to adequately cool.
- Employees shall be encouraged, and never discouraged, to take rest breaks.
- A First Aid trained employee will be present at all times to ensure no employee is experiencing any signs or symptoms of a heat related illness.

- Regardless of ambient temperature, employees shall never be prevented from taking a cool-down rest upon request.
- During times where temperatures do not exceed 80°F, shade shall be provided in a timely manner upon request.

Weather and Temperature Monitoring

Outdoor Environments:

- Supervisors must stay informed of current and forecasted weather conditions.

Indoor Environments (with the potential to exceed 80°F):

- Measure and record temperatures: At the start of the shift, before and after meal breaks, and when temperature increases by 10°F or more since the last reading.
- Maintain temperature records for 12 months.
- Make records available to employees or their representatives upon request.

High-Heat Procedures

- Implement when temperatures exceed 95°F (both indoor and outdoor).
- Assign a first-aid trained supervisor for every 20 employees.
- Ensure constant monitoring of employees' well-being without the intrusion of other duties.
- Ensure employees are alert, drinking adequate amounts of water (with frequent reminders), and are not exhibiting any signs or symptoms of heat illness.
- Summon emergency services if the need arises (unless another designee is specified on the day's Pre-Task Plan).
- Establish effective communication methods (e.g., two-way radios).
- Ensure all employees have the ability to maintain continuous communication with their supervisor.
- Conduct pre-shift meetings to emphasize heat illness prevention, to include reminding employees to hydrate, take pro-active cool-down rests, and look-out for signs of heat illness amongst one another.
- Encourage frequent hydration.
- Remind employees to take proactive cool-down rests.
- Promote vigilance in observing peers for signs of heat illness.

Emergency Response Procedures

Observation:

- Maintain a system that allows employees to be observed and communicated with at all times.

Immediate Actions (if any employee is observed altered, overheated, etc.):

- Move affected employees to a cool and shaded area.
- Remove excessive clothing and PPE.
- Provide cool water to drink
- Apply ice or cool packs to pulse points (neck, arm pits, groin).

Emergency Services:

- If severe symptoms are present, call 911 immediately.
- Designate a person to guide emergency responders to the site.

Continuous Care (by a First Aid trained individual):

- Never leave an affected employee unattended.
- Follow current first-aid training protocols.

Acclimatization**New Employees:**

- Monitor closely for the first 14 calendar days in high-heat environments.
- Remind to hydrate both while at work and during off-shift hours.

Heat Waves:

- Defined as a day with temperatures at least 80°F and 10°F higher than the previous five-day average.
- Implement high-heat procedures (Section 4.4) during heat waves for all employees.

Recordkeeping

- Keep indoor temperature logs for a minimum of 12 months.
- Maintain records of all training sessions, including dates, attendees, and content covered.
- Document any heat-related incidents and the response actions taken.

22.5.8: Employee Access

- Provide access to the Heat Illness Prevention Program upon request.
- Share temperature records and training materials with employees or their representatives.
- Ensure employees understand their rights under this program without fear of retaliation.

TRAINING**Training for All Employees**

All Bayview supervisors and employees shall receive training on the contents of this program, as well as the following points:

- The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- Bayview's procedures for complying with the requirements of this standard (Title 8, sections 3395 and 3396), including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, access to first aid, and the employees' right to exercise their rights under those standards without retaliation.
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot, as employees are likely to be sweating more than usual in the performance of their duties.
- The concept, importance, and methods of acclimatization.
- The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild to serious and life-threatening.
- The importance to employees of immediately reporting any signs or symptoms of heat illness in themselves or observed in co-workers.
- The procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- The procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
- The procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures

shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

Training for Supervisors

All Bayview supervisors, prior to being tasked with overseeing employees, shall receive additional training to include:

- The full content of this Heat Illness Prevention Program, including how to prevent heat illnesses within their assigned crew.
- Current American Red Cross First Aid / CPR / AED Certification, which includes care that is to be provided to an employee suffering from a heat related illness.
- How to monitor weather reports and how they are to respond to hot weather advisories.
- How to take temperature readings in indoor work environments.
- The contents of the required training to be provided to all employees, as listed above, and how to effectively provide said training.

22. EXCAVATION GUIDELINES

The following shall be adhered to at all times during the engagement of any trenching or excavation activities. Additionally, Title 8 Sections 1541 and 1541.1 shall be frequently referred to in order to assure complete compliance.

- Prior to any excavation, all sub surface utilities shall be located, marked, and their respective owners notified. This shall be performed by a qualified person in accordance with Government Code Sections 4216 through 4216.9. If no utilities are present, the competent person on site overseeing the operation shall have documentation reflecting this.
- A Cal/ OSHA permit shall be obtained for all excavations/ trenches that are 5 feet in depth or greater and into which any worker is required to descend into.
- Excavations / trenches that are 4 feet or greater in depth shall have a ladder placed at a maximum distance 25 feet horizontally from each worker.
- All trenches/ excavations greater than 5 feet in depth shall be properly benched, shored, or sloped. Soil conditions may warrant benching, shoring, or sloping on some excavations/ trenches that are less than 5 feet. A competent person present at the location of the work at all times shall oversee such an operation. All protective systems in place shall be installed or constructed in accordance to the guidelines found in Title 8 Section 1541.1. A soil analysis shall be obtained prior to the selection of these methods.
- All shield systems/ shoring shall be engineered and installed in compliance with the manufacturers specifications.
- The competent person has the power to deem any trench or excavation unsafe for entry based on their training, experience, and judgment and to stop work at any time.
- Any trench or excavation shall be inspected either daily or whenever conditions change, whichever is more frequent, by the competent person. This inspection shall be documented, and the competent person shall hold a safety meeting with all involved crewmembers prior to the commencement of work.
- All materials and equipment shall be set back as far as is practical from the edge of a trench or excavation, and shall never be placed closer than 2 feet horizontally. At no time shall any material or equipment disrupt the path of travel to or from the excavation/ trench.
- Workers required to work in the vicinity of a trench or excavation shall receive training pertaining to the associated hazards.
- All fall protection policies in place apply to working in the vicinity of trenches and excavations and shall be strictly followed at all times.
- The Bayview confined space policies shall be taken into consideration during all excavation/ trenching operations.

23. RESPIRATORY PROTECTION PROGRAM

Policy

Bayview Demolition Services, Inc. and Bayview Environmental Services, Inc., CSLB contractors, are well aware of the multitude of airborne hazards, particularly airborne asbestos and silica, as related to the health and well-being of our employees and the environment at large. It has been, and will continue to be, the policy of the Company to provide a safe and healthful work environment to all employees. This program has been designed to ensure the safety of our employees during projects where they may be potentially exposed to airborne contaminants, and must therefore wear respiratory protection. It is written in accordance with CA/OSHA's revised 5144, Title 8, California Code of Regulations and also addresses 1529 (h).

The use of Supplied Air Respirators is not included within this program. Should the need for supplied air respirators arise, this plan will be modified to reflect the use of Supplied air respirators in accordance with 5144 (I) and this plan resubmitted to CA/OSHA Asbestos Registration Unit for approval.

Respirators shall be assigned to employees only after they have been medically cleared by our contracted occupational health care provider and/or provide medical proof (within the last 12 months) that they are fit to wear a respirator. Respirators will be assigned to employees for their exclusive use at no cost to the employee. Employees will not be allowed to remove their respirators, eat, drink, smoke or chew gum while in the designated work area. Disregarding these safety instructions and procedures will be considered a just cause for instant dismissal.

This program will be reviewed and evaluated on a periodic basis (minimum every 6 months) to ensure that it is being properly implemented, and to consult employees to ensure that they are using the respirators properly.

The Corporate Safety Director is the designated Program Administrator. Responsibilities include the administration and oversight of the Respiratory Protection Program, conducting the required evaluations of program effectiveness, assuring regulatory compliance, and coordinating appropriate in-house training.

It is the company's policy to do qualitative fit testing to all negative pressure and powered respirators for all employees. The PAPR respirators will be fit tested in negative pressure mode with the filter attached.

Responsibilities

Regional Safety Manager / Superintendents:

- Provide respirator training and fit testing to BAYVIEW employees at no cost to the employee.
- Conduct frequent safety inspections of respiratory protective equipment.
- Ensure the provisions of this program are carried out.

Project Site Supervisors

- Provide periodic refresher training in the proper use of respirators and their limitations.
- Ensure that all employees in the regulated area wear the correct respirator at all times.
- Ensure that all employees clean and store their respirators in accordance with the provisions of this program.
- Provide each employee with the respirator cleaning and disinfecting supplies, storage space, and repair parts.
- Review results of air monitoring as soon as possible to guarantee proper respiratory protection of employees.

Individual Employees

- Inspect their respirator each day before and after each use.
- Wear the designated type of respirator at all times when in the regulated area. It will be worn from the time they exit the clean room until they decontaminate.
- Clean and store their respirator in accordance with these guidelines

Medical Evaluation

Using a respirator may place a physiological burden on employees, depending on the type of respirator worn, the job, workplace conditions in which the respirator is used, and the medical status of the employee. Employee medical evaluations are required prior to the first use of a respirator. Further, follow-up medical examinations that allow employees to discuss their medical questionnaire results with the administering health care provider are also required on an annual basis. Employee medical evaluations are provided at no cost to the employee and are provided during normal work hours. Bayview's Medical Surveillance Program may be referenced for further details.

No employee shall be assigned to work that requires respirator use if, based on their most recent medical examination, the examining physician determines that the employee is unable to do so safely. Such employees must be assigned to another job or given the opportunity to transfer to a different position within the company that they can perform. If such a transfer position is available, it will be in the same general geographic area, and with the same seniority, status, rate of pay, and other job benefits the employee had prior to such transfer.

Selection of Respiratory Type

Standard Operation Procedures:

- Respiratory protective equipment will be selected and used based on the respiratory hazard present, the degree of exposure, and the work environment in which it is to be utilized.
- The company shall not assign its employees, which are covered by this program, to work in IDLH respiratory environments

NIOSH approved respirators are provided to workers in specific work conditions including, but not limited to, the following conditions as outlined:

- (a) The following requirements apply:
 - (i) *During all Class I asbestos jobs.*
 - (ii) *During all Class II work where the ACM is not removed in a substantially intact state*
 - (iii) *During all Class II and III work which is not performed using wet methods, provided, however, that respirators need not be worn during removal of ACM from sloped roofs when a negative exposure assessment has been made and the ACM is removed in an intact state*
 - (iv) *During all Class II and III asbestos jobs where the employer does not produce a "negative exposure assessment".*
 - (v) *During all Class III jobs where TSI or surfacing ACM or PACM is being disturbed*
 - (vi) *During all Class IV work performed within regulated areas where employees performing other work are required to use respirators*
 - (vii) *During all work where employees are exposed above the TWA or excursion limit*
 - (viii) *In Emergencies*
- (b) The project estimator will obtain background samples from the building owner or owner's industrial hygienist
- (c) The project estimator will obtain an analysis of ACM/PACM to determine the type, composition, and percentage of asbestos present.

- (d) The project estimator will note the general condition of material, scope of work, and estimated length of the job. Estimator will also determine the engineering controls to be utilized and the work procedures to be employed (i.e. set-up, glove bag, ref. method, etc.)
- (e) *Based upon the estimator's information and recommendations, the project administrator will determine what initial respiratory protection will be required for Class I & II work (PAPR). set-up, and other situations (min. ½ face dual cartridge or PAPR) until air monitoring results indicate the actual exposure levels.*
- (f) Air monitoring results (***minimum 2/day plus EL***) of abatement start up will be analyzed using 16 hr. turnaround time to establish expected level of employee exposure.
- (g) Based upon the results of air monitoring, the appropriate respiratory protection is prescribed for employees as per 29 CFR 1926.1101 (h), 8 CCR 1529 (h), and the table below:
 - (i) *Not in excess of 1 fibers/cc – Half mask air purifying w/ HEPA filters*
 - (ii) *Not in excess of 5 fibers/cc – full face mask air purifying w/ HEPA filters*
 - (iii) *Not in excess of 10 fibers/cc – PAPR w/ HEPA filters; Supplied air in continuous mode.*
 - (iv) *Not in excess of 100 fibers/cc – Full face supplied air in pressure demand mode.*
 - (v) *Not in excess of 100 fibers/cc – Full face in pressure demand with auxiliary self-contained breathing apparatus.*
- (h) The company shall provide a tight fitting powered, air-purifying respirator in lieu of any negative-pressure respirator specified in Table 1 whenever (*provided that they have appropriate medical clearance*):
 - (i) An employee chooses to use this type of respirator; and
 - (ii) This respirator will provide adequate protection to the employee.
- (i) In the event half mask negative pressure is utilized, the project administrator will ensure that only those employees who have had physicals and have been cleared by physicians will be allowed in contained areas.
- (j) For 1529 (h) (3) (d), employees shall always issue a tight-fitting PAPR for Class I work where a negative exposure assessment has not been performed and exposure levels are not above 1f/cc. When exposure assessment results indicate that exposure level are >1 f/cc, work shall be stopped and the control methods evaluated and changed to reduce the airborne fiber levels.
- (k) For protection against gases and vapors, the company shall provide an atmosphere-supplying respirator or an air-purifying respirator (the respirator may be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the environment in which it is used). If there is no ESLI appropriate for conditions in the workplace, the employer implements a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of its service life.

Air Monitoring

Air monitoring is an integral part of this program. It will be performed on all asbestos work jobs from the time of initial mobilization until a final clearance has been attained. For a full description of policies, procedures, and controls, see the Air /Exposure Monitoring Program.

Bayview shall not assign its employees to perform work in any atmosphere which is immediately dangerous to life or health (IDLH).

User Training

- A. General – Respiratory training shall be provided initially, annually, and whenever there is a change in work practice, respiratory type and/or usage. The company will provide effective training to employees who are required to use respirators. The training program must be comprehensive, understandable, and reoccur annually, and more often if necessary. The contents of the training program shall include the following:
 - The training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations

- Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance
- 2) Respirators are a highly important safety device. It must be treated with care, and will be provided at no cost to employees. Employees are encouraged to individually mark your respiratory with your name. While working with a respirator, employees are allowed to leave the work area at any time to wash their faces in order to prevent skin irritations or to change filters.
 - 3) If the respirator is a negative pressure respirator and the (physician or other licensed health care professional) PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used; the employer shall provide a PAPR if the PLHCP's medical evaluation finds that the employee can use such a respirator. If a subsequent medical evaluation finds the employee is medically able to use a negative pressure respirator, then the employer is no longer required to provide a PAPR.
 - 4) Eyeglasses may interfere with the sealing surfaces of a respirator and should not be worn in the work area if an interference is present. It may be necessary to obtain corrective lenses that have provisions to be installed on the face shield. A respirator must be used and maintained properly to be effective. The employee must understand that respirators also have their limitations. They may not be used in atmospheres containing a deficient supply of oxygen, nor may they be appropriate in areas containing certain gases or vapors unless the filters or respirators are specifically designed for those purposes.
 - 5) Employees that must utilize respiratory protective equipment must be clean shaven to the specifications of the manufacturer for the specific equipment chosen.
 - 6) The following instructions must be learned and followed to ensure employee safety.
 - (a) HALF FACE HEPA FILTER (North or 3M)
 - (i) *Minimum protection required for workers in asbestos abatement industries.*
 - (ii) *Change filter cartridge whenever breathing resistance or at the direction of a Foreman.*
 - (iii) *Not to be used when asbestos fiber counts are in excess of 1 fiber/cc.*
 - (iv) *May cause employee breathing stress.*
 - (v) *Employee must have physical and be approved by physician prior to use. (See "Respirator Use and Maintenance").*
 - (b) POWERED AIR PURIFYING RESPIRATOR (PAPR) (North or 3M)
 - (i) May be requested by employee in lieu of half face respirator whenever he/she so chooses providing it provides adequate protection (per 1926.1101(h)2iii).
 - (ii) For use when fiber counts are not in excess of 10 fibers/cc. (See "Respirator Use and Maintenance")
 - (c) TYPE "C" PRESSURE DEMAND
 - (i) Maximum protection for employee.
 - (ii) Used when fiber counts are than 100 fibers/cc or when concentration is unknown. (See "Respirator Use and Maintenance")

B) FIT TESTING

- 1) Before an employee may be required to use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.
 - (a) Employees using a tight-fitting face piece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT).
 - (b) PAPR and Type C (with filter attachment) respirators must be at least qualitatively fit tested with the air off and the appropriate filters to ensure a protection factor at least 10 for escape purposes.
 - (c) An employee using a tight-fitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model, or make) is used, and at least annually thereafter.
 - (d) An additional fit test whenever the employee reports, or the employer, PLHCP, supervisor, or program administrator makes visual observation of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
 - (e) If after passing a QLFT or QNFT, the employee subsequently notifies the employer, program administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator face piece and to be retested.
 - (f) The fit test shall be administered using and OSHA-accepted and QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are listed below.
 - (g) QLFT may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.
 - (h) If the fit factor, as determined through an OSHA-accepted QNFT protocol, is equal to or greater than 100 for tight-fitting half face piece, or equal to or greater than 500 for tight-fitting full face piece, the QNFT has been passed with that respirator.
 - (i) Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.
 - (i) Qualitative fit testing of these respirators shall be accomplished by temporarily converting the respirator user's actual face piece into a negative pressure respirator with appropriate filters, or by using an identical negative pressure air-purifying respirator face piece with the same sealing surfaces as a surrogate for the atmosphere-supplying or powered air-purifying respirator face piece.
 - (ii) Quantitative fit testing of these respirators shall be accomplished by modifying the face piece to allow sampling inside the face piece in the breathing zone of the user, midway between the nose and mouth. This requirement shall be accomplished by installing a permanent sampling probe onto a surrogate face piece, or by using a sampling adapter designed to temporarily provide a means of sampling air from inside the face piece.

- (iii) Any modifications to the respirator face piece for fit testing shall be completely removed, and the face piece restored to NIOSH-approved configuration, before that face piece can be used in the workplace.
- 2) The following checks shall be conducted by and for each employee each day prior to entering the work area. These checks cannot be conducted if there is any hair growth between the skin and the face piece sealing surface.
 - (a) STEP #1 – Negative Pressure User Seal Check
 - (i) This seal check requires the use to close off the inlet of the cartridge or filters by covering with the palms or by squeezing the breathing tube so that it does not allow air to pass. Inhale gently so the face piece collapses slightly. Hold our breath for about 10 seconds.
 - (ii) If the face piece remains slightly collapsed and no inward leakage is detected, the respirator fits.
 - (b) STEP #2 – Positive Pressure User Seal Check
 - (i) This seal check is similar in principle to the negative pressure user seal check. Conduct this check by closing off/covering the exhalation valve and exhaling gently into the face piece. The respirator fits is considered okay if slight positive pressure can be built up inside the face piece without any evidence of outward leakage around the face piece. For some respirators, this check requires that the wearer remove the exhalation valve cover. This removal often disturbs the respirator fit if not done before the respirator is put on. The check is easy for respirators whose valve cover has a single small port that can be closed by the palm or a finger. NOTE: Positive and negative pressure user seal checks are checks for tightness, not fit tests. These seal checks should be done each time the respirator is donned.

C) IRRITANT SMOKE TEST – (QUALITATIVE)

- 1) This test is performed on the following occasions:
 - (a) Initial hiring
 - (b) Annually
 - (c) Whenever an employee has a weight change of 20 or more pounds, significant scarring of the area of the face, dental changes (multiple extractions), or cosmetic/reconstructive surgery.

