



2017 INJURY AND ILLNESS PREVENTION PROGRAM

Includes: Code of Safe Conduct | Heat Illness Prevention Program

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APPENDIX A: CONTENTS OF THE SAFTY MANUAL



Sunbelt Controls' mission is to provide our customers with innovative solutions for their building enterprise systems. Our employees provide these innovative solutions and, therefore, are our most valuable resource. Safety is an integral part of ensuring our mission is achieved successfully.

Our safety program has the safety and health of our employees as its core.

Our Goal: An Injury Free Workplace

We believe that with proper training and attention, all accidents can be prevented. Our customers, managers, and employees are each responsible accountable for providing a safe work environment, while promoting safety as an integral value.

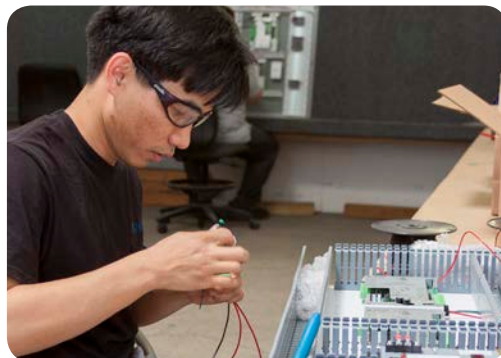
To achieve our safety goals, we author site specific safety plans, train every employee in safe practices, and meet or exceed all state and federal environmental, health, and safety regulations. Employees are oriented, trained, and counseled on how to perform their jobs safely, efficiently, and effectively.

A handwritten signature in black ink, appearing to read "John W. Hansen".

John W. Hansen
President, Chief Operating Officer

A handwritten signature in black ink, appearing to read "Kenneth B. Westphal".

Kenneth B. Westphal
President, Chief Executive Officer



Innovative Solutions for Building Enterprise Systems

1.0 Introduction

Sunbelt Controls will:

- Protect the health and safety of our employees, co-workers, and the general public
- Provide information to all concerned about health and safety hazards
- Identify and correct health and safety hazards and encourage personnel at all levels to report and mitigate hazards

Per California Code of Regulations, Title 8, Section 3203

Sunbelt has adopted an Injury and Illness Prevention Program (IIPP) which describes specific requirements for program responsibility, compliance, communication, hazard assessment, accident/exposure investigations, hazard correction, training, and recordkeeping.

The IIPP is not intended to replace, but to supplement, the existing "Sunbelt Health and Safety Policy Manual" and the "Code of Safe Practices."

Requirements outlined in this manual are mandated by regulation where the word "shall" is used and are advisory in nature where the word "should" is used.

1.1 Posting Requirements/Package Contents

The following items must be present at every job worksite that Sunbelt performs work at:

- **This IIPP Package (Printed)**
- **SDS Book (Printed)**
- **Jobsite Audits**
- **Jobsite Posters**

2.0 Responsibilities

Everyone, beginning with the senior officer of the company, and spanning to each individual performing work, is responsible for safety. Management is responsible for providing resources and safe work environments.

Leaders of work activities are responsible for ensuring employees have the right tools, equipment, and are qualified to perform their work. Employees are accountable for using safe work practices and notifying those leaders of all unsafe conditions or acts of others so corrections can be made.

Sunbelt Controls expects appropriate actions to be taken when failures occur. Management is expected to identify the causal factors of failures, take corrective actions, and to communicate changes to employees and leaders. Leaders are accountable for the implementation of preventative measures. Each employee is expected to endorse change.

The expectation for each employee is to work each day without incident or injury, and to return home safely. Specific responsibilities and accountabilities are listed in various sections of this manual.

2.1 Program Administrator

The ultimate responsibility for Sunbelt's IIPP rests with the President of the Corporation. The following Program Administer is responsible for this program's implementation:

Corporate Safety Director
6446 East Washington Boulevard, Commerce, CA 90040
Tel (818) 244-6571

Program Administrator responsibilities include:

- Advising senior management on safety and health issues
- Working with senior management to develop safety and health guidelines and policies
- Preparing and distributing Sunbelt's guidelines, policies, and procedures on safety and health issues
- Maintaining current information on local, state, and federal safety and health regulations
- Serving as liaison with governmental agencies
- Planning, organizing, and coordinating safety training
- Developing a code of safe practices and inspection guidelines
- Arranging for safety and health inspections and follow up to insure necessary corrective action is completed
- Establishing, conducting, and maintaining an injury/illness/accident report and investigation procedure
- Coordinating with Sunbelt's Department of Risk Management on maintaining injury and illness records (OSHA 300 Log)
- Reviewing injury and illness trends
- Establishing a system for maintaining the records of inspection, hazard abatement, and training

2.2 Project Managers

Project Managers ensure that individuals under their management have the following:

- The authority to implement appropriate health and safety policies, practices, and programs
- Adequate funding for health and safety policies, practices, and programs
- Are in compliance with Sunbelt's health and safety policies, practices, and programs

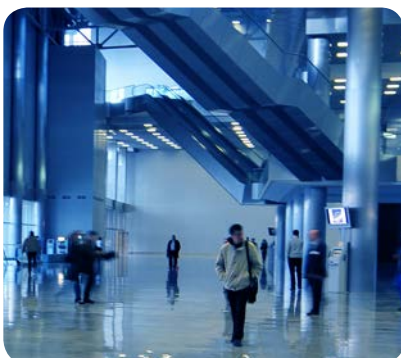
2.3 Supervisors

The first line of supervision is critical to the success of any safety program. These leaders are the eyes and ears of both the employees and the company management. Their leadership by example is crucial. Supervisors/Foremen/General Foremen are responsible for implementing the IIPP plan. This includes the following:

- Ensuring that workplaces and equipment are safe, well maintained, and in compliance with external agency regulations and Sunbelt's policies, programs, and practices
- Ensuring that workplace safety and health practices and procedures are clearly communicated and understood by employees through training programs
- Enforcing health and safety rules fairly and uniformly relating to job performance
- Evaluating employees on compliance with safe work practices
- Acknowledging employees who make a significant contribution to maintenance of a safe workplace and discipline of employees who fail to follow safe work practices
- Encouraging employees to report workplace hazards without fear of reprisals
- Ensuring that periodic, scheduled workplace inspections are conducted and that identified health and safety deficiencies are corrected in a timely fashion
- Ensuring that workplace incidents (injuries, exposures, or illnesses) are reported, investigated, and that corrective actions are taken promptly
- Ensuring that inspections/investigations and employee health and safety records are forwarded to the Safety Department for record retention
- Conduct "Tailgate" safety meetings at least weekly to all construction personnel and monthly to all service personnel, as well as ensuring that topics are timely and relevant
- Determining what level of qualifications their employees have and what additional safety training will be required

Ensure that each jobsite has hard copies of:

- This IIPP program
- SDS Book
- Heat Illness Prevention Program
- Code of Safe Conduct



2.4 Employees

- Keeping themselves informed of conditions affecting their health and safety
- Participating in training programs
- Adhering to healthy and safe practices in their workplace per Sunbelt's Safety Code of Conduct
- Promptly reporting to their supervisors all potential hazards in the workplace and workplace incidents (injuries, exposures, or illnesses)
- Not operating any equipment for which they have not had training
- Not operating any equipment, such as Scissor Lifts, Boom Lifts, Powder Actuated Devices (i.e., Hilti), Forklifts, without a valid certification card from Sunbelt in their possession

2.5 Environmental Health & Safety Department

- Provide training, technical assistance, and coaching in regards to safety for all levels of personnel
- Assist supervisors and employees in conducting workplace hazard assessments to identify, evaluate, and correct hazards
- Review, update, and evaluate the overall effectiveness of the IIPP
- Shall perform site audits on jobsites and report findings to management
- Assist in conducting incident investigations and assigning corrective actions

3.0 Communications

Sunbelt believes in 360 degree feedback in regards to safety. To accomplish this we utilize several methods. These include:

- Training in various safety topics
- Weekly "Tailgate" safety meetings for all construction crews
- Monthly "Tailgate" safety meetings for all service personnel
- Safety suggestions can be made via anonymous email (Safety@accoes.com)
- Newsletters/safety topics from Sunbelt at least quarterly
- Sunbelt Health and Safety Policy Manual
- Safety Leadership Team Meetings (i.e., Safety Committee Meetings)

4.0 Compliance

Sunbelt Controls shall ensure that employees comply with safe and healthy work practices and have adequate safety equipment available to its employees.

- Employees are recognized for following safe and healthful work practices
- Employees are trained and retrained, as necessary or as required
- New employees are to be evaluated for their safety performance
- Periodic audits by Supervisors/Foremen/General Foremen/Safety Personnel - Each construction site is required to have a documented inspection on a weekly basis
- An anti-reprisal policy for employees reporting safety and health concerns is enforced
 - Employees will not be discharged or discriminated against in any manner for bona fide reporting of health and safety hazards to Sunbelt or to appropriate governmental agencies. Supervisors shall inform employees of this policy and encourage reporting of workplace hazards to management.
- The Safety Disciplinary Policy for Sunbelt Controls ranges from a verbal warning to termination.
 - For minor safety infractions, a verbal warning will be issued to the affected employee.
 - Written warnings will be issued for repeat of minor offenses and serious violations.
 - For employees that receive 2 written warnings or a violation that is very serious, the employee will be suspended for 1 to 30 days.
 - For violations that could result in a debilitating injury or a fatality, or willful violations, the employee can be terminated.