D) SELECTION

- 1) The employee will select a respirator from a group of at least 5 different sizes at least 2 different manufactures. PAPR and Type C respirators will be fit tested in the negative pressure mode (off mode). The employee will wear the respirator for five minutes to assess fit. Instructions will be given for donning the respirator and the instructor will ensure the following:
 - (a) Proper adjustment
 - (b) Proper fit across nose and chin
 - (c) Room to talk and no tendency to slip
 - (d) Adequate room for eye protection
- 2) The employee will perform positive and negative seal check. If at any time the employee feels discomfort, he/she will select another respirator and repeat the above. A mirror will be available to assist the employee. Once the employee chooses a respirator it will be marked for their

personal and exclusive use (providing it passes all fit tests). Fit tests, as outlined below, will be conducted on all employees regardless of type of respirator chosen.

- 3) For all tight-fitting respirators, employees are to perform a user seal check each time they put on the respirator.
- 4) For all tight-fitting PAPR respirators, all workers perform a flow check on their PAPR's prior to each use.

E) FIT TEST

- 1) The fit test cannot be performed if any facial hair is present at the sealing surface. The employees will wear the respirator at least 10 minutes before starting the fit test.
- 2) After the instructor has made sure that the respirator is properly donned and adjusted, the employee will perform positive and negative seal checks and then proceed to the fit test area.
- 3) Once in the fit test area, the employee will be advised that the smoke can be irritating to the eyes and they should be kept shut. In a well-ventilated area, the instructor shall direct a stream of irritant smoke towards the employee, moving around the whole perimeter of the mask. While the smoke is present, the employee will perform the following exercises:
 - (a) Breathe normally and breathe deeply
 - (b) Turn the head from side to side
 - (c) Bending over touching toes and jogging in place
 - (d) Contorting facial muscle-smiling and frowning-for at least 15 seconds
 - (e) Nod head up and down inhaling in the most up-facing position
- 4) Our qualitative fit test program:
 - (a) During the fit test the worker should talk aloud for several minutes. The following paragraph is called the *Rainbow Passage*. Reading it will result in a wide range of facial movements, and thus be useful to satisfy this requirement. The employee will repeat the entire passage. Alternative passages serving the same purpose may also be used.

THE RAINBOW PASSAGE

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- (b) If at any time the employee detects the presence of the irritant smoke the test will stop and another respirator will be chosen. The employees may chose two types of respirators and wear them for one week so as to be able to choose the more comfortable respirator.

F) CLEANING

- 1) Respirators shall be regularly cleaned and disinfected. Those issued for the exclusive use of one worker shall be cleaned after each day's use, or more often if necessary. Those used by more than one worker shall be thoroughly cleaned and disinfected after each use.
- 2) Employees departing the regulated area shall continue to wear respirators into the decontamination shower/room. The showering process shall include the washing of all asbestos residues from the exterior of the respirator. All employees who wear respirators area

allowed to leave the work areas to wash faces and respirators whenever necessary to prevent skin irritation, or to change filters when an increase in breathing resistance is noted.

- 3) Respiratory equipment shall be washed with detergent in warm water using a brush. The following process shall be followed:
- (i) Remove filters, cartridges, or canisters. Disassemble face-pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
 - (ii) Wash components in warm (43 deg. C [110 deg. F] maximum) water with mild detergent or with a manufacturer recommended cleaner. A stiff bristle (not wire) brush may be used to remove dirt.
 - (iii) Rinse components thoroughly in clean, warm, preferably running water. Drain.
 - (iv) When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
 - 1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of warm water or
 - 2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at warm or,
 - 3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
 - (v) Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face-pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
 - (vi) Components should be hand-dried with a clean lint-free cloth or air-dried.
 - (vii) Reassemble face-piece, replacing filters, cartridges, and canisters where necessary.
 - (viii) Test the respirator to ensure that all components work properly.
 - (ix) Whenever there is an increase in breathing resistance, the employee is required to replace the used filters with new unused filters.

G) STORAGE

- 1) After inspection, cleaning, and any necessary minor repairs, store respirators to protect against sunlight, heat, extreme cold, excessive moisture, damaging chemicals or other contaminants. Respirators placed at stations and work areas for emergency use shall be stored in non-crushable compartments built for that purpose, shall be quickly accessible at all times and will be clearly marked.
- 2) Routinely used respirators, such as half-mask or full-face air-purifying respirators, shall be placed in sealable plastic bags with filter cartridges taped over.

- 3) Respirators may be stored in such places as lockers or tool boxes only if they are first placed in carrying cases or cartons.
- 4) Respirators shall be packed or stored so that the facepiece and exhalation valves will rest in a normal position and not be crushed.
- 5) Emergency use respirators shall be stored in a sturdy compartment that is quickly accessible and clearly marked.
- 6) Respirators will not be hung from hooks
- 7) Instructions for proper storage of emergency respirators, such as gas masks and self-contained breathing apparatus, are found in "use and care" instructions usually mounted inside the carrying case lid.

H) INSPECTION

- 1) All respirators shall be inspected before and after each use.
- 2) Respirators that are not routinely used shall be inspected after each use and at least monthly. A record of these inspections shall be kept.
- 3) The inspection shall include as a minimum the following items:
 - (a) Tightness of connections
 - (b) Conditions of face piece
 - (i) Excessive dirt
 - (ii) Cracks, tears, holes
 - (iii) Distortion
 - (iv) Scratched, cracked, or loose fitting lenses
 - (c) Head Bands
 - (i) Breaks or tears
 - (ii) Loss of elasticity
 - (iii) Broken or missing buckles or attachments
 - (d) Valves – Inhalation and Exhalation
 - (i) Detergent residues
 - (ii) Dust particles
 - (iii) Cracks, tears or distortion of valve material
 - (iv) Missing or defective valve covers
 - (e) Connecting tube
 - (i) Missing or loose hose clamps
 - (ii) Cracks, tears or holes in tube
 - (iii) Nicks, dents or gouges in end fitting
 - (f) Filter/Canister
 - (i) Proper type for the hazard
 - (ii) Missing or worn gaskets
 - (iii) Worn or stripped threads
 - (iv) Cracks or dents
 - (v) Missing or loose clamps
 - (g) Flow checks for PAPRS

- 4) Air Supply Systems shall be checked at the beginning of each shift. Items check are:
 - (a) General condition of air hoses
 - (i) Breaks, tears and kinks
 - (ii) End fittings for nicks, dents, gouges, and tightness
 - (b) Proper setting of regulators and valves (consult manufacture's recommendations).
 - (c) Correct operation of air purifying elements.
 - (d) Correct operation of carbon monoxide and high temperature alarms.
- 5) All defects shall be repaired immediately. If an item is defective and cannot be repaired it will be immediately removed from service.
- 6) Defective respiratory equipment will be tagged as defective. Tag will include: date, defect, and name of employee to whom it was issued.
- 7) The work site supervisor will remove all defective respiratory equipment form the work site as soon as practical, but at least by the end of the shift. Defective items, which cannot be repaired, will be destroyed.

I) MAINTENANCE

- 1) The continued use of respirators may require periodic repair or replacement of component parts. Such repairs and parts replacement must be done in accordance with the manufacture's specifications.
- 2) When repairs are made on respirators the repair parts used must be for that specific model of respirator. The interchanging of parts between different models will void the respirators certification and may cause dangerous air leaks or equipment failure.
- 3) A selection of respirator repair parts shall be maintained, at the work site, for each model of respirator in use. These repair parts will be normally be kept in the clean room.
- 4) The company shall inspect and maintain legible NIOSH approved labels on filters, cartridges and canisters.

J) SPECIAL CONSIDERATIONS

- 1) Facial Hair
 - (a) Facial hair, which includes beards, sideburns, mustaches or significant stubble are, not permitted. Facial hair between the wearer's skin and sealing surface of the respirator will prevent a good seal. The lack of a good seal will allow leakage of contaminants into the respirator.
- 2) Eye Glasses
 - (a) Ordinary eyeglasses shall not be used with full-face respirators. Eyeglasses with temple bars or straps that pass between the sealing surface of a full-face respirator and the employee's face will prevent a good seal. This lack of a tight will allow asbestos/contamination to enter the respirator. To ensure good vision, comfort, and proper sealing of the face piece, special corrective lenses can be permanently mounted inside a full-face respirator. Eyeglasses and goggles may be worn with half-face respirators, but must not be allowed to interfere with seal of the face piece.

3) Contact Lenses

- (a) Workers shall not wear contact lenses when wearing any type of respirator without authorization from a qualified physician.

4) Facial Deformities

- (a) Facial deformities, such as scars, deep skin creases, prominent cheekbones, severe acne, and the lack of teeth or dentures, can prevent a respirator from sealing properly. Employees with such conditions may not be assigned tasks requiring the use of respirators.

K) COMMUNICATIONS

- 1) Talking while wearing a respirator can break the seal of the face piece. Employees who must talk should keep jaw movement to a minimum. When communication is necessary within the restricted area, it should be done with sign language and gestures as much as possible.
- 2) Where respirator use is not required:
 - (a) The company may provide respirators at the request of employees or permit employees to use their own respirators, if it is determined that such respirator use will not itself create a hazard. If it is determined that voluntary respirator use is permissible, the company shall provide the respirator users with the "Information for Employees Using Respirators When Not Required Standard".
 - (b) In addition, the company must establish and ensure that any employee using a respirator voluntarily is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user.

L) PROGRAM SURVEILLANCE

- 1) An appraisal of the effectiveness of the respirator program shall be carried out at least annually. Action shall be taken to correct defects found in the program. A respirator program checklist is provided as Appendix C to aid in the annual evaluation of the program.
- 2) The evaluation of the Respirator Program will include investigating wearer acceptance of respirators, inspecting respirator program operation, and appraising protection provided by the respirator.
- 3) Evidence of excessive exposure of respirator wearers to respiratory hazards will be followed up by investigation to determine why inadequate respiratory protection was provided.
- 4) The findings of the respirator program evaluation will be documented, and this documentation will list plans to correct faults in the program and set target dates for the implementation of the plans. These evaluations will be conducted at least annually.

M) RECORD KEEPING

- 1) The following records shall be developed and maintained on file for term of employment plus one year for all personnel subject to this Respiratory Program:
 - (a) Medical Evaluations
 - (b) Training Records
 - (c) Hazard Evaluations (Air sampling results, surveys, respirator selection records)
 - (d) Fit Test Records

24. FALL PROTECTION PROGRAM

Summary: The purpose of this program is to specify procedures and training for the safety of company employees while working on elevated surfaces and ladders. This program applies to all employees that perform any duties on an elevated work surface where there is a fall hazard of 6 feet or more to a lower level.

Program Description

The purpose of this program is to specify procedures and training for the safety of company employees while working on elevated surfaces and ladders. Company employees who work at heights of six (6) feet or greater are required to attend training on fall protection. Additionally, those employees working on aerial platforms, scissors lifts or other elevated platform equipment must receive training on the use of such equipment.

Scope

This program applies to all company employees that perform any duties on an elevated work surface where there is a fall hazard of 6 feet or more to a lower level. *This includes work near and around excavations. Guard rails, safety nets, or personal or fall arrest systems should be used.* Employees will not be allowed to perform any duties which require the employee to get closer than 6 feet to an unprotected edge, platform, walkway, or utilize elevated equipment unless the employee is properly secured from falling.

Exceptions: Employees may work without fall protection:

- At the working sides of loading docks
- At the exposed perimeters of theater stages
- When using portable ladders up to 60 feet in length
- When working on scaffolds and aerial lifts up to 6 feet in height
- When working on the edge of an excavation up to 6 feet in depth
- If an employee is on a low slope roof for inspection or observation purposes only

Additionally, this program shall apply to all employees in order to minimize slips, trips and falls on the same elevation. All employees shall control fall hazards in their work area by maintaining good housekeeping and shall report conditions that may lead to slips, trips and falls to the appropriate maintenance unit.

When it becomes necessary to implement the measures for fall protection outlined within this section, a site-specific Fall Protection Plan shall be developed and written. All affected employees will be trained to the contents of the plan and the specific hazards and associated mitigations methods of their assigned work location.

Definitions

- **Aerial lift device:** Equipment such as powered platforms, vehicle-mounted elevated and rotating work platforms, extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers and powered industrial truck platforms.
- **Anchor point:** A secure point of attachment for lifelines, lanyards or deceleration (grabbing) devices.
- **Body harness (also referred as Full-body harness):** An interconnected set of straps that may be secured about a person in a manner that distributes the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with a means for attaching the harness to other components of a personal fall arrest system.

- **Deceleration device:** Any mechanism, such as a rope, grabbing device, rip-stitch lanyard, specially woven lanyard or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limits the energy imposed on an employee during fall arrest.
- **Deceleration distance:** The additional vertical distance a falling person will travel before the point at which a deceleration device completely arrests a fall.
- **Designated area:** A space that has a perimeter barrier erected to warn employees when they approach an unprotected side or edge, and serves also to designate an area where work may be performed without additional fall protection.
- **Fixed ladder:** A ladder, including an individual rung ladder, which is permanently attached to a structure, building, or equipment.
- **Guardrail:** A barrier at least 42 inches high erected to prevent personnel from falling from working levels more than 30 inches above the floor, ground, or other working areas of a building.
- **Hole:** A void or gap 2 inches or more in its least dimension in a floor, roof, or other walking/working surface.
- **Ladder:** A device typically used to gain access to a different elevation consisting of two or more structural members crossed by rungs, steps, or cleats.
- **Lanyard:** A flexible line of rope or strap that generally has a connector at each end for connecting the body harness to a deceleration device, lifeline or anchor point.
- **Lifeline:** A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline). This serves as a means for connecting other components of a personal fall arrest system to the anchorage.
- **Low Slope Roof:** A roof having a slope of less than, or equal to, a 4 in 12 (vertical to horizontal) ratio. A roof with approximately a 19.5-degree slope or less.
- **Lower Levels:** Those areas or surfaces to which an employee can fall. Such areas include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits tanks, material, water, equipment, structures, or portions thereof.
- **Opening:** A gap or void 30 inches or more in height and 18 inches or more in width in a wall or partition, through which personnel can fall to a lower level.
- **Positioning device system:** A body harness system rigged to allow an employee to be supported on an elevated vertical surface such as a wall and work with both hands free while leaning.
- **Personal fall arrest system:** A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, and body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.
- **Restraint line:** A device, which is attached between the employee and an anchorage to prevent the employee from walking or falling off an elevated surface.
- **Roof:** Exterior surface on the top of a building.
- **Rope grab (grabbing device):** A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest a fall.
- **Scaffold:** Any temporary elevated or suspended platform, and its supporting structures, used for supporting employees or materials or both.
- **Self-retracting lifeline/lanyard:** A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal movement and which, after onset of a fall, automatically locks the drum and arrests the fall (usually within two feet or less).
- **Standard railing:** A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls of persons.
- **Snap hook:** A connector consisting of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released automatically closes to retain the object. Only locking snap hooks are permitted at UCI.
- **Toe board:** A low protective barrier that prevents material and equipment from falling to lower levels and which protects personnel from falling.
- **Tie-Off:** A procedure of connecting directly or indirectly to an anchorage point.

- **Unprotected sides and edges:** Any side or edge (except at entrances to points of access) of a walking/working surface, e.g., floor, roof, ramp, or runway where there is no wall or guardrail system at least 42 inches high.
- **Vertical Lifeline:** A component consisting of a vertically hanging flexible line for connection to an anchor point at one end that serves as a means for connecting other components of a personal fall arrest system to the anchor point.
- **Walking/working surface:** Any surface, whether horizontal or vertical, on which an employee must walk or work including, but not limited to, floors, roofs, ramps, bridges, and runways.
- **Work area:** That portion of a walking/working surface where job duties are being performed.

Responsibilities

Managers and Supervisors:

- Ensure that all requirements listed in the written program for fall protection are met.
- Ensure that new and existing employees receive fall protection training as applicable to their job duties.
- Ensure that a fall protection plan is prepared by a qualified person for specific work sites (site specific plan).

Competent Person:

- Employees whose duties involve work activities at elevated locations are required to comply with the rules of operations and accepted safety practices outlined within this written program.
- Responsible for conducting periodic visits to elevated work locations. The purpose of these visits is to inspect equipment and to observe employees' procedures while working at elevated levels.
- Evaluate other elevated work locations identified by managers and supervisors for fall protection requirements.
- General oversight of the implementation of this program.
- Responsible for the prompt rescue of employees in the event of a fall. Managers and Supervisor must assure employees are able to rescue themselves.

Program Components

This program covers the following work situations:

- **Ladders** -fixed, free standing, temporary, or roll away type
- **Elevating Personal Platforms** – scaffolds, aerial platforms, scissors lifts, forklift-mounted platforms, cherry pickers, etc.
- **Elevated Surfaces** – roofs (closer than 6 feet to the edge), catwalks, skylights, boilers, chillers, etc.
- **Vertical Opening** -ground level entry into excavations, trenches, holes, pits, vessels, and other confined spaces.

Fall protection is required whenever work is performed in an area 6 feet above its surroundings and can generally be provided through the use of fall protection systems. All fall protection equipment must meet the requirements of applicable ANSI, ASTM, or OSHA requirements. Fall protection elements should be attached and utilized in a manner that will limit free fall distance. Fall protection systems include:

- **Guardrails** -Standard guardrails consist of a top rail, located 42 inches above the floor, and a mid-rail. Screens and mesh may be used to replace the mid-rail, so long as they extend from the top rail to the floor.
- **Personal Fall Arresting Systems** -Components of a personal fall arresting system include a body harness, lanyard, lifeline, connector, and an anchorage point capable of supporting at least 5000 pounds.
- **Positioning Device Systems** –Not to be used.
- **Controlled Access Zones / Warning Line Systems** -Warning line systems are made up of lines or ropes installed around a work area on a roof. These act as a barrier to prevent those working on the roof from approaching the leading edges.
- **Covers** -Covers are fastened over holes in the working surface to prevent falls.

Note: Where it can be clearly demonstrated that the use of these systems is infeasible or creates a greater hazard, alternative fall protection measures may be implemented.

Ladders: Employees who work on ladders with a working height of 6 feet or more shall be knowledgeable as to their proper use and how to visual inspect them for defects. Additional information on ladder safety can be found in the company Code of Safe Work Practices.

Personal Fall Arrest Systems: Personal fall arrest components including harnesses and lanyards shall be inspected prior to each use for mildew, wear, damage and other deterioration. Defective components shall be removed from service. Fall arrest systems including harnesses shall be inspected at least twice each year or according to manufacturers' recommendations. The date of the most current semi-annual inspection shall be recorded on an inspection tag, which shall be attached to the harness. In addition, records shall be kept and maintained showing date of purchase, dates when attachments were renewed, and dates when the entire harness assembly was inspected and by whom. Employees who use personal fall arresting systems to control fall hazards in their work area shall be knowledgeable of the following:

- The application limits of the equipment
- The proper hook-up, anchoring and tie-off techniques including determination of elongation and deceleration distance
- Set up methods that best limit free fall distances
- Methods of use, inspection, and storage of equipment

Rescue Plan: Any time that fall protection is utilized in a situation that could result in a condition where a worker is suspended, a rescue plan to get the worker to safety will be developed and communicated to the work crew. The rescue plan must account for timely and effective means and methods to either raise, lower, or otherwise support the worker so that they are no longer suspended from the fall protection devices.