5.0 Hazard Analysis

Sunbelt is committed to correct unsafe or unhealthy work conditions in a timely manner based on the potential severity of the hazards.

5.1 Job Hazard Analysis (JHA)

The Job Hazard Analysis (JHA) is a method of looking at an upcoming event or task and then breaking it down into smaller portions. Each portion is then analyzed for risk and a plan is developed to minimize the risk. A good supervisor already does this mentally; however, this is now put on paper.

The following tasks shall require a JHA to be completed 3 days prior to construction work and submitted to the Safety Department for review:

- Crane Work
- Excavations greater than 5 Feet
- Confined Spaces
- Respirator Work
- Working around Extremely Hazardous Chemicals
- Working within Shafts Involving 3 or More Floors
- Roof Work Involving Fall Protection Issues
- Electrical Hot Work
- Welding and Cutting Operations Around Combustibles
- Any Non-routine Tasks not Mentioned Above

The Foreman, Supervisor, or Superintendent in charge of the job is responsible to perform the JHA and to review the JHA with all affected parties prior to the commencement of the work. Each individual who reviews the JHA shall sign it, stating that they understand the JHA and agree to follow it.

5.2 Site Safety Inspections (SSI) for Service

Sunbelt Controls has elected to put into place a system of hazard recognition and correction for the service/maintenance work that is performed. This process includes the following:

- Inspecting customer locations for hazards to workers
- Documenting the hazards and communicating them to employees
- Putting in place safe solutions or practices to protect our workers
- Working closely with our customers to make them aware of discovered safety hazards and assisting them with solution

5.3 Site Audits

Each site shall be audited by the Supervisor/Foreman/General Foreman on an at least weekly basis.

This audit is to be documented and any corrections noted.

Safety Department personnel will also audit sites periodically to ensure compliance.

5.4 Hazard Correction

Sunbelt is committed to correct unsafe or unhealthy work conditions 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, all exposed personnel will be removed from the area, except those necessary to correct the condition
- Employees necessary to correct the hazardous condition shall be provided with necessary safeguards

5.5 Mitigation Escalation Path

When a safety issue is outside of our direct control (e.g., another contractor/general contractor or client issue), it is our responsibility to those we work around to help remedy the situation.

1. Contact your direct Supervisor/Foreman at the jobsite
2. Supervisor/Foreman is to contact General Contractor
3. Contact Sunbelt's Safety Department & General Foreman
4. Sunbelt's Safety Department & General Foreman to discuss options and mitigation plan together

NOTE: The safety department can always be contacted by phone

- **(888) 786-2332 Northern Region**
- **(877) 786-2332 Southern Region**

6.0 Safety and Health Training

Training shall be provided to all employees.

The Supervisor is responsible for determining job-specific or task-specific training required for their crew:

- When the IIPP is first established
- When new employees are hired (orientation)
- When existing employees are assigned to the site (site-specific orientation)
- When employees are given new job assignments for which training has not previously been received
- Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard
- Whenever the employer is made aware of a new or previously unrecognized hazard

Typical training topics provided by the safety department include:

- Aerial Lift
- Asbestos / Lead Awareness
- Bloodborne Pathogens
- Confined Spaces
- CPR / First Aid / AED
- Electrical Safety – NFPA 70e
- Fall Protection
- Fire Safety
- Flagger Training
- Forklift
- Heat Illness
- Lockout / Tagout
- Ladder Safety
- Powder Actuated Tools (Hilti)
- Power Tools
- Reach Lift
- Respiratory Protection
- Rigging/Signaling
- Scaffold Awareness
- Trench Safety
- Welding/Cutting Safety

7.0 Incident Investigation

In order to prevent accidents/incidents from recurring, it is imperative that we investigate incidents when they occur. In this way, preventive measures can be implemented to stop the incident from happening again or happening somewhere else.

The purpose of the investigation is NOT to put blame on any individual or organization.

All first aid injuries are to be investigated at the site level with the Foreman and General Foreman. Results are to be forwarded to the safety department and the superintendent of the affected trade.

All recordable injuries are to be jointly investigated by the Supervisor, Foreman, and General Foreman with the Superintendent and Safety Manager (Accident Review Board). Results forwarded to safety department.

8.0 Records

The following types of records are stored with the Safety Department for three years:

- Employee Injury Reports
- Log of Work Related Injury & Illness
- OSHA Citations
- Training Matrix (Cal/OSHA 300, 301, Summary)
- Property Damage Reports
- Job Safety Training Records
- Accident Investigation Reports and Investigations
- Employer's Report of Injury
- Vehicle Accident Reports
- Job Hazard Analysis and Investigations
- Facility Hazard Inspections
- Workplace Hazard Correction

9.0 Code of Safe Practices

Working conditions may change from day to day, particularly on location. To prevent accidents, you need to be aware of your work environment and the equipment being used. Safety Meetings will be conducted frequently to brief you on potentially hazardous situations as they arise.

9.1 General Safety

Hazards: Exhaustion/Fatigue

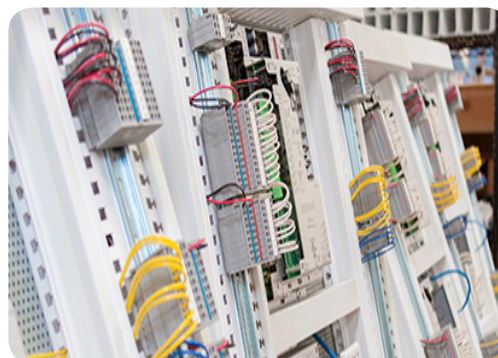
- Report to work rested and physically fit to perform your job.

Hazards: Miscellaneous

- When entering different work areas, familiarize yourself with current activities and look for potential hazards.
- Be aware of work going on around you - Keep clear of suspended loads, traffic areas, etc.
- Report any unsafe conditions or equipment to your supervisor.
- Keep horseplay and roughhousing away from the job - Practical jokes often become painful injuries.
- Preventing accidents depends mostly on you - THINK SAFETY!
- Rely on your supervisor's knowledge and experience if you do not understand any rule or work operation.
- Intoxicants and non-prescribed drugs are NOT PERMITTED and result in disciplinary action.
- Report any prescription drugs you take that may influence your performance.
- Keep your mind on your job, and your temper under control.
- Report any injuries immediately - even small cuts can become seriously infected.
- Not reporting injuries can affect potential benefits.

Hazards: Slips, Trips, and Falls

- Be sure your footing is well supported before stepping. Watch out for overhanging planks, slippery spots, loose objects, etc.
- Always have enough light on stairs, aisles, basements, work areas, etc.
- Place barricades and signs to warn of traffic, overhead dangers, etc.
 - Have warning lights and flagmen, if necessary.
- Always be seated when riding in authorized vehicles, unless they are designed for standing.



9.2 Personal Protective Equipment

Hazards: Getting Snagged or Hung-up

- Wear clothing suitable for weather and your work - Torn or loose clothing, cuffs, and neckwear are hazardous. Jewelry (rings, bracelets, neck chains, etc.) should not be worn.

Hazards: Eye Injuries

- Eye protection must be worn at all times while on the jobsite.
- Face shields or goggles will be worn when operating tools overhead, using a grinder or wire wheel.

Hazards: Lacerations, Puncture Wounds, Contusions, Burns, and Dermatitis

- Wear approved safety footwear that is in good condition and suitable for your trade.
- Gloves will be worn when using any tool or handling of materials, unless wearing gloves increases the hazard. Replace gloves when they are worn out.
- Wear a hard hat at all times while working, visitors included, to prevent any such injuries to the head.
- Maintain in good condition any safety equipment issued to you, and report loss or damage, immediately.

Hazards: Inhalation of Toxic Dusts, Mists, Fumes, Vapors, or Gases

- Wear respiratory equipment when required. For example, while spray painting, during welding operations, or anytime one is exposed to toxic dusts or vapors.
- Only wear respiratory equipment after being properly trained, fit tested, and having a doctor's approval.

9.3 Housekeeping

Hazards: Puncture Wounds, Slips, Trips, and Falls

- Avoid shortcuts; use ramps, stairs, walkways, ladders, etc.
- Always maintain a clear pathway into and out of your work area - Clean as you go.
- Plan your logistics.
 - Clear access?
 - Lay down area?
 - What equipment is needed to transport/lift/position material?
- Keep materials orderly - Prevent piles from falling or shifting (tie or support if necessary)
- Shavings, dust, scraps, oil, or grease must not accumulate - Maintain good housekeeping at the site.
- Remove refuse piles as soon as possible.
- Remove or clinch nails in old lumber.
- Clean up oil, grease, and water spills right away.
- Keep loose materials off stairs, walkways, ramps, platforms, etc.
- Do not block aisles, traffic lanes, or fire exits.
- Be sure your footing is well supported before stepping. Watch out for overhanging planks, slippery spots, loose objects, etc.
- Always have enough light on stairs, aisles, basements, work areas, etc.
- Construction grade boots with ankle support shall be worn.

9.4 Trenches/Excavations

California & Nevada: "Call before you dig" Call 811, (800) 227-2600, or visit www.usanorth.org

- Call must be made at least two working days prior to excavation.

California: OSHA Excavation permit must be faxed to local Cal-OSHA office if trench is greater than 5 feet in depth.