Aerial Lifts: Employees who use aerial lifts shall be knowledgeable of the following:

- The manufacturer's operating instructions and training
- Pre-start inspection of the lift
- Inspection of the work area for dangerous conditions such as uneven surfaces, overhead obstructions such as power lines, or other hazards
- Load capacities of the equipment
- How to safely move the equipment
- How to prevent falls and use appropriate fall protection personal protective equipment
- Minimum safe approach distances to energized power lines

Scaffolds: Bayview employees who work on scaffolds shall be knowledgeable of the following:

- The nature of any electrical hazards, fall hazards, and falling object hazards in the work area
- The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling
- The fall protection systems and falling object protection systems being used
- The proper use of the scaffold
- The proper handling of materials on the scaffold
- The required training for working on the scaffold
- The maximum intended load and the load carrying capacities of the scaffolds

All Bayview employees should be aware of guidelines to minimize slips, trips and falls on the same elevation of walking/working surfaces. To prevent slipping, tripping and falling, all work environments including passageways, storerooms, and service areas must be kept clean, orderly and in a sanitary condition. The floor of every work area will be maintained in a clean and, so far as possible, dry condition. Where wet processes are used, drainage will be maintained by providing false floors, platforms, mats, or other dry standing places.

Reporting Requirements

Constant awareness of and respect for fall protection procedures and compliance with all applicable Company safety rules is mandatory. Superintendents of the company are authorized to issue warnings to employees and stop unsafe work from continuing. Supervisors may issue warnings and implement disciplinary actions up to and including termination for failure to follow the guidelines of this program. Employees shall report any safety concerns to their supervisor.

Training Requirements and Competency

Under no circumstances will any company employee work in areas of high fall hazards, perform work requiring fall protection devices, or use fall protection devices until he/she has attended training in fall protection. This includes all new employees regardless of previous experience. The training program provided by the company includes instruction and review on specific fall hazards to each construction site. Employees will require retraining under any of the following conditions:

- Changes in the workplace render previous training obsolete
- Changes in the types of fall protection systems or equipment to be used render previous training obsolete
- Inadequacies in an employee's knowledge of use of fall protection systems or equipment or observed behavior indicate that the employee has not retained the required training

Requirements of Trainer and Program Preparer

A designated competent person will provide training in fall hazard recognition to each employee who may be exposed to falls. The competent person is responsible for preparing the fall protection program. The competent person must be qualified in the following areas:

- The nature of fall hazards in the work area.
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used.
- The use and operation of guardrail, personal fall arrest, safety net, warning line, and safety monitoring systems, controlled access zones, and other protection to be used.
- The role of each employee in the safety monitoring system, when used.
- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs.
- The correct procedures for handling and storage of equipment and materials and the erection of overhead protection.
- The role of employees in fall protection plans.
- The standards contained in 29 CFR 1926 subpart M.

Training Documentation

Written certification records will be kept stating who was trained, by whom, and the date of the training.

Accident Investigations

The company requires that an accident investigation be conducted by the appointed competent person in the event accidents or serious incidents occur. If any changes to the fall protection plan are necessary, the changes will be implemented immediately and training provided to all affected employees.

25. CONFINED SPACE PROGRAM

This policy addresses all work involving the entering of confined spaces as described in Title 8 CCR section 5158 "Other Confined Space Operations". This work is referenced in the Construction Safety Orders of Title 8, CCR, Section 1502. This program outlines the practices and procedures to protect employees from the hazards of confined spaces.

This policy will be used any time work will need to be done under the following conditions, as identified by a properly trained competent person. The confined space shall become permit required when all four of the following criteria are present:

- Is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit (ie.: silos, tanks, vats, vessels, boilers, compartments, ducts, sewers, pipelines, vaults, bins, tubs, trenches, and pits). This includes site conditions where the ready access or egress for the removal of a suddenly disabled employee is difficult due to the location and/or size of the opening(s).
- Is not designed for continuous human occupancy.
- Contains or has a potential to contain a hazardous atmosphere. This includes, but is not limited to, existing ventilation being insufficient to remove dangerous air contamination, oxygen enrichment and/or oxygen deficiency (which may already exist or potentially develop) or any other recognized serious safety or health hazard (such as the potential for engulfment).

This program shall be reviewed by the company annually to ensure its effectiveness, and amended as needed in order to stay current with any regulatory changes.

Pre-entry Requirement Conditions:

1. Only employees trained in accordance with the above referenced standards, and any other local jurisdictional requirements, shall be permitted to perform work within, or fulfill an outside support role of, a confined space operation. This training shall consist of an initial class and an annual refresher, both of which will verify the demonstrated proficiency of all "Confined Space Operations" certified employees.
2. Following Bayview Services, Inc. Lock-Out/Tag-Out policy, all lines and hazards which may contain liquids or solids, gases or fumes shall be disconnected, blinded, or blocked off by other positive means to prevent the development of dangerous air contamination and/or oxygen deficiency within the space. The disconnection or blind shall be so located, or done in such a manner, that inadvertent reconnection of the line or removal of the blind are effectively prevented.
3. The space shall be emptied, flushed or otherwise purged of flammable, injurious or incapacitating substances to the extent feasible.
4. The air shall be tested with an appropriate device to determine whether dangerous air contamination and/or an oxygen deficiency exists and a written record of such testing results shall be made and kept at the work site for the duration of the work. The internal atmosphere shall be tested, with a calibrated direct-reading instrument, for the following conditions:
 - Oxygen concentration
 - Carbon monoxide
 - Flammable gases and/ or vapors
 - Hydrogen Sulfide
 - Any other toxic gas that is suspected or likely to be present
4. Affected employees and/or their representative shall be afforded an opportunity to review and record the testing results.
5. Where interconnected spaces are blinded off as a unit, each space shall be tested and the results recorded, and the most hazardous condition so found shall govern procedures to be followed.

6. If dangerous air contamination and/or oxygen deficiency does not exist within the space, as demonstrated by tests performed, entry into and work within the space may proceed subject to the following provisions:

- Testing shall be conducted with sufficient frequency to ensure that the development of dangerous air contamination and/or oxygen deficiency does not occur during the performance of any operation.
- Where the existence of dangerous air contamination and/or oxygen deficiency is demonstrated by tests performed in accordance, existing ventilation shall be augmented by appropriate means.
- When additional ventilation has removed dangerous air contamination and/or oxygen deficiency as demonstrated by additional testing conducted, entry into and work within the space may proceed.
- No source of ignition shall be introduced until the implementation of appropriate provisions of this section have ensured that dangerous air contamination due to flammable and/or explosive substances does not exist.
- Whenever oxygen-consuming equipment such as salamanders, plumbers' torches or furnaces, and the like, are to be used, measures shall be taken to ensure adequate combustion air and exhaust gas venting.
- To the extent feasible, provision shall be made to permit accessible and ready entry and exit from the confined space.
- Where it is not feasible to provide for ready exit from spaces equipped with automatic fire suppression systems employing harmful design concentrations of toxic or oxygen-displacing gases, or total foam flooding, such systems shall be deactivated. Where it is not practical or safe to deactivate such systems the use of respiratory protective equipment shall apply during entry into and work within such spaces.

Confined Space Operations

The requirements of this section apply to entry into and work within a confined space whenever an atmosphere free of dangerous air contamination and/or oxygen deficiency cannot be ensured or whenever, due to the existence of an emergency, it is not feasible to ensure the removal of dangerous air contamination and/or an oxygen deficiency. The Bayview Supervisor will confirm and/or perform any or all air monitoring that is required. The supervisor will ensure that all personal have had the proper training/necessary to perform their task. The supervisor will further ensure that proper barriers/barricades or other appropriate measures are in place to prevent unauthorized entry into the space.

1. Tanks, vessels, or other confined spaces with side and top openings shall be entered from side openings when practicable.

NOTE: For the purposes of this program, side openings are those within 3 **V2** feet of the bottom.

2. Appropriate, approved respiratory protective equipment, in accordance with the company's respiratory protection program, shall be provided and worn.
3. An approved safety harness with an attached line shall be used. The free end of the line shall be secured outside the entry opening. The line shall be at least 1/2-inch diameter and 2,000-pounds test. EXCEPTION: Where it can be shown that a safety harness and attached line would further endanger the life of the employee.

Attendant (Hole-Watch):

- At least one employee shall stand by on the outside of the confined space ready to give assistance in case of emergency. At least one additional employee who may have other duties shall be within sight or call of the standby employee(s).
- The standby employee shall have appropriate, approved, respiratory protective equipment, including an independent source of breathing air.
- A standby employee (or employees) may enter the confined space but only in case of emergency and only after alerting at least one additional properly trained employee outside of the confined space of the existence of an emergency and of the standby employee's intent to enter the confined space.
- The standby attendant will know the hazards and the possible behavioral effects that may be faced during entry, including information on the mode, signs or symptoms, and consequences of over exposure.
- Will continuously maintain an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants accurately identifies who is in the confined space,
- The attendant will communicate with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.

Entrant

- It is the duty of the entrant to know the hazards that may be faced during entry, including mode, signs or symptoms and consequences of exposure.
- The entrant will communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate.

Supervisor

- The entry supervisor will know the hazards that might be faced during entry, including information on the mode, signs or symptoms, and consequences of exposure.
- The supervisor will verify, by checking that the appropriate entries have been made and/or documented on any record and/or permit. He or she must verify that all tests, procedures and equipment specified by the confined space procedures are in place before endorsing the work and allowing entry to begin.
- The supervisor will verify that rescue services are available and that the means for summoning additional services are operable. That at least one standby person at the site is trained in the operating and rescue procedures and ready to give assistance in case of emergency. Also the supervisor shall ensure that at least one person trained in CPR and First Aid shall be immediately available whenever the use of respiratory protective equipment is required.

4. When entry must be made through a top opening, the following requirements shall also apply.

- The safety harness shall be of the harness type that suspends a person in an upright position.
- A hoisting device or other effective means shall be provided for lifting employees out of the space.

5. Work involving the use of flame, arc, spark, or other source of ignition is prohibited within a confined space (or any adjacent space having common walls, floor, or ceiling with the confined space) which contains, or is likely to develop, dangerous air contamination due to flammable and /explosive substances.

6. Whenever gases such as nitrogen are used to provide an inert atmosphere for preventing the ignition of flammable gases or vapors, no flame, arc, spark, or other source of ignition shall be permitted unless the oxygen concentration is maintained at less than 20 percent of the concentration which will support combustion.

Communication and Emergency Action

- The Attendant (hole watch) must be able to communicate with entry personnel at all times. Options for communication methods include two-way radio, rope signals, hand signals (visual), voice signals (audible), or tactile signals (if able to establish physical contact).
- The Attendant must also be able to initiate rescue procedures if necessary. The emergency phone number must be boldly written on the record and/or permit form and located by the confined space entrance. Notification of a confined space entry emergency shall be made to the responsible entry supervisor in addition to the designated rescue team.
- Rescue action is best taken from outside the confined space utilizing retrieval equipment. A mechanical means of retrieval shall be provided for any vertical entry of more than 4 feet.
- When there is a recognized hazard, the entrants will use a full body harness and lifeline. All vertical entry will require the use of a full body harness. If conditions exist which create a hazard by using the lifeline, approval to use only the full body harness not continuously attached to a lifeline must be obtained from the Safety Manager or his designee.
- If confined space entry personnel are exposed to substances that have Material Safety Data Sheets (MSDS's), these MSDS's must be maintained with the entry paperwork and made available to medical personnel in the event of an injury involving exposure to that substance.
- All emergency procedures, including procedures relating to emergencies outside of the confined space, shall be reviewed with all entrants, attendants, and other related personnel prior to entry. Required rescue equipment shall be specified on the record/form at the confined space entry. Never allow a person into a confined space until all participants know the procedure to get that person out in the event of an emergency.
- **A site-specific Confined Space Emergency Rescue/Action Plan shall be generated for all hazardous entry operations.*

CONFINED SPACE ENTRY PERMIT

GENERAL INFORMATION				PERMIT #		JOB#		
Space to be Entered:				AUTHORIZED DURATION OF PERMIT				
				Date:		To:		
Location:				Time:		To:		
				Reason:				
Site Address:				PERMIT CANCELLATION				
				Date:		Time:		
Site Contact:				ADDITIONAL PERMITS REQUIRED				
Site Phone#:				☐ Hot Work ☐ Line Breaking				
				☐ Other:				
ATTENDANTS				PREPERATION FOR ENTRY				
Print Name:		Signature:		Check-off after Completion				
				☐ Notification of Affected Departments / Trades				
ENTRANTS				Safety Measures				
Print Name:		Signature:		☐ Ventilate / Purge		☐ Lock-out / Tag-out		
				☐ Atmospheric Testing		☐ Barriers		
				☐ Inert		☐ Blank/Blind		
				☐ Pre-Entry Briefing of Specific Hazards and Controls				
				Other (list):				
				☐ 1:				
				☐ 2:				
OPERATIONAL AND PROTECTIVE EQUIPMENT								
☐ Warning Signs/Barricades		☐ Fire Extinguisher		☐ Static Protection				
☐ GFCI for 120v power		☐ Recovery Area		☐ Rope				
☐ Ventilation Fan/ Blower		☐ Lighting (Hazard Rated)		☐ Other:				
PERSONAL PROTECTIVE EQUIPMENT								
☐ SCBA-Level B		GLOVES ☐ PVC ☐ Nitrile		☐ Safety Glasses				
☐ Supplied Air line w/ escape kit		SUITE ☐ Poly ☐ White ☐ Other		☐ Fall Protection/ Arresting				
☐ Chemical Splash Goggles		☐ PVC Boots Steel Toe		☐ Hearing Protection				
☐ APR w/ ☐ OVAG ☐ OV ☐ P100		☐ Other Equip:						
EMERGENCY PROCEDURES AND EQUIPMENT								
Medical Emergency#:		911		Site Emergency #				
CSE Communication:		☐ Radio ☐ Voice/Hand ☐ Rope/Cable						
Recovery Equipment:		☐ Tripod/Davit ☐ Rescue Winch ☐ Full Body Harness ☐ Ladder						
Air Monitoring Equipment:		Make/Unit#:				Calibration Date:		
AIR MONITORING RECORD – Document Every 15 minutes								
	Pre-Entry	Result #1	Result #2	Result #3	Result #4	Result #5	Result #6	Result #7
CO (<35ppm)								
H2S(<10ppm)								
O2(19.5-23.5)								
LEL(<10%)								
5:								
Temp.								
Time:								
Initials:								
ENTRY SUPERVISOR AUTHORIZATION								
"I certify that all required precautions have been taken and all necessary or required equipment is present."								
PRINTED NAME		SIGNATURE		DATE		TIME		

CONFINED SPACE EMERGENCY RESCUE/ACTION PLAN

Use the following checklist to establish a rescue plan for each Confined Space Entry.

GENERAL INFORMATION

Identified Confined Space atmospheric hazard(s):

Identified Confined Space Content hazard(s):

Yes	No	
()	()	Rescue service or team notified and assigned emergency first aid/CPR person(s) on site?
()	()	Independent supplied air source and safety harness with lifeline available?
()	()	Mechanical retrieval equipment (tripod, winch, etc.) available?
()	()	Emergency communication procedures established?
()	()	Emergency phone numbers listed on CSE permit?

EMERGENCY COMMUNICATION

Identify method to notify site workers and entrants of an emergency situation and evacuation of the work site (portable air horn, radio, etc.):

The following standard hand signals will be used in case of failure of audible communications:

• HAND GRIPPING THROAT	Out of air, can't breathe
• GRIP PARTNER'S WRIST OR BOTH HANDS AROUND WAIST	Leave area immediately
• HANDS ON TOP OF HEAD	Need assistance
■ THUMBS UP	OK / I'm alright
• THUMBS DOWN	No, negative

EMERGENCY PROCEDURES

(To be modified as necessary for specific operations)

The Entry Supervisor and/or Project Supervisor shall be notified of ANY on-site emergencies and are responsible for ensuring that the appropriate procedures are followed. The client representative and the Bayview Environmental Safety Representative will be notified of ALL accidents, incidents, near misses, and/or illnesses that occur at the client's facility.

Change of Conditions or Unsafe Situation Discovered

The Entry Supervisor and/or Attendant Shall:

- ORDER Authorized Entrants out of the Confined Space.
- PROVIDE assistance as necessary for removing personnel from the Confined Space (non-entry assistance).
- REMOVE and CANCEL any Entry Permit.
- POST the "Do Not Enter" tag at the entryway.
- STAND-BY until acceptable entry conditions are re-established and it is determined safe to enter.
- NOTIFY Bayview Environmental Safety Representative.

Injury (Man Down) in the Confined Space the Entry Supervisor and/or

Attendant Shall:

- SOUND the designated emergency signal immediately.
- CALL for emergency medical assistance and ambulance.
- ORDER non-injured Authorized Entrants out of the Confined Space, except those needed to assist injured employee.
- ASSIST rescue personnel in donning a safety harness and lifeline, along with the independent air supply for entry (if entry is required).
- CLEAR obstructions from entry point to Confined Space.

For Horizontal (side) Entries:

- TRY to remove injured person from confined space using other Authorized Entrants and lifeline/body harness.
- If unsuccessful, entry must be made by qualified rescue team members.

For Vertical (top or bottom) Entries:

- SET UP retrieval equipment.
- TRY to remove injured person from confined space using other Authorized Entrants and lifeline/body harness.
- If unsuccessful, entry must be made by qualified rescue team members.
- EVALUATE nature of injury and use decontamination procedure on the affected person, if possible, before transporting to medical facility.
- PERFORM first aid and/or CPR, if necessary, until emergency medical assistance arrives.
- NOTIFY company Safety Department, jobsite Superintendent, and client Representative.

Personal Protective Equipment (PPE) Failure

If ANY Authorized Entrant experiences failure or alteration of protective equipment that affects the ability of the PPE to effectively protect the worker, that person and other workers with similar PPE shall IMMEDIATELY exit the Confined Space.

Re-entry shall not be permitted until the cause of the equipment failure is corrected and the equipment is repaired or replaced.

26. CONTROL OF HAZARDOUS ENERGY (LOTO)

Purpose

This program has been developed to provide Bayview employees with information on OSHA's Control of Hazardous Energy Standard, 29 CFR 1910.147 and DOSH 8 CCR 3314, which we normally call Lock-out/Tag-out. This program will inform when lock-out/tag-out procedures are required, different employees involved in the procedure, the lock-out/tag-out procedures to be used, electrical safety related work practices, and employee responsibilities under company policy. The Project Manager has overall responsibility for the administration and enforcement of this Program.

Scope

The following procedures shall be followed by all employees (authorized employees) during the maintenance, installation, and upkeep of equipment and facilities. All other Employees and (affected employees) shall adhere to the rules and regulations of the procedure.

Responsibility & Procedures:

The energy that runs industrial equipment can be hazardous if it is not carefully controlled during servicing or maintenance. The lock-out/tag-out standard covers procedures for shutting down, releasing energy types (including stored energy in capacitors or elevated machine parts), the actual lock-out/tag-out procedures, verifying lockout, release of locks and tags, and re-energizing equipment. The standard requires that each affected, authorized, and qualified employee be trained in specific requirements under the standard. This program has been developed to meet OSHA's training requirements under Lock-out/tag-out.