Hazards: Falls, Debris Falling into Excavation

- Place fencing or barricades at excavations or floor openings.
- Ladders are required in trenches or excavations greater than 4 feet in depth.
 - All personnel within the excavation must be within 25 feet of a ladder.
- Ladders must be secured in place prior to being used.
- Ladders must extend 3 feet above the landing for easy access.
- Place excavation spoils far enough away to avoid load strain on walls (a minimum of 2 feet).
- Remove surface rocks and debris that may fall into the excavation.

Hazards: Collapse of Trench Wall or Shoring, Getting Crushed

- Properly brace or shore up excavation side walls, if not sloped.
- Competent Person will be responsible for safety involving all excavations operations.
- Do not permit vehicles too close to the edge of the excavation.

Hazards: Striking Utilities (Electric Shock, Drowning, Fire, and Explosion)

- Prior to excavating or working in pre-existing buildings, locate all utilities. Contact Dig-Alert and review as-built drawings.
- Excavation within 2 feet of a utility must be performed by hand.

9.5 Proper Lifting Techniques

Hazards: Back Injuries, Strains, and Sprains

- Bend knees. Keep back nearly straight when lifting. Use your leg muscles, not your back, to do the work.
- Get help with heavy (i.e., over 50 pounds) or bulky materials to avoid dropping load or getting thrown off-balance.
- Have just one person give commands when team-lifting big loads.
- Prior to carrying a load, ensure the path is cleared of all obstructions.
- Use equipment (e.g., pallet jack, cart, or dolly) when necessary to lift and move materials and equipment.

9.6 Operating Machinery

Hazards: Inexperience, Flying Particles, or Getting Snagged

- Only qualified personnel should operate or service power tools, vehicles, and other machinery.
- Before starting machinery, opening valves, switches or similar devices, check safety of workmen.
 - Have all safety guards attached.
- Never adjust or repair machinery while it is in motion - "Lockout/Tagout."
- Operate machinery and vehicles within rated capacities and at safe speeds.
- Report defective power tools or machinery to supervisor, immediately.
- Never point an air hose at anyone or use it to clean clothing; it is extremely dangerous!

9.7 Electrical Safety

Hazards: Electrical Shock

- Consider all wires “live” until checked and locked out. Keep safe distance from “live” electricity.
- Have electrical power tools and equipment properly grounded.
- Always use a GFCI when using any corded power tool or equipment.
- Do not use electrical power tools or equipment in standing water.
- All electrical power tools and extension cords will have rubber insulation.
 - Damaged cords will be repaired or replaced.
- Only qualified personnel should make electrical repairs or installations.
- Do not use metal ladders or metal hats near high-powered electricity.
- Have all cords, leads, and hoses placed to prevent tripping hazards or getting damaged.
 - Ensure all cords are placed away from oil and grease.
- Workers exposed to electrical installations that must remain live due equipment limitations, such as trouble shooting and start up, must follow NFPA 70e guidelines.

9.8 Fire Safety

Hazards: Fires, Explosions, and Burns

- Obey the “No Smoking” signs at all times.
- Know the location and how to use fire-extinguishing equipment.
- Flammable material containers should be clearly labeled and stored in a protected, separate area.
- Flammable materials should only be used in small amounts and in approved metal safety containers.
- Do not refuel a hot or running engine, and clean up spills before starting.
- Store oily wiping rags in covered metal containers or dispose of them safely.
- Never use an air hose for pressure to empty gasoline drums.
- Keep salamanders or other portable heating equipment away from combustible materials.
- Make sure engines in buildings are away from combustibles and exhaust is properly ventilated.

9.9 Ladder/Scaffold Safety

Hazards: Falls

- Ladders are to be inspected before use. If there is any damage, such as cracks, missing rungs, missing rivets, warping, etc., take it out of service immediately.
- Face ladder when climbing. Use three points of contact. Use hand line or material hoist to lift loads.
- Use only sturdy ladders on a firm base. Where possible, angle out base $\frac{1}{4}$ of ladder working length.
- Have ladder reach at least 3 feet above landing for easy access.
 - Secure ladder by tying off at top and bottom.
- Use scaffold with solid footing if safe ladder access is not possible
 - All planking shall be Scaffold Grade as recognized by grading rules for the species of wood used (table in OSHA 1910.28(a)(9)).

- Platform planks shall extend over their end supports not less than 6 inches nor more than 18 inches and be secured from shifting.
- Keep all tools and materials away from edge of scaffolds, platforms, shaft openings, etc.
- Use a minimum of 4 inches high toe-boards where there is a danger of tools, materials, or equipment falling from a scaffold.