Lock-out/tag-out procedures are required to be used when:

1. Maintenance or servicing equipment
 2. An employee is required to remove or bypass a guard
 3. An employee is required to place any part of his/her body into an area of a machine or equipment where work is performed upon the material being processed (point of operation) or where a danger zone exists during the machine's operating cycle.
- Minor tool changes and adjustments, and other minor servicing activities, which take place during normal operations, are not covered by lock-out/tag-out procedures. These activities must be routine, repetitive, and integral to the use of the equipment. However, this work must be performed using alternate measures to provide effective employee protection such as machine guarding.
 - Lock-out/tag-out does not apply to work on cord and plug connected electrical equipment, which the exposure to a hazard is the unexpected start-up of the equipment will be controlled by unplugging the equipment from its energy source. The plug must be under the control of the employee performing the maintenance on the machine.
 - When an employee locks or tags equipment, that employee must be familiar with the types of energy the equipment uses (electrical; hydraulic; mechanical; pneumatic; air, steam, or water pressure; thermal; spring loaded; gravity; chemical; or nuclear) including types of stored energy that the machine uses. Each energy source must be isolated by closing valves, relieving trapped pressure, disconnecting circuits, or blocking/bleeding down lines.

Terminology

What is Lock-out?

- Lock-out is placing a lock-out device on an energy-isolating device according to an established procedure after an energy source has been relieved. The lock-out device insures accidental re-energizing does not occur.

What is a Lock-out Device?

- A device that utilizes a lock, either key or combination, to hold an energy isolating device in a safe position. If an energy source cannot be locked out, a tag-out system shall be utilized.

What is Tag-out?

- Tag-out is placing a tag on an energy source according to an established procedure. The tag is only a warning device indicating that the equipment must not be operated until the tags have been removed by the authorized employee. Tags do not provide the same level of protection that locks do. When only tag-out procedure is used, additional safety precautions must be taken — removing of a fuse or a valve control handle.

What is a Tag-out Device?

- A weather and chemical resistant warning tag standardized in size and color with wording warning of hazardous energy. Examples would be “Do Not Start”, “Do Not Open”, “Do Not Close”, “Do Not Energize”, and “Do Not Operate”.

What is an Affected Employee?

- An affected employee is an employee whose job requires him to operate or use a machine or piece of equipment on which servicing/maintenance is being performed under lock-out/tag-out, or whose job duties require the employee to work in an area in which such lock-out/tag-out is being performed. All affected employees who work in an area where lock-out/tag-out is used will be trained in the purpose, identification, and the use of the energy control procedure (Lock-out/Tag-out Procedure) and that they are prohibited from tampering with or attempting to restart any locked out or tagged out machinery or equipment.

What is an Authorized Employee?

- An Authorized employee is defined as an employee who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment.”

All authorized mechanical Lock-out/Tag-out employees will be trained in the following:

- General Rules for Lock-out/Tag-out
- Specific rules for Locks and Tags
- Mechanical Lock-out/Tag-out Procedures
- Groups Lock-out/Tag-out Procedures
- Shift Changes
- General Electrical Safety Rules and Work Practices
- The location and contents of the “Energy Control Procedures” (ECP) for each type of machine and equipment including: recognition of hazardous energy sources; the type(s) of the energy; the methods and means necessary for energy isolation and control.

What is a Qualified Employee

A Qualified employee is defined as “An employee who locks out or tags out machines or equipment in order to perform electrical work on that machine or equipment. A qualified employee is one who is familiar with the construction and operation of the equipment and the hazards involved.”

All qualified electrical Lock-out/Tag-out employees will be trained in the above Authorized Employee training program along with the following:

- Qualified-Electrical Safety Rules and Work Practices
- Specific Electrical Lock-out/Tag-out procedures
- The skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment.
- The skills and techniques necessary to determine the nominal voltage of exposed live pads.
- The specific clearance distance and the corresponding voltages to which the employee will be exposed
- The proper use of precautionary techniques, PPE, insulating shielding materials, and insulating tools.

General Rules for Lock-Out/Tag-Out:

- A machine shut down for repair, cleaning, or inspection must have all power switched and locked in the "OFF" position by each employee working on that equipment.
- If the equipment cannot be locked out, it is permissible to pull the fuses in the motor control center to render the equipment inoperable. A "Do Not Operate" tag is to be placed at the equipment controls.
- Note: Only electrically qualified employees can remove fuses. After May of 1998, energy isolating devices designed to accept a lockout device shall be required for all new machines and equipment that are installed and when replacement, major repair, renovation, or modification of equipment is performed.
- If an employee will be exposed to the servicing or maintenance activities of an outside contractor/repair personnel, the employee must be informed of and comply with the contractor's/repair personnel's energy control procedures. The outside personnel must also be informed and given a copy of the Bayview Lock-out/Tag-out program and will use these procedures if they do not have their own.

Specific Rules for Locks and Tags:

- Each authorized and qualified employee who services or maintains machinery and equipment shall be issued a lock and a tag prior to starting each job.
- Locks and tags will be assigned by number for the purpose of identification and either kept in a central area or distributed to only one specific employee for that employee's specific use.
- The lock or tag must identify the name of the employee applying the lock or tag. These locks and tags may not be used for any other purpose other than lock-out or tag-out.
- The lock-out and tag-out devices must be durable and constructed and printed to withstand wet and corrosive locations. The lockout devices must be substantial enough to prevent removal without the use of excessive force (such as bolt cutters). Only one form of lock and tag (of the same color, shape, size, print, and format) shall be used at the facility.
- During lockout, employees must keep their keys in their immediate possession. Master keys are not permitted. The maintenance department may keep a duplicate key in a secure location.
- The tag and its means of attachment shall be substantial enough to prevent inadvertent or accidental removal. The attachment means shall be of a non-reusable type, attached by hand and self-locking, such as one-piece, all-environment-tolerant nylon cable tie (zip-tie).
- Tag-out devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a statement such as: *Do Not Start; Do Not Open; Do Not Close; Do Not Energize; Do Not Operate.*

Mechanical Lockout/Tagout Procedure:

Before servicing or performing maintenance on machinery or equipment, the authorized employee must follow this written procedure.

Preparation for Shutdown

- Notify affected employee that lock-out/tag-out procedures are going to be used and the reason for procedure use.
- The authorized employee will know the type(s) and magnitude(s) of energy; the hazards of the energy; and the method(s) to control the energy. If the authorized employee is uncertain of any of this information, the employee must review the energy control procedure for that piece of machinery or equipment.
- Shut down the machine or equipment by normal stopping procedures (depress stop button, open toggle switch, etc.).
- Tag-out cannot be used if the machine or equipment is capable of being locked out. If the lockout is not possible, a tag must be securely fastened to each energy-isolating device to indicate that the machine or equipment may not be operated until the tag is removed. All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically

located & operated in such a manner as to isolate the machine or equipment from the energy source. The authorized employee who attaches the tag must verify that the machine or equipment has been turned off before starting work.

- If tag-out is used, additional methods of preventing accidental energization must be used if feasible (removal of an isolating circuit element, blocking of a controlling switch, opening of an extra disconnecting device, removal of valve handle).

Applying Lock-out/Tag-out

- Apply locks and tags to each energy-isolating device, isolating energy sources. Tags must note the employee's name and the service date. Each employee must install a lock and tag on the equipment to be serviced.
- All stored and residual energy must be relieved, disconnected, restrained, and otherwise rendered safe.
- Verify that the main disconnect or circuit breaker cannot be moved. Press all start buttons and activating controls on equipment to make sure all power is disconnected.
- If it is possible that stored energy will re-accumulate to a hazardous level, the authorized employee will repeat the certification process until servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.
- Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employee shall verify that isolation & de-energization of the machine or equipment have been accomplished.

Perform Work

- Avoid tasks that could reactivate the equipment.
- Do not bypass locks or tags when putting in new piping or wiring.

Removing Lock-out/Tag-out

- Remove all tools from the work area, reattach guards taken off, and make sure the machine or equipment is safe to operate.
- Inform all affected employees that lock(s) and tag(s) are being removed. Check to ensure all Employees are safely positioned or removed from the area.
- Verify controls are in neutral.
- Remove lock(s) and tag(s) and re-energize equipment.
- Notify affected employees that the servicing is completed and the machine or equipment is ready for use.

Electrical Lockout/Tagout Procedures:

All mechanical Lock-out/Tag-out procedures still apply plus the following:

Shutdown of Machines or Equipment

- All sources of energy must be completely disconnected, including auxiliary power supplies (batteries, generators, etc.). Also dissipate any stored energy present (capacitors).
- Push button selector switches, interlocks, and other control devices may not be used as the sole means for isolating energy.
- Clear the work area of all unqualified personnel.

Applying Lock-out/Tag-out

- Lock-out/Tag-out every point where the equipment could be re-energized.
- If a lock cannot be used, use a tag, providing at least one safety precaution equivalent to a lock (removal of fuses, blocking switches, and removal of circuit breakers.)
- A qualified employee must verify that equipment is inoperable by attempting to restart it using equipment's on/off controls or by using test equipment (voltmeters, circuit testers, etc.).

Removing Lock-out/Tag-out

- After electrical work is completed and before re-energizing equipment, a qualified employee must conduct tests, using test equipment, and make visual inspection to verify the following:
 - That work is completed properly
 - That there are no shorts or grounds
 - That all tools, electrical jumpers and other such devices have been removed, so that the equipment may safely re-energized.
- Only the worker who applies the lock/tag is permitted to remove it. In an emergency, locks may be removed with the consent of a supervisor. The Supervisor must then inform the worker that the lock was removed before the worker comes back to work.
- After lock-out/tag-out is removed a qualified employee must conduct a thorough safety inspection of the work area, warn others to stay clear, and then energize the machine according to the prescribed sequence under the proper lock-out/tag-out procedures.

Special Situations

Temporarily reactivating machinery/equipment

- When reactivating equipment, you must remove unnecessary tools from the work area, make sure personnel is clear of equipment, remove lock(s)/tag(s), and energize & proceed with testing. As soon as energy is not needed, isolate equipment and reapply lock(s)/tag(s) following Applying Lock-out/Tag-out sequence (step 6-9).

Servicing lasting more than one shift

- Only the person who applies the lock tag is permitted to remove it. In emergencies, locks may be removed with the consent of a Supervisor. The supervisor must then inform the worker that the lock/tag was removed and the reason for removal before that worker goes back to work.

Servicing by outside contractors/repair personnel

- If an employee will be exposed to the servicing or maintenance activities of an outside contractor or repair personnel, the employee must be informed of and comply with the outside contractor's/repair personnel's energy control procedures. The outside personnel must also be informed and given a copy of the Bayview's Lock-out/Tag-out Program and will use these procedures if they do not have their own.

Group Lockout/Tagout Procedures:

- If more than one person is servicing or maintaining a piece of equipment, each authorized employee will place a lock and tag on each energy-isolating device.
- A hasp will be used if the energy-isolating device cannot accept multiple locks and tags.
- The department supervisor will be responsible for ensuring compliance with this procedure.

Shift Changes:

- During shift or personnel changes, the departing employee servicing the equipment must notify the supervisor of such change.
- The departing employee will follow the Removing Lock-out/Tag-out sequence (step 13-15)
- The new employee will follow steps 1-11 (Preparation for Shutdown, Applying Lock-out/Tag-out, and Perform Work) of the lock-out/tag-out procedure.

Compliance With Program:

Regulations

- All Employees are required to comply with the restrictions and limitations imposed upon them during the use of lock-out/tag-out. Non-compliance would be considered a serious violation in the discipline system.

- The authorized employees are required to perform the lock-out/tag-out in accordance with this procedure.
- In no case shall any employee remove another employee's lock-out/tag-out device.
- All employees, upon observing a machine or piece of equipment which is locked out or tagged out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

Verification/Inspection

- The company shall conduct a periodic inspection of this energy control procedure at least annually to ensure that the procedure and the requirements of the Standard are being followed.
- An authorized employee other than the one(s) utilizing the energy control procedure being inspected shall perform the periodic inspection.
- The periodic inspection shall be conducted to correct any deviations or inadequacies identified.
- Where lock-out is used for energy control, the periodic inspection shall include a review between the inspector and each authorized employee of that employee's responsibilities under the energy control procedure being inspected.
- Where tag-out is used for energy control, the periodic inspection shall include a review between the inspector and each authorized and affected employee of that employee's responsibilities under the energy control procedure being inspected and the elements set forth in Section "Training and Communication" of this Plan.
- The inspector shall certify that the periodic inspection has been performed. The written certification shall identify the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection. Copies of the certification shall be maintained by the inspector and the Human Resources Department.

Training and Communication:**Training**

The company shall provide training to ensure that the purpose and function of the energy control program are understood by all Employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. The training shall include the following:

- Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.
- Each affected employee shall be instructed in the purpose and use of the energy control procedure.
- All other Employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure and about the prohibition relating to attempts to restart or re-energize machines or equipment which are locked out or tagged out.
- Where tag-out systems are used, employees shall be trained in the following limitations of tags:
 - Tags are essentially warning devices affixed to energy isolating devices and do not provide the physical restraint on those devices that is provided by lock.
 - When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
 - Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area in order to be effective.
- Tags and their means of attachment must be made of materials, which will withstand the environmental conditions encountered in the workplace.
- Tags may evoke a false sense of security and their meaning needs to be understood as part of the overall energy control program.

- Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

Retraining

- Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedure.
- Additional retraining shall be conducted whenever a periodic inspection of this plan reveals, or whenever Bayview has reason to believe, that there are deviations from, or inadequacies in the employee's knowledge, or use of the energy control procedures.
- The training shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Certification

- Bayview shall certify that employee initial and retraining has been accomplished and is being kept up to date.

Authorized/Affected Employees

- Bayview employees that receive formal training as outlined under this program shall be designated Authorized Employees.
- Bayview employees that receive awareness training during initial employee orientation in regards to purpose, identification, and use of energy control procedures shall be designated as affected employees.

Compliance Program & Evaluation

- Frequency of Inspection – the company's safety manager shall perform periodic and annual inspections to ensure procedures & requirements are being followed. The safety manager shall certify the review and include the date of the inspection, equipment, and employee(s).

27. ELECTRICAL SAFETY

Purpose

This program is designed to comply with applicable OSHA & DOSH electrical safety standards, for workplaces needing written procedures and employee training for preventing electric shock or other injuries resulting from direct/indirect electrical contacts by employees working on / near energized or de-energized parts. This program applies to all work operations at BAYVIEW where employees may be exposed to live parts and/or those parts which have been de-energized and require the implementation of this plan's guidelines to prevent electric shock.

Administration of Plan

The project superintendent is the person having the responsibility for implementing the Electrical Safety Program at each work location. Under this program, employees receive instructions in the purpose and use of energy control procedures, as well as the other required elements of the Control of Hazardous Energy standard. This instruction includes the de-energizing of equipment, applying locks and tags, verifying de-energization, and equipment re-energizing. **This program also covers Ground Fault Protection** and the use of ground fault circuit interrupters (GFCIs).

Equipment Grounding Conductor Program / GFCIs

This written plan is intended to establish and implement specific procedures for an equipment grounding conductor program covering:

- All cord sets,
- Receptacles which are not a part of the building or structure
- Equipment connected by cord and plug which are available for use or used by employees, and
- Procedures & guidelines to eliminate all injuries resulting from possible malfunctions, improper grounding and/or defective electrical tools
- Any equipment that does not meet the requirements of this program shall not be made available for use by the Company, and further is forbidden from use by all employees. These requirements apply to all company construction job sites. This part of the written plan complies with the requirements of 1926.404(b)(1)(iii) & T8 CCR 2405.4
- GFCIs are to be used on all company 120 volt, single phase 15 and 20 amp temporary wiring connections at construction sites. GFCIs shall be tested daily before use, and immediately taken out of service and destroyed if found to be defective.

Equipment Grounding Conductor Inspection

Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, are visually inspected by the worker utilizing it before each day's use for:

- external defects, such as deformed or missing pins or insulation damage, and
- indications of possible internal damage.

Equipment found damaged or defective is not to be used until repaired and is to be removed from service immediately by the person finding it and given to the project foreman.

Equipment Grounding Conductor Testing

The following tests are performed on all cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and cord- and plug-connected equipment required to be grounded:

- All equipment grounding conductors are tested for continuity and must be electrically continuous.
- Each receptacle and attachment cap or plug is tested for correct attachment of the equipment grounding conductor and that the equipment grounding conductor is connected to its proper terminal.

All required tests are performed:

- Before first use.
- Before equipment is returned to service following any repairs.
- Before equipment is used after any incident which can be reasonably suspected to have caused damage (for example, when a cord set is run over).

- At intervals not exceeding 3 months, except for cord sets and receptacles which are fixed and not exposed to damage, which will be tested at intervals not exceeding 6 months.
- The company does not provide or permit employees to use any equipment which has not met the requirements of this program.

Recordkeeping

Tests performed as required in this program are recorded as required. The test records:

- identify each receptacle, cord set, and cord- and plug-connected equipment that passed the test, and
- Indicate the last date it was tested or the interval for which it was tested.

The project superintendent or warehouse manager is responsible for maintaining these records. This record is kept by means of inspection forms or project log entries and is maintained until replaced by a more current record.

Hazard Analysis Report

- To determine areas of company activities that need to be included in the Electrical Safety Program, the Project Superintendent will conduct a hazard analysis of the workplace for each jobsite. This analysis will provide information identifying which equipment uses electricity, various types of wiring installations, and the types of employee functions that must be covered by the Electrical Safety Program.
- Only employees who have completed training in accordance with this program, and designated as "Qualified Employees" shall work on, near, or with energized electric circuits and equipment. Such persons shall be made familiar with the use of special precautionary techniques, PPE, insulating & shielding materials and insulated tools.
- Employees working on, near, or with energized electric circuits and equipment who have limited knowledge of electrical circuitry are designated as "Unqualified Employees"

Operational Procedures

- Only Qualified employees can work on electric circuit parts or equipment that have not been de energized and locked out and tagged out using the procedures detailed in this written program. They shall also be familiar with the use of special precautionary techniques, PPE, insulating & shielding materials and insulated tools. Any equipment which is not locked out and tagged out shall be assumed to be energized.

Overhead lines

- When work is performed near overhead lines, the lines shall be de-energized and grounded and other protective measures shall be provided before work is started. Unqualified employees shall maintain minimum distances of 10 feet for lines 50 kv or less to ground. For voltages greater than 50 kv, an additional 4 inches shall be added to the 10 feet for each 10 kv above 50 kv.
- For qualified employees, they may not approach, with tools or equipment, overhead lines closer than specified in table S-5 of 1910.333 unless the energized part is insulated, or the person is insulated from the part. This includes any potentially conductive equipment or materials that could become a dimensional conductor, such as a duct, pipe, or pole.

Vehicular and Mechanical Equipment

- For vehicular and mechanical equipment, clearance distances to overhead lines shall maintain minimum distances of 10 feet for lines 50 kv or less to ground. For voltages greater than 50 kv, an additional 4 inches shall be added to the 10 feet for each 10 kv above 50 kv.
- Distances may be reduced further if insulating barriers are installed and approval is given by the Project Manager. The company will determine distances in accordance with regulations and as a result of our hazard analysis.

Illumination

- Employees may not enter spaces containing exposed energized parts unless adequate illumination is provided to work safely. Employees shall not reach blindly into areas that may contain exposed energized parts.

Confined Spaces or Enclosed Work Areas

- When an employee works in a confined space or enclosed work area, protective shields, protective barriers, or insulating materials shall be provided and used as necessary to protect the employee from exposed energized electrical parts.

Conductive Materials and Equipment

- Conductive materials and equipment handled by an employee shall be handled in a manner which will not allow contact with exposed energized lines or parts. If the potential for contact exists insulated guarding, PPE, and work practices shall be instituted to minimize the hazard.

Portable Ladders

- Ladders that may contact exposed energized electrical parts shall have nonconductive side rails.

Conductive Apparel

- Conductive articles of clothing and jewelry shall not be worn if they may contact live energized electrical parts. They may be worn however if they are rendered non-conductive by covering or insulating.

Training Program

- Bayview employees who faces the risk of electric shock from working on or near (based on training on clearance distances) energized or de-energized electrical sources receives training in electrical related safety work practices pertaining to the individual's job assignment.
- The purpose of the electrical safety training program is to ensure that all employees understand the hazards associated with electric energy, clearance distances, and that they are capable of performing the necessary steps to protect themselves and others by utilizing safe work practices to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.
- The electrical training program covers these basic elements:
 - The assured equipment grounding conductor program.
 - Electrical safety related work practices to prevent shock or other injuries from either direct or indirect electrical contacts when work is performed near / on equipment / circuits which are / may be energized.
 - Lockout and tagging of conductors and parts of electrical equipment.
 - Safe procedures for de-energizing circuits and equipment.
 - Application of locks and tags.
 - Verification that the equipment has been de-energized.
 - Procedures for reenergizing the circuits or equipment.
 - Other electrically related information which is necessary for employee safety.
- All employees assigned to work on or near energized or de-energized electric sources will be considered "qualified" to work safely with electrical energy only after having received the appropriate training, certification, or verified equivalent experience to do so. In addition to the basic training elements, "qualified" employees are trained in the skills and techniques necessary to identify exposed live parts, determine nominal voltages, and clearance distances and corresponding voltages. These employees will also have an employee present that has received additional training in first aid & CPR.
- The training program consists of both classroom and hands-on training. New employees who will be working on or near electrical equipment or circuitry must attend initial training. When changes

occur to a work task, additional training will be provided (as needed) to ensure the safety of all affected workers.

- The project superintendent (or other designated representative) conducts the electrical safety training for effected employees.

Lock-out And Tag-out Program

(Additional IIPP Section on this topic is to be referenced as well.)

- Any employee that is exposed to contact with circuits and fixed electric equipment must be disconnected from all electric energy sources before work on them begins. Appropriate lockout and tagging devices are used to prevent the accidental re-energization of the circuits and equipment. These lock-out and tagging procedures are a main component of our electrical safety program.
- Conductors and parts of electrical equipment that have been de-energized but not been locked or tagged out shall be treated as live parts.

De-energizing circuits and equipment.

- Disconnect the circuits and equipment to be worked on from all electric energy sources and release stored energy that could accidentally reenergize equipment.

Application of locks and tags.

- Only authorized employees may place a lock and tag on each disconnecting means used to de-energize circuits or equipment before work begins. Locks prevent unauthorized persons from reenergizing the equipment or circuits and the tags prohibit unauthorized operation of the disconnecting device.

Verification of de-energized condition of circuits and equipment.

- Prior to work on the equipment, a "qualified" employee verifies that the equipment is de-energized and cannot be restarted.

Reenergizing circuits and equipment.

- Before circuits or equipment are reenergized, follow these steps in this order:
 1. A "qualified" employee conducts tests and verifies that all tools and devices have been removed.
 2. All exposed employees are warned to stay clear of circuits and equipment.
 3. Authorized employees remove their own locks and tags.
 4. We do a visual inspection of the area to be sure all employees are clear of the circuits and equipment.

Arc Flash Safety

- Bayview strictly forbids its employees from performing any work task where there is the potential for an arc flash condition. No work where such a hazard has the potential of existing shall be performed until the hazard is abated.

Enforcement

- Constant awareness of and respect for electrical hazards, and compliance with all safety rules are considered conditions of employment. Company management reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

28. HAZARD COMMUNICATIONS

Purpose

This policy reflects the changes of the Company's Hazard Communications (HazCom) procedures as necessary to reflect the Global Harmonized System (GHS). All previously trained employees will be retrained to this updated policy. Key concepts of the new GHS include a standardized Safety Data Sheet format with 16 unique sections, universal pictograms, simplified and clearer labeling, and changes to how some chemicals are classified.

Safety Requirement

- No chemical shall be used by company employees unless the container is labeled, all affected employees have been instructed in its use and a current Safety Data Sheet (SDS) is available.
- Under no circumstances will an employee be permitted to perform taste, odor, contact, or any other test in lieu of chemical analysis performed by a certified laboratory.

Application

- Bayview will insure that the hazards of chemicals used at its facilities are evaluated and that information about their hazards is transmitted in a timely manner to potentially exposed employees.
-
- This written program will be maintained in accordance with 8 CCR 5194 and will be updated as required. Where no update is required, this document will be reviewed annually.
-
- Chemicals shall not be used by the company unless the container is labeled, a Safety Data Sheet (SDS) is available for review by affected employees, and all potentially exposed employees have been instructed in the chemical's use and hazards.

HAZCOM Program

This program is comprised of three distinct programs:

- A labeling program;
- An SDS program; and
- A training program.

Full compliance with CA/OSHA requires that all three programs be present when employees are using any chemical substance.

Labeling Program

Labeling requires the labeling of any container of chemicals used by the company as well as containers of chemicals and hazardous materials being shipped off site.

- No unmarked container containing chemicals may be used in conjunction with any duties or operations by the company unless the container is a portable container in the control of a specific person for their immediate use.
- Container means barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.
- For purposes of this program, pipes or piping systems, engines, fuel tanks, or other operating systems in a vehicle are not considered to be containers.
- Employees shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced. Containers containing hazardous chemicals will be properly disposed of and the labels defaced after use.
 - Once emptied, chemical containers can never be used in the place of any other container (for example trash receptacles).
 - Bayview will ensure that labels have the six required elements of the GHS. The SDS will be consulted to determine the specific information for any generated labels. The label at a minimum will contain:
 - A signal word indicating the hazard level.

- The appropriate hazard pictogram(s).
 - The chemical name as reflected on the SDS, and any other needed identifiers.
 - Any precautionary statements and related immediate first aid measures.
 - Name, address, and emergency phone number of the chemical manufacturer, importer, or other responsible party.
 - Hazard Statements as defined on the SDS.
-
- If a mixture has been tested by an approved laboratory as a whole to determine its hazardous characteristics, the results of such testing shall be used to determine whether the mixture is hazardous and to provide the appropriate labeling information.
 - If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture.
 - Scientifically valid data such as that provided on the SDS to evaluate the physical hazard potential of the mixture must be used.
-
- The Hazard Communication Standard does not require labeling of the following chemicals:
 - Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and regulations issued under that Act, when they are subject to the labeling requirements under that Act by the Food and Drug Administration.
 - Any distilled spirits (beverage alcohols), wine, or malt beverage intended for non-industrial use, defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol Tobacco, and Firearms.
 - Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission.
 - Labeling of containers of chemicals and hazardous materials being shipped off site designated as hazardous waste. Where these materials are classified as hazardous waste they fall under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), and the provisions of 40 CFR. And as such will be subject to regulations issued under that Act by the Environmental Protection Agency.

Safety Data Sheet (SDS) Program

Bayview shall maintain a SDS for each chemical utilized. This includes:

- Maintaining copies of any SDS received with incoming shipments of the sealed containers of hazardous chemicals;
- Obtaining an SDS for sealed containers of hazardous chemicals received without an SDS.
- Ensuring that the SDS is readily accessible to all employees during each work shift.
- Employee "right-to-know" copies will be available to all employees at an effected work site (including employees who are assigned to multiple worksites). SDS shall be made available, upon request, to employees or their designated representatives. For multi-employer sites, this information will be made available for any hazardous chemical in the vicinity as well.
- All SDS (or other pre-GHS implementation documents for discontinued products) copies will be maintained for all abandoned chemicals for a period of 30 years.
- A formal request will be made to any vendor who does not provide an SDS with a product received by the company.

- An SDS shall have information related to the product divided in 16 unique sections. The sections are as follows:
 - 1) Identification of the substance or mixture and of the supplier
 - 2) Hazard identification
 - 3) Composition / information on ingredients
 - 4) First-aid measures
 - 5) Fire-fighting measures
 - 6) Accidental release measures
 - 7) Handling and storage
 - 8) Exposure controls / personal protection
 - 9) Physical and chemical properties
 - 10) Stability and reactivity
 - 11) Toxicology information
 - 12) Ecological information
 - 13) Disposal consideration
 - 14) Transport information
 - 15) Regulatory information
 - 16) Other information

Training Program

- HAZCOM training shall be conducted by the work-unit as the need arises or special situations are identified. Newly hired personnel will be briefed on the general requirements of this program by their immediate supervisor before they begin any duties.
- The company shall provide employees with information and training on hazardous chemicals in their work area:
 - at the time of initial work assignment, and
 - whenever a new chemical is introduced into their work area that could present a potential hazard.
- Company employees shall be informed of:
 - Any operations in their work area where hazardous chemicals are present.
 - The availability of the written hazard communication program, including a list(s) of hazardous chemicals used in their department and the associated safety data sheet (SDS). All employees will have access to this location and materials during each shift.
- Training will include:
 - Methods (subjective and objective) used to detect the presence or release of a hazardous chemical in the work area. SDSs will be used to augment this requirement wherever possible.
 - The physical and health hazards of the chemicals present in the work area.
 - The measures employees shall take to protect themselves from these hazards.
 - Specific procedures the company has implemented to protect employees from exposure to hazardous chemicals, including appropriate work practices, emergency procedures and personal protective equipment.
 - An explanation of the labeling system used by the company, the SDS, and how employees can obtain and use the appropriate hazard information.
 - The chemical (formal) and common name(s) of products used, and all ingredients which have been determined to be health hazards.
 - Physical and chemical characteristics of the hazardous chemical including vapor pressure and flash point.
 - The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity.
 - The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions that are generally recognized as being aggravated by exposure to the chemical.
 - The primary route(s) of exposure; inhalation, absorption, ingestion, injection, and target organs.

- The OSHA permissible exposure limit (PEL), ACGIH Threshold Limit Value (TLV), including any other exposure limit used or recommended by the chemical manufacturer.
 - Whether the hazardous chemical has been found to be a potential carcinogen by the International Agency for Research on Cancer (IAAC).
 - Any generally applicable precautions for safe handling and use which are known including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks.
 - Any generally applicable control measures which are known appropriate engineering controls, work practices, or personal protective equipment.
 - Emergency and first aid procedures.
 - How to determine the date of preparation of the safety data sheet concerned and the last change to it.
 - Specific chemical identity such as the chemical name, Chemical Abstracts Service (CAS) Registry Number, synonyms and any other pertinent information.
- All training will be documented and will include the instructor's name, a brief course curriculum, and records of individual employee's proficiency.

Non-company Employees & Multi-Employer work sites

The Health & Safety program manager or contact will advise visitors, contract employees, contractor personnel and in-house representatives of any chemical hazards that may be encountered in the normal course of their work on the premises; the labeling system in use; the protective measures to be taken; the safe handling procedures to be used and availability of SDSs. This notification will be documented in the project files.

- Any contractor bringing chemicals on-site shall provide the company with the appropriate hazard information on these substances, including the labels used and the precautionary measures to be taken in working with these chemicals. No work may proceed until this information is provided.
- Where employees must travel between work places during a work shift (multi job sites), the written program may be kept at a primary job site. If there is no primary site, then the program will be sent with employees.

Inventory

- Any hazardous chemicals stored at company locations will have an active and updated inventory including the type of chemical and the approximate quantities.

Trade Secrets

- To protect trade secrets, the chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name, and other specific identification of a hazardous chemical, from the safety data sheet.
- To ensure the safety of employees, the company will obtain any information not shown on a SDS from a supplier when such information is needed to determine the hazardous constituents of chemicals used within a facility or by employees.
- Company employees will not use a specific chemical if they cannot determine from the SDS (or other approved source) proper protective measures to be used. The following conditions apply:
 - Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, product suppliers are required by law to immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need of a confidentiality agreement.
 - For non-emergency situations, the following CAL/OSHA guidelines apply when requesting information designated as a trade secret from a SDS. Requesters of trade secret information will:
 - Provide the request in writing.
 - Explain in detail why the disclosure of the specific chemical identity is essential.

- Agree (when required) in a written confidentiality agreement that the information will not be used for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to CA/OSHA, as provided in 8 CCR 5194.
- Use the information for only the following reasons:
 - To assess the hazards of the chemicals to which employees will be exposed.
 - To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels.
 - To conduct pre-assignment or periodic medical surveillance of exposed employees.
 - To provide medical treatment to exposed employees.
 - To select or assess appropriate personal protective equipment for exposed employees.
 - To select or improve engineering controls or other protective measures for exposed employees, and to conduct studies to determine the exposure effects.

Hazardous Non-Routine Tasks

When employees are required to perform hazardous non-routine tasks, the affected employee will be given information by the immediate supervisor, department, or specific workplace health and safety training about the hazardous chemicals he or she may encounter during such activity. This information will include:

- specific chemical hazards,
- protective and safety measures the employee can use, and
- steps the company is using to reduce the hazards, including ventilation, respirators, presence of another employee and emergency procedures.
- Some examples of non-routine tasks are: confined space entry, tank cleaning and painting of enclosed vessels. Non-routine tasks may be performed only by employees who have received appropriate information and training.

Chemicals in Unlabeled Pipes

When employees are required to conduct work activities in areas where chemicals are transferred through unlabeled pipes, the affected employee(s) will contact the supervisor prior to starting work for information regarding:

- The chemical in the pipes.
- Potential hazards
- Specific procedures and safety precautions which should be taken prior to commencing work.

Glossary of Terms

- **Chemical** - any element, chemical compound, or mixture of elements and/or compounds.
- **Chemical Manufacturer** - an employer with a workplace where chemical(s) are produced for use or distribution.
- **Chemical Name** - the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC), or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.
- **Combustible Liquid** - any liquid having a flash point at or above 100 F (37.8C), but below 200 F (93.3 C), except any mixture having components with flash points of 200 F (93.3 C), or higher, the total volume of which make up 99% or more of the total volume of the mixture.
- **Common Name** - any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.
- **Compressed Gas** - A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 p.s.i. at 70 F (21.1 C); or a gas or mixture of gases having, in a container, an absolute pressure exceeding 104 p.s.i. at 130 F (54.4 C) regardless of the pressure at 70 F (21.7 C); or a liquid having a vapor pressure exceeding 40 p.s.i. at 100 F (37.8 C) as determined by ASTM D-323-72.
- **Designated Representative** - any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified

collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

- **Distributor** - a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.
- **Employee** - workers who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers who encounter hazardous chemicals under normal in non-routine, isolated instances are not covered.
- **Employer** - persons engaged in business where chemicals are used, distributed or are produced for use or distribution, including a contractor or sub-contractor.
- **Explosive** - a chemical that causes a sudden, instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.
- **Exposure or Exposed** - an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.
- **Flammable** - a chemical that falls into one of the following categories:
 - Aerosol, flammable - an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening.
 - Gas, flammable - a gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or a gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit.
 - Liquid, flammable - any liquid having a flash point below 100 F (37.8 C), except any mixture having components with flash points of 100 F (37.8 C) or higher, the total of which make up 99% or more of the total volume of the mixture.
 - Solid, flammable - a solid liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited and burns so vigorously and persistently as to create a serious hazard.
- **Flash point** - the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested as follows:
 - Tagliabue Closed Tester (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100 F (37.8 C) that do not contain suspended solids and do not have a tendency to form a surface film under test; or
 - Pensky-Martens Closed Tester (See American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100 F (37.8 C), or that contain suspended solids, or that have a tendency to form a surface film under test; or
 - Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278-78)). Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flash point determination methods specified above.
- **Foreseeable Emergency** - any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.
- **Hazardous Chemical** - any chemical which is a physical hazard or health hazard.
- **Hazard Warning** - words pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazard(s) of the chemical(s) in the container(s).
- **Health Hazard** - a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.
 - The term health hazard includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

- Appendix A to 8 CCR 5194 provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this standard practice instruction.
- **Identity** - any chemical or common name which is indicated on the safety data sheet (SDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label, and the SDS.
- **Immediate Use** - the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.
- **Importer** - the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.
- **Label** - any written, printed, or graphic material, displayed on or affixed to containers or hazardous chemicals.
- **Mixture** - any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.
- **Organic Peroxide** - an organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.
- **Oxidizer** - a chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.
- **Physical Hazard** - a chemical for which there is scientifically valid evidence that it is an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.
- **Produce** - to manufacture, process, formulate, or repackage.
- **Responsible Party** - someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary. Specific chemical identity means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.
- **Safety Data Sheet (SDS)** - written or printed material concerning the physical characteristics and related safety information of a hazardous chemical.
- **Trade Secret** - any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.
- **Unstable (reactive)** - a chemical which when processed, handled or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.
- **Use** - to package, handle, react, or transfer.
- **Water-Reactive** - a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.
- **Work Area** - a room or defined workplace where hazardous chemicals are produced or used, and where employees are present.
- **Workplace** - an establishment, job site, or project, at one geographical location containing one or more work areas.

29. DRUG/ ALCOHOL INTOXICATION TESTING POLICY

Bayview shall use management's discretion as to if, and when to implement post-incident drug testing. Any incidents involving either an injury requiring professional medical attention or an at-fault vehicle accident shall be automatic triggers for testing. For all other incidents, factors such as reasonable suspicion, severity of the incident, involvement of other parties, and worker history shall be taken into account during the decision-making process. Bayview further reserves its right to test any employee at any time during their work shift if they have reason to believe the employee is intoxicated or otherwise under the influence of drugs. This may require the employee to extend their shift for the time it takes to get the test performed. Refusal of a drug test for any reason will be treated the same as a positive test result.

30. RESPIRABLE CRYSTALLINE SILICA EXPOSURE CONTROL PLAN

Purpose

Bayview Services, Inc., including its subsidiaries (Bayview Demolition Services, Inc., Bayview Environmental Services, Inc., and Bayview Industrial Services, Inc.) understand and acknowledge the health concerns related to respirable crystalline silica. This program shall address the methods by which employees will be protected from respirable crystalline silica, hereby referred to only as “silica”, and by which Bayview Services, Inc., hereby referred to as the “company” will comply with California Title 8, Section 1532.3, hereby referred to as the “regulation”. This program shall be overseen by the Corporate Safety Director and reviewed for effectiveness and amended as needed at minimum on an annual basis. A copy of this plan is available to all employees.

Work Assignments Subject to Silica Exposure

This program applies to any work task that has the potential to create silica dust at the Action Level (AL) of 25 ug/m³, calculated as an 8-hour Time Weighted Average (TWA). Recognized tasks that may be within the company’s scope include the following:

- Breaking or chipping activities of concrete, mortar, ceramic, or masonry
- Cutting of concrete, mortar, ceramic, or masonry
- Grinding or polishing of concrete, mortar, ceramic, or masonry
- Drilling or coring of concrete, mortar, ceramic, or masonry
- Movement of debris comprised of concrete, mortar, ceramic, or masonry including the use of any debris chutes
- Movement of soils or other ground cover with heightened levels of silica
- Mechanized travel over dirt roads with heightened silica
- At no time shall any employee be subject to a work assignment that with the use of proper engineering controls, work practice controls, and personal protective equipment will result in an exposure above the established Permissible Exposure Limit (PEL) of 50 ug/m³ over an 8-hour TWA.
- Exposure assessments will be conducted for employees who are expected to be exposed to silica at or above the action level.