9.10 Hand Tool Safety

Hazards: Flying Particles, Lacerations, and Contusions

- Do not use tools with split, broken, or loose handles.
- Have tools with burred or mushroomed heads dressed. Keep cutting tools sharp and stored in containers, not in your pocket.
- Know correct use of hand and power tools before using - Use the right tool for the job!
- Be sure you have clear area behind you before swinging sledgehammer, other tools, or materials

9.11 Welding/Cutting Operations

Hazards: Burns, Flash Burns, Fires, and Explosions

- Welding and cutting operations should be closely supervised - Remove or shield nearby combustibles.
- Keep a fire watch with adequate fire extinguishers during and after "hot work," as job location requires.
- Wear proper eye and face protection when working within the proximity of welding and cutting operations.
- Check hose, fittings, and valves for leaks (use soapy water).
- Keep oily cloths away from oxygen (explosion hazard).
- Always light torches with a torch lighter; never use a match or cigarette.
- Open compressed gas cylinders slowly to avoid valve damage.
- After work, check clothing for hidden hot slag or molten metal - Do not wear oil soaked clothing.

9.12 Operating Vehicles

Employees are not allowed to operate any Sunbelt-owned or rented equipment without specific authorization and training.

This includes:

- Forklift/"Grade- All"
- Scissor Lifts/Manlifts
- Boom Lifts/"JLG"
- Company vehicles

10.0 Heat Illness Prevention Plan (HIPP)

Heat Illness can be very serious and in many cases cause death. As the state gathers more data it appears that it may be the cause of many more deaths than was previously thought.

There are three areas which need to be addressed: Prevention, Recognition, and Treatment/Medical Aid.

10.1 Heat Illness Prevention

Prevention is the easiest, cheapest, and least disruptive path to take. These steps are to be taken whenever the temperature is forecast to be over 80 degrees Fahrenheit, or where work conditions require lots of physical effort which might cause "over heating". This may include time when the weather is cold and workers are wearing heavy coats or layered clothing.

NOTE: All aspects of this program must be in effect at the start of the shift whenever the weather is forecast to be more than 80 degrees.

All jobs sites are to comply with the following:

Water Supplies

Provide access to potable drinking water. Water must be "fresh, pure, and suitably cool" and located as close as practicable to where employees are working, with exceptions when employers can demonstrate infeasibility. Where drinking water is not plumbed or otherwise continuously supplied, it will be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Projects may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow personnel to drink one quart or more per hour. At no time is the water supply allowed to be depleted.

- These sources of water need to be close to where the workers are working. Where water jugs are used, single use cups and trash receptacles shall be provided as required by regulation.
- Workers are to be encouraged to drink lots of water.
- Use buddy system to ensure everyone is consuming enough fluids. (Approximately 1 quart per hour or 4 ounces every 15 minutes).

Shade

Shade shall be provided for workers to use for "preventive cool down" rests. Portable canopies, more permanent structures, or building shade can be used. This shade needs to be near the area that work is being performed.

Rest Periods

Regulations require two rest periods of 10 minutes each in addition to a 30 minutes lunch period. If the conditions dictate other rest periods will be necessary to ensure prevention.

Acclimatization

Workers new to the heat will need time to acclimate to the heat. This would include all workers, if the weather shifts from cool to hot suddenly, new workers, and others which are not accustomed to working in the heat. These workers are tasked part of the day in the sun and heat and part of the day in cooler, less strenuous area or job.

Medications

Workers are to be cautioned against the use of medication, drugs, alcohol, caffeinated or carbonated drinks. All these can accelerate the onset of heat illness. We cannot tell a worker not to take their prescription medication. Instead we ask them to talk to their personal doctors and/or pharmacist about the affect their medicine might have with the heat and then relay that message to us.

Clothing

The wearing of appropriate clothing can be very important to preventing heat illness. Light colored clothing will absorb less heat from the sun than dark colored clothing. Long sleeved shirts will retain sweat, giving it time to evaporate and help cool the body. Workers are to be encouraged to wear light colored clothing with long sleeves.

Personal Protective Equipment

The use of PPE (Personal Protective Equipment) can also accelerate the onset of heat illness. If workers are required to wear PPE which might retain body heat, they will need to be watched closely and need more breaks to recover.

NOTE: For conditions above 95 degrees, the following also applies:

1. Ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
2. Observe employees for alertness and signs or symptoms of heat illness.
3. Remind employees throughout the work shift to drink plenty of water.
4. Employees exposed to high heat conditions are to take 5 minute (minimum) rest breaks every hour.
5. Close supervision of a new employee by a supervisor or designee for the first 14-days of the employee's employment, unless the employee indicates at time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30-days for 4 or more hours per day.