Control Measures

The company shall conduct all work in accordance to Table 1 of Title CCR Section 1532.3 whenever feasible and prudent. This includes the use of tools and attachments engineered specifically for the purpose of silica dust suppression or recovery. The concepts outlined in Table 1 shall be followed even in times when they cannot be strictly adhered to. The preferred control method shall be the continuous application of water, sufficient in flow rate and with a proper pattern to suppress dust, directed at the point of generation of the silica dust. When jobsite conditions do not permit for the use of adequate amounts of water, a HEPA-filtration equipped vacuum may be used in its place. The nozzle of the vacuum shall be placed as close as practical to the silica generation site and continuously be recovering generated dust.

The company recognizes that there may be specific site conditions that do not allow for the above-mentioned Company Standard control methods to be fully implemented. In these specific cases, in order to limit the exposure of silica to only employees involved in silica related tasks, the work area at times may be contained with dust barriers (poly sheeting or other) to contain the dust. This work area will have its atmosphere filtered with attached negative-air machines equipped with HEPA filtration. Once the silica dust generating work is complete, the work area shall be cleaned prior to the removal of the dust barriers.

On sites where Silica originating from soil or other ground cover has been identified to create silica dust at or above the Action Level, paths of travel or excavation activities shall be adequately moistened to keep the dust from rising significantly.

Housekeeping

Silica dust generated from Company activities shall either be adequately managed as it is created in order to limit its spread. Methods of management may include the following: misting the area, limiting travel that will loft dust back into the atmosphere, the recovery of slurry with squeegees and vacuums, and / or the sweeping of dust after a high-tack sweeping absorbent has been applied. Dry sweeping is both less efficient and prohibited. Any tools or equipment used in silica related work shall be cleaned. Compressed air shall not be used to either clean tools and equipment or workers' persons.

Respiratory Protection

All employees assigned to silica related tasks at or above the AL will be provided with a respirator as per the company's respiratory protection program. Respirators will be mandatory for use as outlined in Table 1 and during all tasks that are not covered under Table 1 that have the potential of exceeding the Action Level. The baseline respiratory protection for silica work shall be a tight-fitting half-face air-purifying respirator equipped with P-100 cartridges. This baseline may be upgraded as needed based on air sampling results or anticipated silica exposure concerns to either a full-face model or powered air-purifying respirator, all respectively equipped with P-100 cartridges.

Medical Surveillance

All workers who are required to wear a respirator due to silica related work (assumed to have the potential to be exposed at or above the action level if a respirator was not worn) for 30 or more days per year shall be under the medical surveillance of a physician as outlined in T8 CCR 1532.3(h). Records of this shall be kept as prescribed by law.

Air Sampling

All work tasks conducted in a manner not prescribed in Table 1 will have an exposure assessment performed to assure that the engineering controls, work practice controls, and personal protective equipment in place are adequately protecting all affected employees. The results of the initial personal air samples taken will be used as a baseline for ongoing work as long as they remain accurately representative of the work being performed. Reassessment of exposure through additional personal air samples will be performed as outlined in the regulation. Records of these samples will be kept as prescribed by law.

Controlled Access Zones & Hazard Communication

Work areas where silica dust generating activities are performed shall be demarcated in a controlled access zone (CAZ). The CAZ will be established through the use delineators and caution / danger flagging, or adequate signage on all entry ways leading to the work area. Either the flagging or other site entry barriers will be clearly and conspicuously labelled of the silica respiratory hazard within the CAZ. All employees at the job site, even if not assigned to work within the boundaries of the CAZ will be made aware of the health concerns and control measures pertaining to silica. The number of workers within the CAZ will be limited to only those essential to the work functions being performed in order to limit the risk of exposure.

Competent Persons

A company foreman will be on site whenever silica work is performed. All company foremen have the training and authority necessary to fulfill the function of designated competent person for silica work. The competent person will be designated on site paperwork and shall make frequent and regular inspections of the work area to ensure the control measures outlined in this plan are adhered to at all times. If work methods are found to be inadequate or inappropriate, work shall be halted until which time the unsatisfactory condition can be abated.

Training

Exposed Workers:

All employees assigned to or near a silica related task will receive appropriate training on an annual basis. Workers without any supervisory duties will be trained to the level necessary for an exposed worker. This training shall cover:

- Understanding what crystalline silica is
- Understanding under what conditions it is respirable
- Potential sources of silica at construction job sites
- Work activities that are likely to generate silica dust
- The health concerns of silica
- The pertinent regulations to working with silica
- The engineering controls that can be utilized
- The company mandated work practice controls
- PPE
- Decontamination
- Personal air sampling
- Medical surveillance guidelines
- Reporting procedures for any unsafe conditions observed

Supervisors:

- All company supervisors will be further trained to the level Respirable Crystalline Silica Competent Person. This training will include the above topics as well as:
- How to properly set up a controlled access zone
- Jobsite inspection procedures
- Assessment of worker knowledge of silica work practices
- When to stop work due to silica exposure concerns
- How to properly communicate silica hazards
- Record keeping of silica related work activities

31. LEAD AWARENESS

As a state licensed Lead Related Construction contractor, the company understands the importance of educating its workers of the presence and dangers of lead as it pertains to their work assignments. Prior to assignment to any work areas where there is the possibility of lead being present, workers will receive training on lead awareness. This training shall cover the following topics:

- What lead is
- Where lead is found in construction (paints, primers, ceramics, metals, etc.)
- Environmental risks of lead
- Health effects of lead exposure (both acute and chronic)
- Exposure routes of lead
- Basics regulations pertaining to industrial lead exposure
- How lead containing materials are identified on the jobsite
- How lead abatement areas are labeled
- How to properly decontaminate if lead is inadvertently handled (wash hands and face)
- Reporting procedures if a worker feels exposure may have occurred

This training shall be properly documented and refreshed annually. When lead abatement activities are taking place (including on multi-contractor worksites), they shall be clearly labeled as per all pertinent regulations and employees trained only to an awareness level shall not be permitted to enter. Only CDPH certified workers will disturb lead containing materials and perform all tasks that could result in exposure at or above a regulated level.

As stated above, workers will be made aware of the health effects of acute lead exposure so that they can report them to seek treatment in a timely manner. The possible acute exposure health effects include:

- Digestive issues (ie.: loss of appetite, nausea, vomiting, abdominal cramps, constipation).
- Headache
- Memory difficulties.
- Joint and/or muscle aches
- Difficulty sleeping.
- Unexplained fatigue.
- Mood disorders (such as unexplained irritability or depression)
- Unusual taste in the mouth.

32. LEAD RELATED WORK ACTIVITIES

Purpose

The purpose of this program is to ensure compliance with all Federal, State and Local regulations and establish safe working procedures for protecting company employees while conducting Lead Based Paint Abatement and associated Demolition of Lead Based Paint coated components.

During all Lead Paint Removal Projects, the company shall comply with all applicable requirements of the California General Industry Safety and Health Standards, Safety and Health Regulations for Construction, Title 8, California Code of Regulations (CCR), Federal OSHA Section 1926.62, Lead in Construction, Cal/OSHA Lead Construction Standard 8 CCR 1532.1 and Title 17 CCR, Division 1, Chapter 8.

This program shall ensure that through the use of work practice controls, engineering controls, and personal protective equipment, no employee will be exposed to lead in concentrations above the PEL of 10 micrograms per cubic meter of air.

Supervision

All supervisors will be accredited pursuant to Title 17, Code of California Regulations (CCR) all supervisors shall have a minimum of one (1) year of experience supervising projects and a minimum of one (1) year experience with LBP removal projects or abatement work.

The supervisors overseeing the work will be familiar with all applicable regulations related to LBP removal. This will include:

- Preparation of the work area
- Personal protective equipment, including respiratory protection and protective clothing
- Decontamination procedures for personnel, work area and equipment
- Abatement methods and procedures to be utilized
- Air monitoring procedures
- Procedures for handling and disposing of lead waste materials
- Procedures for final decontamination and cleanup

Air Monitoring

- As required by Cal/OSHA, Construction Lead Standard [Title 8 CCR 1532.1 (d)] an initial determination of the worker lead exposures will be performed at the onset of all LBP abatement projects.
- The results of this initial determination shall be used to establish the degree of engineering, administrative and respiratory protection controls.

Periodic Exposure Monitoring

- Notwithstanding the results of the initial determination, Bayview will conduct daily employee exposure monitoring of not less than (10%) of the employees that are conducting LBP removal or demolition.
- Daily monitoring of the employees shall be performed to enable each employee's exposure to be reasonably represented by at least one full shift (7-hour minimum) air sample.
- The minimum frequency of the exposure monitoring shall be maintained based on employee exposure levels, as required by Title 8 CCR 1532.1.
- Portable low-flow pumps will be used to draw a known volume of air through a 37 millimeter, 0.8 micron MCE filter. Samples will be analyzed pursuant to the NIOSH 7300 method to yield a weight-per-unit volume (mg/m^3).
- Air flow volumes will be calibrated utilizing a field rotameter which will be calibrated with a primary standard such as a frictionless piston (soap film bubble burette).
- All samples will be analyzed for lead by a Laboratory which is accredited by the American Industrial Hygiene Association.

Air Monitoring Data

- All sample results shall be available on site for employee review as soon as possible but not later than 5 working days following receipt of monitoring results from the testing facility. Results will be posted in the Bayview jobsite office and affected employees will be notified of the sample results.

Site Security

- Only authorized personnel may enter the work site. All hazardous waste containers containing LBP will be located within the work site and locked at all times when authorized personnel are not present to oversee the material. All containers of hazardous materials shall be clearly labeled as containing hazardous materials with legible signs in both English and Spanish.
- LBP abatement and demolition work areas will be restricted only to authorized, trained and protected personnel. These may include employees of subcontractors, owner employees and representatives, state and local inspectors, and any other designated individuals.
- Entry into the work area by unauthorized individuals shall be reported immediately to management.
- A decontamination log will be maintained in all clean rooms of the worker decontamination system. Anyone who enters a LBP abatement work area must record: Name, Affiliation, Time-in and Time-out for each entry.
- Access to the work area may be through a worker decontamination system located at the work site. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent inadvertent entry or exit from the work area. The only exceptions to this rule are the waste load-out area which shall be sealed except during the removal of containerized lead waste from the work area, and emergency exits in case of fire or accident. If two or three stage containment areas are required, emergency exits shall not be locked from the inside; however, they shall be sealed with polyethylene sheeting and taped until needed.
- The competent person will have control of site security during operations to protect work efforts and equipment.

Emergency Procedures

- Emergency planning shall include considerations of fires, explosions, toxic atmospheres, electrical hazards, loss of electrical power, slips, trips and falls, confined spaces, and heat related injuries. Written procedures shall be developed and employee training of procedures shall be provided.
- A competent person who is trained and certified to administer First Aid, CPR and related emergency assistance will be designated at the start of all projects and will remain on site throughout the duration of the project. This individual will ensure adequate controls are applied to maintain worker safety.
- Employees shall be trained in evacuation procedures in the event of workplace emergencies.
- For non-life-threatening situations, the injured personnel shall decontaminate following normal procedures before exiting the workplace to obtain proper medical treatment.
- For life threatening injuries or illness, worker decontamination takes the least priority. After taking measures to stabilize the injured personnel, he/she shall be removed from the workplace and transferred to proper medical care.
- In the event of an evacuation, the competent person shall notify the appropriate emergency care providers (ambulance, paramedics, medical facility, etc.) that the injured person(s) is or may be contaminated with lead.
- Emergency telephone numbers of all emergency response personnel shall be prominently posted in the clean room/change area.
- Emergency eyewash will be provided in the change room of the decontamination unit.

Personnel Requirements

- Training
 - Any worker entering an area known to contain lead based paint for the purposes of removing or disturbing it must have successfully completed an accredited DHS worker training course.
 - Evidence of completion of the training will be provided to the consultant on site prior to an individual's initial entry into the work area.
- Biological Monitoring
 - Employees who are exposed or may be exposed at or above the PEL for more than 30 days in any consecutive 12 months, shall have BLL and ZPP testing performed at minimum every 2 months for the first 6 months, and every 6 months thereafter.
 - A worker will be removed from the job if their blood level is 10ug/100 deciliter (dl) or greater.

Respiratory Protection

The following guidelines are in addition to the company's complete Respiratory Protection Program (Section 24) which shall be adhered to at all times.

The standard type of respiratory protection required for lead abatement activities is a negative pressure, half mask, air purifying respirator, equipped with HEPA filters for airborne lead levels not in excess of 0.5 mg/m³ (10 X PEL). However, for abrasive blasting activities a Type C will be required until air monitoring allows for down grading of respiratory protection.

In the event air monitoring results exceed the protection factor for negative pressure, half mask, air purifying respirators the following protection will be required:

- Full facemask air purifying respirator, with HEPA filters for airborne lead levels not in excess of 2.5 mg/m³ (50 X PEL).
- Pressure demand, full facemask, supplied air respirators for airborne lead concentrations expected to met or exceed 50 mg/m³ (1000 X PEL).

All workers inside the LBP abatement work area will wear the proper respirator for the lead concentration generated.

Workers will be properly trained in the care, use and maintenance of respirators. Each worker will be fit tested for the respirator annually. See Respiratory Protection Program.

Respirators will not be removed until the worker enters the washing area (or equivalent) of the decontamination chamber.

Personal Protective Equipment

Workers will wear full body disposable suits with hoods and booties. A TYVEK or similar type of suit may be worn. Suits will continue to be worn inside the work area after the area passes pre-lead abatement inspection and shall remain in use until the area passes final clearance inspection.

Goggles or safety glasses with side shields will be worn while on site at all times.

Additional respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. The competent person will consult the SDS and obtain the proper filters as needed.

During abrasive blasting operations, a cloth full body suit with hood and booties shall be worn. At the conclusion of this work the coveralls are to be HEPA vacuumed and stored in a plastic bag. They may be re-used until the end of the project when they will be disposed of as lead waste.

Personal Hygiene Practices

The competent person shall enforce and follow good personal hygiene practices during lead abatement. These practices will include, but not be limited to, the following:

- No Eating
- No Drinking
- No Smoking
- No Chewing Gum or Tobacco
- No Applying Cosmetics in the Work Area

A clean space will be designated separate from the work area for these activities.

All workers must wash hands and face upon leaving the work area for breaks and lunch and shall shower at the end of the work shift as required. Wash facilities will be provided, at a minimum, running potable water, towels, and a HEPA vacuum. Upon leaving the work area, each worker will remove and dispose of work suit, wash and dry face and hands, and HEPA vacuum clothes that were worn under the disposable suits in the work area. Appropriate emergency eyewash shall be available for use.

The decontamination unit (shower, change room, etc.) when needed, may be located so that it is not contiguous with the work area. In this case, workers shall wear two full body disposable suits, while in the work area. Upon leaving the work area the outside suit shall be HEPA vacuumed and then removed. Then, while still wearing the inside suit and respirator, the worker will proceed directly to the decontamination unit, wash face and hands and clean the exterior of the respirator. Then the inside suit may be removed.

The respirator must be removed in the shower room. The interior and exterior of the respirator must be cleaned: filters must be taped or discarded. The respirator must be placed in a clean poly bag and stored in the clean room of the decontamination unit.

Disposable suits and other personal protective equipment (PPE) when required, must be donned prior to entering the work area. A clean room will be provided for workers to put on suits and other PPE and to store their street clothes. Disposable suits shall only be used once, and then properly discarded.

A lavatory facility will be provided and located in the immediate vicinity of the work area. The eating and drinking area, clean room and lavatory facility must be maintained in a clean and orderly fashion at all times. Portable lavatories will be provided when needed.

If air monitoring data shows that employee exposure to airborne lead exceeds 10 ug/m³, the following conditions apply:

- Street clothes cannot be worn into the containment. Workers must wear nylon shorts, or proceed under full shower conditions with no clothes under their disposable suit.
- Showers will be provided, Shower water must pass through at least a 5.0 micron filter before returning to the public waste system, and the effluent discharge lead concentrations must not exceed the levels stipulated by the local POTW.
- All workers must shower upon leaving the work area.
- Three-stage decontamination unit must be established consisting of equipment room and airlock; shower and airlock; and a clean room.

Preparation Of Work Area

I. Work Area

- Preparation of the work area is dependent upon the type of lead abatement planned and the expected/experienced concentrations of airborne lead within the containment (employee exposure monitoring) and exterior to the containment (area monitoring). Two levels of engineering controls and work area preparation are possibilities.

II. Plastic Barriers

- A single layer of six (6) mil polyethylene plastic with either a Z-flap at entry/egress points and signs or barricade tape to identify the lead abatement area and required entry authorizations. This control level is anticipated primarily for lead abatement via demolition of walls within the building after paint stabilization has occurred (i.e. removal by scraping of loose paint chips or chemical stripping).

III. Three Stage Containment

- Air monitoring results above the PEL will require a full three stage containment with two layers of plastic, airlocks, negative air pressure system, a dirty/equipment room, shower, and a clean/change room. This control level may be required for extensive on site dry removal methods, such as abrasive blasting.

IV. Minimum Lighting

- The minimum lighting requirements are as follows: minimum of 20 foot candles in the general work area and a minimum of 50 foot candles on working surfaces where removal and/or detailing is taking place.

V. Signage

- Signs will be posted immediately outside all entrances and exits to the work area.
- The signs will remain in place until the work area has been cleared. All signs will meet the following description.

“CAUTION: LEAD HAZARD. KEEP OUT. DO NOT ENTER WORK AREA. AUTHORIZED PERSONNEL ONLY. NO EATING, DRINKING, OR SMOKING IN THIS AREA.

Date: _____ Loc.: _____”

- All signage will be in bold with a minimum of two-inch lettering.

Three Stage Containments

- Shut down and isolate (by means of one layer of 6 mil plastic sheeting) heating, cooling and ventilating air systems to prevent contamination and lead dust dispersal to other areas of the structure. During the work, vents or openings within the work area shall be sealed with tape and plastic sheeting.
- Seal off all openings, including but not limited to corridors, doorways, skylights, ducts, grilles, diffuser openings and any other penetrations of the work areas, with two layers of 6 mil plastic sheeting sealed with tape. Doorways and corridors that will not be used for passage during work must be sealed with 6 mil plastic barriers.
- Build airlocks at entrances to and exits from the work area. Airlocks should be built in a manner that allows for in flow air. Make-up air, if required, shall be admitted through specially constructed vents which prevent contaminated air from leaving the work area.
- Establish a negative air pressure system which produces 4 air changes per hour in the work area and maintains a pressure differential of minus 0.02-inch water gauge between the inside and outside of the work area.
- Emergency and fire exits from the area will be adequately marked.

Pre-Work Requirements

LBP demolition and abatement shall not commence until:

- Arrangements have been made for containing and/or disposing of waste water resulting from showering and other LBP abatement activities.
- Work areas, decontamination enclosure system, and waste load-out areas are effectively segregated.
- Tools, equipment and material waste receptacles are on site.
- All respirators are on site and fully operative.

- A visitor and employee log-in/log-out register is in place at the job site. All persons entering the site will be required to sign in and out.
- Should any Presumed Asbestos Containing Material (PACM) be identified, the work activities shall cease in the affected area and the materials shall be sampled and analyzed for asbestos content.