10.2 Heat Illness Training

All workers shall receive specific training on Heat Illness. This is to include:

- Types of Heat Stress
- Causes of Heat Illness
- Heat Illness Prevention
- Medical Treatment and First Aid for Heat Illnesses

10.3 Heat Illness Recognition

Supervision and workers **MUST** be able to recognize heat illness. The earlier in the process that it is recognized, the easier it is to treat and recover. Workers can go from one stage to the next very quickly.

For any concerns, contact your designated Safety Manager and/or Onsite Health & Safety, (866) 998-2750.

Types of Heat Illness (Listed from Minor to Most Severe):

Heat Rash – A skin irritation caused by excessive sweating. Not significant, but a good indicator of things to come.

Heat Cramps – Heat cramps are painful, brief muscular cramps or spasms that occur when the body loses electrolytes during profuse sweating or when inadequate electrolytes are taken into the body. The most common time this will happen is when the body is exercising in a hot environment. Heat cramps usually begin in the arms, legs, or abdomen, and often precede heat exhaustion. Cramping may be delayed and occur hours after the workout. If caught at this stage, treatment is simple and can be done on the job. Rest in a cool location and water will normally take care of the situation within 15 to 30 minutes. Any other heat illness will require professional medical attention.

Heat Syncope (sing-kuh-pee) (a.k.a. Fainting) – Employees who stand for long periods or suddenly get up from a sitting or lying position when working in the heat may experience sudden dizziness, light-headedness, and fainting.

Heat Exhaustion – This is the point where the body temperature starts to lose its cooling capacity. The list of symptoms is long - heavy sweating, painful muscle cramps, extreme weakness, nausea, dizziness, and headache. Body temperature may be high, but not always. Fainting, fast or weak pulse, fast and shallow breathing are also symptoms. You will observe some and possibly all of the above symptoms.

Heat Stroke – This can be fatal unless medical treatment is provided promptly. The following are outward signs and symptoms of someone suffering from heat stroke. The body has stopped sweating. The worker may be confused, delirious, or having convulsions. The skin is likely to be hot and dry. The heart rate is rapid and weak. His/her muscles may twitch, and he or she may have a throbbing headache. Victims may be unconscious or have an elevated body temperature.

10.4 Treatment/Medical Aid for Heat Illness

When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency service providers will need to be called. When an employee displays possible signs or symptoms of heat illness, and no trained first aid worker or supervisor is available at the site, emergency service providers will be called.

IMPORTANT: A sick worker will not be left alone, as he or she can take a turn for the worse!

Activate Emergency Response Systems (911) if...

...the victim shows symptoms of significant heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, and a red, hot face), does not look OK, or does not get better after drinking cool water and resting in the shade. While the ambulance is in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits and groin area and fan the victim). Do not let a sick worker leave the site, as they can get lost or die before reaching a hospital!

Worksite First Aid – Heat Rash

- Provide a cooler, less humid environment.
- Have the worker keep the affected area dry.
- Dusting powder may be used to increase comfort, but avoid using creams or ointment, as they can make the conditions worse.

Worksite First Aid – Heat Cramps

- Worker is to stop all activity and sit quietly in a cool/shaded place.
- Have them drink clear juice or sports drinks.
- Do not allow the worker to return to strenuous activity for a couple of hours after the cramps subside, as further exertion may lead to heat exhaustion or heat stroke.

Worksite First Aid – Heat Exhaustion

If Employee is Showing Signs/Symptoms, [Contact Onsite Health & Safety at \(866\) 998-2750 for Help/Advice](#)

- Encourage worker to drink water.
- Rest in shade or, better yet, an air-conditioned environment.
- Spray worker with cool water.

Worksite First Aid – Heat Syncope (Fainting)

If Employee is Showing Signs/Symptoms - **Activate Emergency Response Systems Immediately (911)**

- Have worker lay down with his/her feet elevated.
- Check for injuries from the fall.
- Once conscious, have worker drink an adequate amount of water.
- Once recovered, have the worker sit and move his/her legs to prevent blood pooling in the lower limbs.

Worksite First Aid – Heat Stroke

If Employee is Showing Signs/Symptoms - **Activate Emergency Response Systems Immediately (911)**

- Get worker to shady area.
- Use whatever methods available to cool work down immediately - spray with cool water, immerse in cool water, place ice packs in armpits, groin and neck area.
- While wet, fan worker vigorously.
- Station persons to escort emergency response to victim's location upon arrival.