Enclosure and Waste Load-out Area

- If a three-stage containment is required, a worker decontamination enclosure system will be constructed that is contiguous to the work area. It will include the following:
 -
 - An equipment room with two doorways, one to the work area and one to the shower room.
 -
 - A shower room with two doorways, one to the equipment room and one to the clean room. The shower room shall contain at least one shower with hot and cold water. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind. A supply of soap and shampoo will be available at all times. Clean and dry towels will be available for employees and owner authorized visitors and personnel. A three-stage water filtration system will be employed prior to release of shower water into the local sewage system.
 -
 - A clean room with one doorway into the shower and one entrance or exit to non-contaminated areas of the building or outside. The clean room shall have sufficient space for storage of the worker's street clothes, towels and other non-contaminated items. Individual lockers shall be available to workers within the clean room.
 -
 - Workers shall change clothes (i.e. dress and undress) within the clean room exclusively. If additional space is required for changing clothes, modesty rooms with black polyethylene sheeting will be constructed.
 -
 - Airlocks shall be established at the entrance of the waste load-out area and a separate negative air machine shall be utilized exclusively for this waste load-out area.
 -
 - Access to the waste load-out area shall only be through the work area through a separate airlock between the work area and the wash down station.
 -
 - At the waste load-out station, thoroughly wet clean contaminated equipment, sealed polyethylene bags or metal drums and pass them into washroom. Once inside the washroom, again wet clean and place sealed metal drums, polyethylene bags or equipment into a second layer of 6 mil polyethylene sheeting or bag. All workers in this decontamination facility shall be required to wear full protective clothing and appropriate respiratory protection.
 -
 - All double bagged waste shall be transported to a dumpster by sealed, portable containers. The dumpster and portable container shall be fully lined (exclusive of ceiling) with one layer of 6 mil polyethylene sheeting. Dumpster and portable containers shall be leak tight.
 -
 - LBP components shall be transported to the waste dumpster, to the extent feasible, in carts to prevent the loss/spreading of LBP chips. If pallet type or flatbed conveyances, etc. are used, the path from the work area to the dumpster shall be marked with warning tape, covered with a layer of 6 mil plastic and cleaned with a HEPA vacuum to ensure that any paint chips are cleaned up.

Maintenance of Enclosure System

- Before and throughout the shift, barriers will be inspected to ensure that they are properly sealed and taped. Any damaged barriers will be repaired immediately upon discovery.
-
- Enclosures and negative air units shall be inspected at the beginning of each work period or shift. Details of the inspections are to be included in the competent person's daily report.

Clean-up Procedures

I. General

- When active lead abatement work is taking place, there will be continuous, ongoing cleanup to reduce the accumulation of debris, and the work site shall be cleaned at the end of each day's activities. Prior to beginning lead control, all stored materials or equipment shall be either removed to a "clean room" or wrapped in polyethylene prior to start of the lead abatement work. A separate, secured area within the containment space shall be designated for storage of debris until it can be properly disposed of according to the contract documents. The lead abatement area shall be secured to prevent entry by any persons after termination of the workday. Disposable supplies such as mop heads, sponges, and rags shall be replaced regularly and disposed of. All equipment shall be cleaned by HEPA vacuuming and detergent washing. No equipment shall be removed from the work area until it has been cleaned.

II. Clean-Up Methods and Equipment

- Areas in which lead abatement operations have been completed shall be cleaned, starting at the ceilings and working down to the floor, using a HEPA vacuum.
-
- HEPA vacuum, followed by a wet cleaning with a general all-purpose cleaner or a cleaner made specifically for lead.

III. Removal of Plastic Sheeting

- The plastic sheeting covering the floors, window openings and ground shall be sprayed, picked up and HEPA vacuumed prior to removal. The plastic sheeting shall be carefully folded from the corners and ends toward the middle and placed into a 6-mil plastic bag and sealed. Bags shall be stored in the designated area and disposed of accordingly.

IV. Triple Clean

- Final cleanup will begin no less than 24 hours (unless notified otherwise) after final clearance and all materials, equipment, debris and plastic sheeting have been removed.
- The entire area shall be HEPA vacuumed, washed and HEPA vacuumed again. No dry sweeping is allowed. All disposable supplies used during cleanup, such as mop heads, sponges, etc., shall be disposed of accordingly. After this cleaning, any surfaces requiring painting such as plaster walls or ceilings shall be sealed or primed with an approved product. The lead related final cleanings may be combined with the final asbestos clean-up procedures.

Disposal of Waste Material

- All applicable Federal, State and Local LBP debris disposal requirements will be verified and accomplished. RCRA requirements shall be complied with as well as applicable state hazardous waste and solid waste requirements. During the actual lead abatement, debris will not be abandoned at the facility / job site or nearby property, incinerated, dumped in an unauthorized location, and lead contaminated water will not be introduced into storm water (yard inlets or street drains) or sanitary sewers (household toilet or drains).
- Lead-based paint chips, debris, dust, etc. will be placed in 6-mil polyethylene bags that are air-tight and puncture-resistant and then placed into a 55-gallon metal drum.
- Residues from solvents and strippers will be packaged in properly lined and labeled drums constructed from materials that cannot be dissolved or corroded by chemicals. Solvents, caustics, and acid waste must be segregated and not stored in the same containers with LBP waste.
- All waste streams will be properly segregated and sampled separately to determine if the waste stream is a hazardous or non-hazardous waste.
- Federal: Toxicity Characteristic Leaching Procedure (TCLP) – Soluble Threshold Limit Concentration (STLC) equal or exceeds 5 mg/L (5 ppm).
- California: SW846 for total metal concentrations, Total Threshold Limit Concentration (TTLC) equal or exceeds 1000mg/kg (1000 ppm).
- Waste Extraction Test (WET) soluble metal concentration – Soluble Threshold Limit Concentration (STLC) equal or exceeds 5 mg/L (5 ppm)

- All waste will be properly packaged, labeled, manifested and disposed of at an approved landfill.

Abrasive Removers

- If sanders are to be used they will be dual action, rotary action, orbital or straight line system capable of being fitted with a HEPA dust collection system. Sanding shall only be done on flat surfaces which allow the HEPA dust collection hood to come into tight contact with the surface.

Demolition of Intact Walls

- The demolition of intact drywall systems will be done in such a manner to control the spread of dust and liquid effluent created during the process.
- Normal demolition activities that may be utilized to demolish the wall systems include, but are not limited to, manual demolition, bobcat, sawing, etc.
- The demolition of the wall systems will be done wet such that dust control measures are utilized to control the spread of dust and lead dust into various areas of the building which may or may not be directly involved in LBP demolition.
- The paint chips and dust with paint chips generated during this type of work shall be collected and disposed as hazardous waste.

Heat Gun Use

- Electrically operated heat-blower guns shall be flameless electrical paint softener type. Heat-blower shall have electrically controlled temperature settings to allow usage below a temperature of 700 degrees Fahrenheit. Heat-blower shall be GFI type (non-grounded) 120V, AC application. Heat-blower shall be equipped with various nozzles to cover all common applications (cone, fan, glass protector, spoon reflector, etc.).
- The hot air stream from the heat-blower gun shall be directed at the paint surface and paint allowed to blister and soften. Considerable lead is volatilized from lead based paint and lead fumes are released at approximately 700 degrees Fahrenheit. Heat-blowers shall not be operated above 700 degrees Fahrenheit and respiratory protection is required for all persons in the work area.
- Softened paint shall be removed down to the substrate surface as completely as possible by scraping and/or brushing. In cases where some pigment may remain embedded in plaster and similar porous substrates, care shall be taken to avoid damage to the substrate with the scraping or brushing tool.

Chemical Remover Use

- Chemical removers will not contain methylene chloride products. Chemical removers shall be compatible with, and not harmful to the substrate to which they are applied. Chemical removers used on masonry surfaces shall contain anti-stain formulation that inhibits discoloration of stone, granite, brick and other masonry materials.
- During the use of chemical strippers employees shall wear the following Personal Protective Equipment:
 - Full Face Respirator
 - HEPA / Organic Vapor Filters
 - Black PVC Gloves
 - Yellow Poly Chemical Suits
 - Rubber Boots

***Chemical Stripper Neutralizer**

Chemical stripping neutralizers will be applied after the use of the chemical stripper to ensure that all the chemical has been removed and will be used in accordance with the recommendations of the manufacturer.

Abrasive Blasting

- Blasters if used will be designed in full compliance of all codes that govern abrasive blasting and the removal and handling of hazardous materials.

-
- Blasting media will be non-toxic and conform to the recommendations and specifications of the blasting machine manufacturer.
-
- The abrasive blasting shall be done within the approved containment.
-
- Care shall be taken not to damage the substrate with the blasting operation.
-
- Blasting operations will be performed by workers who are properly trained in the use of the blasting equipment being utilized.

HEPA Vacuum and Power Tool Cleaning

- Power tool cleaning involves the use of an air compressor to power the sanding, impacting (needle gun), grinding or brushing equipment to remove all paint, rust and mill scale on metal and irregular surfaces. When surfaces are flat and the tool is used properly, dust generation is minimal. However, dust will escape in areas of complex configuration when an adequate seal between the tool and the surface cannot be maintained. The proper shroud will be selected for the shape of the surface to be treated. All debris will be HEPA vacuumed as soon as possible to avoid tracking material out of the work area.
-
- Containment shall consist of a tarp or wind screen to isolate the work area and ground covering of 6-mil plastic sheeting.

Peeling Paint

- During demolition and at the end of each work shift, the fallen paint chips shall be collected manually and/or with a HEPA vacuum. One or more persons shall be assigned this work with no other duties. The paint chips and dust collected in the manner shall be disposed as hazardous waste.

Encapsulation

- Encapsulation is the process that makes LBP inaccessible by providing a barrier between the LBP and environment. The barrier is formed using a liquid applied coating or adhesive bonding covering material. The encapsulation product/system will be warranted by the manufacturer to perform for at least 20 years as a durable barrier. The encapsulate must be capable of being applied safely; must remain intact for an extended period of time when exposed to environmental conditions and use patterns; and it must comply with fire, health and environmental regulations as well as the requirements of ASTM E-1795. Encapsulation is not recommended for friction surfaces (e.g. window jambs, exterior wood flooring, or stairs), deteriorated components or paint films, severely deteriorated paint films, or surfaces where there is known incompatibility between two existing coating layers.
- When encapsulation is used, all areas where the material is applied shall be labeled and recorded.
- Surfaces to be encapsulated will be thoroughly cleaned with non-sudsy degreaser or other appropriate cleaning products. Flaking, peeling paint shall be removed and the surface stabilized. If the painted surface is smooth and glossy the surface shall be de-glossed. Corroded metal should be cleaned using HEPA power tools to remove rust and contaminants. Bare concrete and masonry materials should be washed to remove loose dirt, degraded materials or other surface contaminants.
- Adhesives will be applied with a roller or sprayer depending on the manufacturer's directions.

Clearance Criteria

- The clearance criteria for the projects will be established prior to the start of a project as all or part of the specifications. These criteria will include such elements as surface wipe concentrations, soil concentrations, etc.

- After the lead paint abatement, clean-up and waste removal, a certified Lead Inspector shall perform a final visual inspection to the degree of cleanliness of the affected area. After the area has passed the visual inspection the Inspector may conduct wipe tests in accordance with the Cal/DHS Title 17 requirements. The wipe testing shall be repeated after all further construction activities have been completed and before area re-occupancy.
- The wipe tests shall conform to Table 10.1 in the HUD LBP 1995 Guidelines. Samples will be analyzed by a qualified laboratory utilizing the EPA 6010 method.
 - Floors: 40 micrograms per sqft
 - Interior Horizontal Window Surfaces: 250 micrograms per sqft
 - Exterior Floors and Horizontal Window Surfaces: 800 micrograms per sqft

33. RIGGING

The company shall not conduct complex rigging, such as that pertaining to the use of cranes. If basic rigging becomes necessary to move equipment, material, or debris the following criteria shall be adhered to:

- All rigging equipment shall be thoroughly inspected per manufacturer specifications by a competent person prior to its use. Only equipment found to be free from any defect shall be used. Equipment that is damaged, defective, past its expiration date, or too soiled to be properly inspected shall be destroyed (to prevent its future use) and discarded.
- Slings, chains, and wire ropes (cables) shall only be used and maintained in a manner intended by their manufacturer. Rigging shall be of the proper length for the task to be accomplished. They shall not be shortened by adding knots, twists, kinks, or by any other means.
- All hooks shall be equipped with safety latches.
- All equipment shall have its Safe Working Load Limit clearly marked on each individual piece of equipment. If such marking is not clear and legible, the equipment shall be taken out of service.
- The proper rigging tool (slings, cables, webbing, shackles, etc.) shall be selected for the unique requirements of each task. Weights of all rigged pieces shall be known in order to assure equipment is within its safe working load limits.
- Rigging shall be protected from sharp edges by padding or other suitable methods.
- Tag lines shall be affixed to all objects being lifted overhead.
- Loads shall be properly balanced so that they do not shift. Slings shall be set so that they cannot slip out of place.
- Suspended loads shall be kept clear from obstructions.
- At no point shall any personnel ever be under a suspended load.
- Employees shall be aware of pinch points both from the load and from rigging, and shall keep themselves clear.
- Rigging shall not be used in any manner that shall result in a shock load.
- Loads shall not be suspended over or near any live utilities.
- Prior to any rigging operation begins, all crew members involved shall meet to review the plan, address the hazards, and establish communication methods.
- Any specialty rigging devices that shall be used will have their Safe Working Load Limit clearly marked and have, at a minimum, been proof tested to 125% of their rated capacity prior to use.

34. SCAFFOLDS

The company shall only construct pre-manufactured scaffolding components as per their manufactures specifications. All scaffolds constructed by the company shall have their tallest member at a height lower than 36 feet.

- The erection of all scaffolds shall be overseen by a Qualified Person designated by the company by merit of training and experience.
- Prior to the use of any completed scaffold, it shall be inspected and Green Tagged by the Qualified Person responsible for its erection. The Green Tag shall have the load rating of the scaffold (light, medium, or heavy duty) clearly marked.

- Light duty scaffolds shall support a working load of 25 lbs. per square foot. Medium duty shall support 50 lbs. /ft², and Heavy duty 75 lbs. /ft² respectively.
- The scaffold shall be inspected daily prior to its use by competent person. This inspection shall be documented.
- All scaffolds shall be equipped with either attached ladders or stairs designed for the safe access by workers. At no time shall the exterior of the scaffold members be climbed in order to gain access.
- Free standing scaffolds shall have their tallest platform set at a height that is no greater than three times the width of its base (3:1 ratio). Outriggers may be used to accomplish this, but must be placed on both sides of the scaffold at all times. If a 3:1 ratio is not feasible, the scaffold must be appropriately tied back and braced to the structure to prevent it from tipping either towards or away from the structure.
- Scaffolds shall be equipped with appropriate guardrails (both top and mid) on any platform that is set at 6 feet or higher. "X" braces may suffice as both guard and mid rails as is permitted. Wherever the hazard exists for material or tools to fall and strike workers below, toe boards shall be installed.
- Planks shall either be sufficiently overlapped (6" minimum) or secured so that they do not shift. Only rated scaffold planks shall be used.
- Any wheels or casters used shall be rated for a minimum of 4 times the intended working load. Wheels or casters shall be locked at all times the scaffold is not actively being moved.
- The work platform shall be level at all times. If screw jacks are used to achieve this, they shall have a minimum of 1/3 their length within its tube and not exceed 12" of exposed thread.
- Scaffolds shall only be constructed on adequately firm ground and secured so that they cannot shift during use.

35. FIT FOR DUTY

Bayview is committed to providing for a healthy, safe work environment for all of its employees. A core part of this is ensuring that all employees are in proper physical and mental health in order to perform their assigned task. As such the following will be taken into consideration:

- Employees will be made aware of the physical demands of their job, and if at any time, they feel that they are unable to perform it, are to immediately notify their supervisor so that they can be properly reassigned.
- Employees assigned to certain projects may be subject to drug/alcohol screening beyond that which is outlined in Bayview's IIPP. This may occur as pre-placement to the project, post-accident/ incident, or at random. The employee shall be made aware of these unique requirements prior to be assigned to an applicable project.
- If at any time an employee is to report to work and is under the influence of any medication (prescription or over-the-counter) that could in any way impair the safety of their work performance, the employee shall inform his supervisor prior to starting any work.
- If an employee is fatigued to the point of not being able to perform their assigned task safely, whether stemming from work activities or otherwise (such as caring for ill children, illness, poor rest, etc.) they shall immediately notify their supervisor so that appropriate action can be taken (reassignment, a period of rest, early shift ending, etc.).
- Bayview supervisors, as outlined in the IIPP, Code of Safe Work Practices, and Employee Handbook, have the duty to ensure all workers are working safely and in a manner that represents the company well at all times. Any unsafe or inappropriate activities will be immediately addressed, with appropriate discipline following, including the removal from the project should the supervisor deem so as necessary.

End of Document

(Bayview IIPP)

CODE OF SAFE WORK PRACTICES

Personal Conduct, Substance Abuse and Smoking:

General Work Rules:

- All persons are entitled to be treated fairly and with respect without regard to ethnic background, religious belief, gender or sexual orientation. Discrimination in hiring, promotion, work assignment, or general treatment contrary toward this policy toward anyone will not be tolerated
- Abusive or threatening language will not be tolerated
- Stealing or pilfering of anything can be grounds for termination and may even be subject to criminal prosecution. In order to avoid misunderstandings, do not borrow someone else's property without asking.
- Horseplay, Fighting or practical jokes can be dangerous and will not be tolerated. Violation of this rule may result in termination.
- Permission must be obtained from your *supervisor* before bringing cameras, recording equipment, televisions, media players or radios to work.
- Circulating distributing or posting written material without permission is prohibited.
- Soliciting for the sale of products or services (other than company products or services is prohibited).

Substance Abuse:

- Clear decision making and good judgment continue to play a vital safety role in our day-to-day routine work schedules. Impaired thinking and decision-making caused by the consumption of alcohol and/or drugs are not only a direct safety hazard to the individual under the influence, but also to those employees working around that individual. Reference the IIPP for suspected substance abuse testing procedures

Safety Responsibilities

Company Employees

- Safety is the responsibility of each employee. Employees are responsible for following the guidelines in this handbook and the company's IIPP. It is the desire of management to protect the employees from accidental injury and damage to health while working for our company. This matter must receive top priority at all levels.
- Safety is the functional responsibility of each supervisor to demand safe operations. It is the supervisor's obligation to teach employees to work safely.
- Notwithstanding the responsibilities of the supervisors, each employee must be responsible for their own safety and wellbeing on and off the job site.

Safety Meetings

- A daily "tailgate" safety meeting shall be conducted covering the immediate daily safety concerns. Supervisors will complete a JHA / PTP form and review hazards pre-task with the employees.
- The crew will review topics relevant to the tasks at hand. These topics will be recorded on the daily sign in sheet.
- The crew will perform a guided stretch and flex warm up.

Pre-Job Safety Inspections

- Prior to the start of a project, efforts will be made to identify potential hazards. All supervisors are required to conduct a pre-job safety inspection, and document this inspection results on the Safety Inspection Checklist. Those hazards which can be eliminated will be eliminated. Employees shall be informed of the hazards which remain and be given instructions to safeguard against them. If an incident occurs on the job, a second inspection will be completed.

Reporting Unsafe Acts & Conditions

- Unsafe acts should be corrected immediately. If an employee observes another employee committing an unsafe act he/she shall immediately stop that employee's action and request that

the employee perform that act in a safe manner. If the employee that is committing the unsafe act refuses to acknowledge the request, the correcting employee shall immediately report it to their supervisor.

- Unsafe conditions should be corrected immediately if possible. Conditions that cannot be corrected immediately should be isolated by temporary protective measures, such as safety barriers or danger tape. The condition should be reported to the supervisor and the company safety representative.

Hazard Communication and Hazardous Materials

- Many of our customer's facilities utilize chemicals and substances considered to be hazardous. Safety Data Sheets (SDS's) describe the physical and health hazard information on chemicals that may be encountered.
- SDS's are available on site, see HazCom program.

First Aid and Medical Control

- Each Job shall have a first aid kit. The first aid kit shall be kept in sanitary, useable condition. First aid kits, located in field job boxes, are periodically inspected to ensure that needed items are replaced. Supervisors are responsible for the inspection of first aid kits in all facilities.
- The telephone numbers of emergency services shall be posted at each job site.

Accident Prevention and Reporting

- The company's goal is to complete all projects accident free. If the events and circumstances that lead to accidents can be determined and eliminated, this goal can be realized. This necessitates the need to investigate accidents when they occur and to determine their root cause.
- Any employee who is involved in or observes an incident shall immediately report that incident to the supervisor. Minor incidents or near misses should be reported no matter how insignificant the incident may seem.
- Refer to the following procedures on the proper method of reporting and documenting an incident should one occur.

Incident Procedures

Should any employee become involved in an incident (injury, non-injury accident, property damage, fire, spill, near miss etc.) the following steps must occur to ensure proper treatment:

- If the incident resulted in an injury, determine extent, and begin first aid/CPR.
- If an ambulance is required, immediately call **911** and/or the site's emergency response team or equivalent.
- Once care is provided and an ambulance is summoned, or if an ambulance is not required, immediately inform the following individuals of the incident. They can either be reached directly on their company mobile phones, or through the office main line.
 - Regional Safety Manager
 - Operations Manager
 - General Superintendent
 - Personnel Director
- Do not allow an injured employee to drive themselves to a medical facility
- If the incident does not result in an injury, move on to documentation of the incident.

Documentation

Documentation and paperwork are a critical part of incident/accident reporting. Employees are expected to cooperate with the investigation and fill out the required paperwork as outlined in the IIPP.

- Any injury, non-injury accident, property damage, fire, spill or near miss, etc. will be investigated by the foreman and an **Incident Report** form will be completed.
- Any injury, or extensive damage will also be investigated by the superintendent, and an **Incident / Accident Report Form** will be completed and reviewed by operations staff.

Ergonomics and Material Handling

Your back supports the weight of your body, when you move loads your back carries even more weight. If you do not work within your body's natural limits, your back cannot safely support your body and the load. Spinal pressure created by extra weight, ends up on your lower back. Many back injuries can be prevented if you apply the following steps.

General tips

- Exercise and stretch on a regular basis to maintain good physical condition
- Avoid sitting for long periods.

Lifting tips

- Keep your legs apart for good balance and bend your knees and hips, not your waist.
- Your back should stay aligned with your ears, shoulders and hips.
- Take a deep breath, tighten your stomach muscles, and carry the load close to your body
- Lift using your leg, and arm muscles to lessen the force on the load to your back.

Carrying tips

- Know where you are going, so you do not have to carry the load while looking for a place to set it.
- Make sure you have a clear path, so you carry the load the shortest distance
- Hold the load close to lessen the pressure on your back.

Turning Tips

- Tighten your stomach muscles before you lift to support your back while you turn
- Keep the load in front of you and step in the direction of the turn, rather than twist.

Reaching Tips

- Set up your work area for reaches you do every day
- Slide the load to the edge, towards your body, down to waist level.

Carrying Loads

- Keep in mind possible hazards to others when carrying loads
- Keep the front end of extended loads (such as conduit, pipe, ladders, or lumber) up and under control to avoid striking objects or other employees.
- Do not obstruct your vision with the load
- When carrying a load with other, all involved should agree who is leading
- Do not pass or throw materials through manholes or other small openings without positioning a spotter on the other side to ensure everyone is clear.

Slip, Trip and Fall Prevention

Slips and falls can be the source of very serious injuries. Following these guidelines can help to eliminate those injuries.

- Walk, do not run
- Practice good housekeeping
- Wear shoes with appropriate soles for the floor surface you work on
- Stay alert for slipping and tripping hazards
- Be careful when walking on ice, snow, or slippery surfaces
- Follow safety rules especially for ladders and scaffolding
- Remove, repair, or report unsafe conditions that might cause someone to fall
- Be especially cautious when climbing or descending stairs
- Know how to fall and have a safer less painful landing
- Practice safe material handling
- Use special equipment when necessary.

Housekeeping

- Housekeeping is an integral part of safety. Work areas must be kept neat and orderly. A Work area check is to be made at the beginning of the day to make sure no hazards exist from poor housekeeping practices.
- Personnel are required to keep the area in which they are working in a neat and orderly manner at all times, free of any tripping hazards.
- All scrap, waste materials, and refuse should be placed in appropriate containers as the work progresses.
- Do not dump oil, fuel, or other hazardous liquids on the ground, in dumpsters, or in ditches. Contact the supervisor for proper disposal of these materials.
- Spills or oil spots should be cleaned immediately. In the event the condition cannot be corrected immediately place temporary safeguards such as a safety barrier to block off the area. Notify your supervisor immediately.

Personal Protective Equipment (PPE)

Personal protective equipment is available and often required to provide you additional safety in your daily work. You will be provided training on the selection of, use, and care of all company provided PPE, and retrained as necessary. Mandatory PPE is available through the company or at the job site at no cost to the employee. Consult your supervisor for additional information.

- All employees must wear shirts and pants that cover the shoulders, arms and legs at all times. Complete arm and leg protection will be required in most areas. This is considered required attire to report to work, and not a component of PPE
- Special safety equipment is required when handling certain chemicals, and during certain work activities (sandblasting, torch cutting, power washing, etc.). A hazard assessment of the job task will be performed prior to the start of work in order to select the proper PPE. Consult your supervisor when regarding specific equipment requirements.
- PPE must be maintained in a clean and sanitary condition.
- All PPE must be of the proper fit and size for the worker who is utilizing it.
- Any PPE found to be defective must be removed from service and replaced immediately.

Hand Protection

- Remember, while hand gloves can be a safety asset in many work areas, they can just as quickly become a safety hazard. When working around rotating & operating equipment, use good judgment.
- Plastic or rubber-coated gloves are required when handling solvent, acids, or chemically treated materials. Review MSDS's on the material involved to obtain the proper equipment.
- Leather gloves should be worn when handling sharp objects, during demolition, or when working around items that could burn your skin.

Foot Protection

Foot protection is an important part of your proper work attire. Tennis shoes are not allowed on job sites. All personnel working on company job sites must wear shoes which meet the following criteria.

- Sole- Must be constructed of oil resistant non-slip material, and shall be capable of providing a substantial amount of puncture resistance.
- Heel-must not be less than .5 inches in height. High heels are not allowed.
- Upper-The upper must be constructed of leather or an equivalent material that resists liquid penetration while providing puncture, impact, and thermal protection. Safety toes (steel or composite) are required unless specifically exempted.

Hard Hats

- Osha specified ANSI Z-89.1 compliant hard hats that are in good condition are required in all fieldwork areas, roads, and in the shop during work hours

Eye Protection

- Safety glasses with side shields are required in all work areas, except those working in offices or riding in enclosed vehicles. Glasses must be marked with ANSI (Z87.1) approval.
- Burning goggles with no less than a No.3 density lens with plastic cover plates on each side are required for all welding and burning.
- Coverall goggles, and/or full face, side shields, are required for most power chipping, grinding and sawing.
- Full face shields are required when handling molten materials.

Hearing Protection

- Approved hearing protection is required when entering areas where operating equipment generates noise which exceeds 85dBA.
- Be aware of posted signs on the jobsite requiring hearing protection. Your supervisor will help to indicate these areas.
- Impact tools, grinders, saws and other noise producing tools will usually require hearing protection.

Respiratory protection

- Respiratory equipment can be effective in protecting you from inhalation of hazardous amounts of airborne contaminants. The proper respiratory equipment must be worn to protect you from potential exposure to harmful concentrations of dust, fumes, mists, vapors, and or gasses that may be encountered on the job.
- When such hazards cannot be controlled at their source, respiratory equipment must be worn, and particularly while performing the following operation:
 - Handling/exposure to toxic, corrosive, and or hazardous materials that involve dust, vapors, fumes, fibers, or mists.
 - Handling clay, concrete or other finely powdered materials
 - Entering any space where respiratory equipment is specified as being required.
 - Welding, cutting. Especially in confined spaces.
- Reference the company's **Respiratory Protection Program** for a complete list of related policies and guidelines.

Safety Harnesses

- Personnel who are required to work in elevated areas can perform their job safely and efficiently with the proper use of a safety harness. The company's **Fall Protection Program** shall be referenced anytime an employee may be potentially exposed to a fall from a height of 6' or greater.

Environmental Considerations

- Work conditions that have the potential to result in workers having elevated core body temperatures can result in injuries and even fatalities. All employees shall be familiar with the company's Heat Illness Prevention Program and thoroughly follow all of its contained guidelines.
- Hypothermia, which is a reduced core body temperature, is of significant concern as well. Employees shall wear proper attire to assure that they maintain adequate warmth and remain dry in inclement weather. Extra observations should be made by all to ensure no members of the crew are becoming hypothermic.
- Work that must take place in the rain shall have extra consideration placed on avoiding slippery conditions, the possibility of ice generation, and any additional needed PPE.

Emergency response for fires

- When entering a jobsite, and prior to conducting and scheduled work, obtain all information regarding procedures for reporting fires and emergencies. Make note of all critical phone numbers associated with the reporting procedure.

Reporting

- If you notice a fire immediately notify the people around you and your supervisor. After summoning assistance and whenever possible personnel should attempt to take steps to extinguish small controllable fires whenever possible, to mitigate damage to the work area.

Prevention and coordination

- Employees shall be informed of escape procedures during orientation at each job site. The supervisor will be responsible for establishing a meeting area, and accounting for all employees during an emergency. He shall also be responsible for coordination of rescue/medical efforts,
- The worksite will be prepared and maintained in a manner to facilitate emergency response to fires.
- A safe and unobstructed access to all fire-fighting and safety equipment will be maintained at all times.
- All fire extinguishing equipment shall be inspected periodically, and kept in proper working condition. Defective equipment and supplies shall be immediately replaced.

Fire prevention

- Hot work permits may be required at specific job sites. Ask your supervisor regarding specific hot work restrictions.

Extinguishers

- Employees should familiarize themselves with the operation and location of fire extinguishers in their working areas. Those extinguishers should be conspicuous and easily accessible in case of an emergency. Prompt action and intelligent use of this equipment can be an effective means of keeping a fire from spreading until additional control measures are brought into action. Employees should be familiar with the type of extinguisher provided. Extinguishers must be replaced promptly after use.

Combustibles (“Burning Materials”)

- Combustible materials must be kept in a proper container away from steam lines, radiators, heaters, and hot process or service lines. All exposed combustible materials below welding and burning areas must be removed to a safe location or covered by a fire blanket. A fire watch must take place after a welding or cutting operation.

Open Hole Protection

- All hole openings through floors, decking, or walls less than 42 inches above the floor at all elevations must have properly identified barricades and/or coverings.
- Covers must be secured so that they cannot slip and must extend beyond the edge of the hole.
- Covers may be fabricated with $\frac{3}{4}$ " plywood, provided one dimension of the hole opening is less than 18". Otherwise, 2" lumber is required.

Protective Barricades and/or Guardrails

- If it is necessary to remove railings, barricades or guardrails, they must be replaced as soon as possible. Fall protection equipment must be used during the removal of these materials
- Barricades are required around all excavations, holes, openings in floors, elevated platforms, or whenever necessary to prevent falls.
- Barricades must be 42" high, with a mid-rail and a minimum 4" tall toe board if work is taking place below.
- Barricades must support 200lbs of force in any direction.
- If possible, erect barricades before holes are created.
- An access gate should be provided when possible.

Safety Signs

- Legible signs should be placed on barricade stands, posts, doorway entrances, or other suitable stanchions before work starts and removed promptly upon completion.

Hand Tool Safety

Tools should only be used for the purpose for which they are designed. Many serious incidents have resulted from the improper use of hand tools. Many of those injuries could have been prevented if the following rules were observed. Use the right tool instead of trying to make the wrong tool work. Each tool has a specific purpose, remember that your hands are tools too.

- Keep control of yourself, the tool, and the job. When you apply force with a tool, remember that it may slip, break, or just suddenly complete its job. Watch your hand and your balance to avoid injury. Do not modify tools, or re-use tools that have been modified.
- Use proper PPE. Select your gear wisely and use it as it supposed to be used. Safety Glasses as well as hearing protection are necessary in many cases. Is your clothing sufficient for the materials you are working with? Gloves offer protection but may also present new hazards. Do not use tools you are not trained to use. Never use “cheaters” to increase capacity.

Care

- Take care of your tools. Store them where they will not become damaged, store them where they will not present a hazard.
- Check your tools for defects, wear, and or damage- and replace or repair before using. Defective tools must be removed from service.
- All tools shall only be used if in a safe condition.

Supervision

- As a supervisor, be certain that your employees are trained. Watch their work. Ask about their work and take an interest in helping to discover the safest way to complete the job. This will help to prevent accidents.

Portable Power Tool Safety

Power tools present a serious potential for injury, but can be used safely if the proper principles are practiced. In addition to all the guidelines for hand tools above, implement the following:

- Wear proper, task specific PPE
- Make sure all guards are in place and safety shut off pressure activated switches are operating before use. Guards must never be removed unless explicitly permitted by the manufacturer.
- Before using and power tool, make sure the material you are working on is properly secured.
- Do not connect air or power unless the operating switch is turned off
- Select the proper type and size of tool for the job
- Cords and hoses are tripping hazards, route them to minimize interference in walkways, overhead is preferable.
- Watch the tool while you are operating it. Make sure it is doing what you want it to do.
- Disconnect power when changing accessories.
- Always use a GFCI (Ground Fault Circuit Interrupter).
- For electrical tools, check the cord for breaks, if broken red tag and send in for repairs
- Disconnect the power supply, and properly store your tools when you leave the jobsite.

Ladders

- Ladders must be inspected by a qualified person and approved before being put into service, each user must inspect ladders visually before use.
- Any ladder that is found to be defective shall be tagged and removed from service or destroyed and disposed of.
- All ladders used by company employees shall meet OSHA/ANSI specifications for their intended use.
- Ladder load limits must be known and never exceeded.
- Ladders shall only be used in a manner consistent with their manufacturer intended design.
- Never use painted ladders
- If it is necessary to place a ladder in a doorway, barricade the door and/or post warning signs.

- While ascending or descending a ladder, carry nothing that will prevent holding on with both hands. Use a hand line, if necessary to raise and lower materials.
- Always face the ladder. Fall protection is required if it is necessary to work backwards from a ladder.
- Place extension ladders so that the base is out $\frac{1}{4}$ the vertical distance from the ground to the object against which the ladder is leaning (4:1 ratio).
- Straight and extension ladders must be properly tied off.
- Top of the ladder must extend 3 feet past the supporting object when being used to access an elevated work area
- After ladder has been raised to desired height, the latches must be put into place, and the rope secured, before use.
- Extension ladder sections are not to be used separately.
- Stepladders should never be used as a straight ladder. All 4 feet of a step ladder must be firmly on the ground.
- Using a ladder at the edge of an elevated work area will require fall protection.

Scaffolding

- Personnel must be properly tied off on scaffold platforms that are not equipped with proper hand rails or complete decking.
- No one is allowed to ride on a rolling scaffold while it is being moved.
- Scaffold handrails are not to be climbed, use ladders for access.
- All scaffolds must be erected level and plumb, on a firm base.
- Scaffolds that are three times higher than the smallest base dimension shall be secured to the building at the second life, and every list thereafter.
- Where space permits, all scaffolds must be equipped with standard 42" high guardrails, mid-rails, and scaffold decking.
- Use toe-boards if area below is being utilized by personnel.
- No adjusting or leveling screws can be used on rolling scaffolds.
- Never exceed safe working loads on scaffolds.
- Rolling scaffolds shall only be used on smooth level surfaces.
- Do not alter scaffold framework with welds or cuts
- Parts from different scaffold types are no interchangeable.
- Swing stages must be approved by a qualified person before use. Safety harnesses must be worn while working on the swing stage.
- An independent lifeline must be provided to each swing stage worker.
- Scaffolds must be inspected daily prior to use.

Material Hoists and Man-lifts

- May be operated by trained and authorized personnel only
- Material hoists are not to be used for transporting personnel
- The weight of the material and the capacity of the hoist must not be exceeded. Material must be positioned so that it cannot shift.
- Keep all body parts away from pinch points
- Man-lifts must have complete handrails
- Man-lifts will only be used on level surfaces
- Man-lifts and bucket trucks are not to be used as cranes
- Safety harnesses will be worn at all times while working from a man-lift.

Forklifts and Industrial Truck Safety

- Only drivers trained in safe operation will be permitted to operate such vehicles.
- Forklift training shall include formal instruction, practical training by a qualified instructor and the ongoing workplace evaluation of operators by supervisors.
- Refresher training will be provided with any new equipment, unique site changes, or when needed as a remedial measure. At minimum, all operators will be re-evaluated every 3 years.

- Drivers shall check the vehicle at the beginning of every shift, anything found amiss should be corrected by the driver or reported immediately to the supervisor. The keys should be removed from any truck found unsafe. A DO NOT OPERATE sign shall be posted on the vehicle's steering wheel until the repairs have been completed.
- Vehicles shall not exceed a safe speed.
- No riders on forklifts.
- Forklifts should not be used in place of a scaffold, man-lift or ladder to lift people, however forklifts with a proper working platform are acceptable.
- When leaving vehicle unattended power shall be shut off, brakes set and mast brought to a vertical position, forks left in down position.
- Trailers must be blocked and have brakes set before driving forklift off.
- When left on an incline, wheels must be blocked.
- Operators shall face one direction when possible, and not move a vehicle until certain that all persons are clear.
- Employees shall not ride on the forks.
- Forks should be carried as low as possible.
- Use extreme care with tilting loads.
- All forklifts shall be equipped with backup alarms.

Entering Tanks, Vessels or Confined Spaces

- Entering confined spaces is a high-risk job which requires specific procedures to be followed. DO NOT enter confined spaces without notifying your supervisor, and without a hole-watch in place. Many confined spaces will require permitting and air monitoring to make the job safe. Before attempting any work of this kind, discuss with your supervisor.

Communication

- It is necessary to maintain open communication with customer's representatives and with the work crew. Some of the worst accidents have occurred due to a lack of communication between trades on the work site. Often these accidents occur due to unsafe practices, or work on the wrong system. Always be sure that you are working on the correct system, never depend on vague descriptions of the system or material that you are working on. If you have any doubt, contact your supervisor or the client representative onsite. Always notify operations of any changes to insure you are working in the right location. No job must be completed so quickly that it prevents you from double-checking when in doubt.

General Electrical Safety

- Always assume electrical lines are energized
- Always test your voltage meter against a live conduit before assuming it is working correctly.
- Never work on a line someone else tells you is de-energized without testing it yourself.
- Always "lock and tag" whichever circuit you are working on when possible.
- Never remove another worker's lock, or energize a circuit marked "DO NOT OPERATE"
- Refer to the company's **Control of Hazardous Energy Plan**.

Lock Out/ Tag Out Procedure

- Employees should always follow the Client's Lock-Out/Tag-Out procedure when working at a customer's facility. Refer to the company's **Control of Hazardous Energy Plan**

End of Document

(Bayview Code of Safe Work Practices)