Appendix A - Contents of Safety Manual:

1 - Philosophy	19 - Fall Protection
2 - Responsibilities and Accountability	19A - Fall Protection Work Plan Checklist
3 - Standards	20 - Fire Protection
4 - General Manual Administration	20A - Fire Protection Checklist
5 - General Safety	21 - Powered Industrial Trucks (Forklifts)
6 - Personal Protective Equipment-PPE	21A - PIT Training Outline
6A - PPE Assessment	21B - Forklift Inspection Form
7 - Regulatory Agency	21C - Forklift Inspection Form
8 - Subcontractor Management	22 - Hazard Communication (HAZCOM)
9 - Safety Systems	22A - Asbestos Policy
9A - Job Safety Analysis (JSA)	22A1 - Asbestos Abatement Policy
9A1 - Job Safety Analysis Worksheet	22A2 - Asbestos Questions (FAQ)
9B - Safety Committee Agenda	22B - Benzene
9C - Inspection Addendum	22B1 - Benzene Competency Assessment
9C1 - General Inspection Checklist	22C - Cadmium
9C1.2 - Construction Jobsite Safety Checklist	22D - Hydrogen Sulfide
9C1.3 - Job Site Specific Safety Audit Form	22E - Lead Program
9D - Safety Meeting Report Form	22F - Hazard Communication Program
9E - Disciplinary Process Addendum	22G - Silica Policy
10 - Aerial Personnel Lifts	23 - Respiratory Protection
10A - Aerial-Scissor Lift Inspection Form	23A - Respirator Medical Evaluation Letter to Physician
10A1 - Monthly Aerial Lift Inspections	23B - Employee Respirator Use Record
11 - Bloodborne Pathogens	23C - SCBA & Respirator Inspection Maintenance log & Cartridge Coding
11A - Job Classification Exposure	23D - Voluntary Respirator Use Form
11B - Job Classification Exposure-Some EE	24 - Housekeeping and Sanitation
11C - First Responder Info Form	25 - Industrial Hygiene
11D - BBP Exposure report	26 - Ladders
11E - Hep B Vaccine Approval Form	27 - Process Safety Management
11F - Hep B Declination Form	27A - Chemical Limits for PSM
11F1 - BBP Consent-Non Consent Form	28 - Scaffolds
11G - BBP Training Cert	28A - Scaffold Inspection Checklist
11H - BBP Responsible Person Statement	28B - Typical Scaffolds and Accessories
12 - Confined Spaces	29 - Tools
12A - Confined Spaces Pre-Job Assessment Form	30 - Vehicle
12B - Reclassification Form	30A - Vehicle Point System
12C - CS Entry Permit	30B - Auto Accident Report Form
12D - CS Attendant Log	31 - Welding and Cutting
13 - Crane Policy	31A - Filter Lens Shade Specs
13A - Crane Inspection Record	31B - Welding and Cutting Permit
13B - Crane Pre-Operational Checklist	32 - Security
13C - Crane Pre-Plan Report	33 - Incidents & Injuries
14 - Electrical-General	33A - Medical Facility Evaluation Checklist
14A1 - Personal Protective Equipment Matrix (PPE) matrix	33B - Root Cause Analysis
14A2 - Indemnity Agreement for Energized Electrical Systems	33B1 - Incident Investigation Report
14B - Electrical Safety Checklist	33C - Modified Duty Task Schedule
14C - Hot Work Addendum	33D - Modified Duty Status
14C1 - Hot Work Request Form	33D1 - Off Work Employee Injury Follow Up Report
14C2 - Hot Work Request Form Service & Maintenance Only	34 - OSHA Record Keeping
15 - Emergency Preparedness	34A - OSHA Record Keeping Forms 300, 300A, 301
15A - Emergency Plan Checklist	35 - Water Response and Mold prevention Program (MRMPP)
15B - Emergency Evacuation Drill Analysis	35A - A Fungi Fact Sheet
15C - Bomb Threat Checklist	35A1 - Moisture water Mold Growth Condition Inspections & Response Flowchart
16 - Control of Hazardous Energies	35B - Water Loss & Mold Contaminated Building Inspection Check List
16A - Energy Control Procedure Form	35C - Summary & Comparison Tables of EPA & NYC DPH Mold Remediation Guidelines
16B - Lock Removal Procedure Form	35D - Additional Resources List WRMPP
17 - Heavy Construction Equipment	35E - Glossary & Acronyms WRMPP
17A - Heavy Construction Equipment Inspection	36 - Hearing Conservation
18 - Excavation and Trenching	37 - Heat Illness Prevention
18A - Trench Pre-Plan	38 - Accident Review Board Procedures
18B - Trench Excavation Inspection Checklist	39 - Apprentice Continue Construction Observation
18C - Sloping Tables	

Resources for Safety Information and Procedures

To retrieve important and useful information related to jobsite safety from anywhere, go to the following website or use a smartphone with a QR reading application to scan the QR code below.

<http://www.sunbeltcontrols.com/about/construction/safety-information-procedures/>



The resources available on this site include the following:

- Injury and Illness Prevention Program
- I.C.E. (In Case of Emergency) Pack
- Safety Manual
- Jobsite Signage
- Blank Inspection Forms
- Weekly Tailgates
- Sunbelt's SDS List



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