CAL/OSHA HEAT ILLNESS PREVENTION PROGRAM (HIPP)

Company Name: Bonanza Plumbing

Effective Date: January 1st, 2026

Revisions Date: Annual Review Required

Governing Standard: California Code of Regulations, Title 8, Section 3395 (8 CCR 3395)

SECTION 1: PURPOSE & OPERATIONAL SCOPE

1.1 Objective

Bonanza Plumbing is committed to protecting all employees from the hazards of heat stress while working outdoors. Heat illness is a serious medical condition that can progress quickly to heat stroke and death. This program establishes enforceable field procedures to control heat hazards and guarantee that every worker has access to the life-saving resources required by California law.

1.2 Application

This Heat Illness Prevention Program (HIPP) applies to all Bonanza Plumbing employees who perform outdoor work activities, including but not limited to:

- Trenching, excavation, and main line water/sewer installations.
- Rough-in plumbing on uncovered commercial or residential framing decks.
- Loading, unloading, and organizing pipe materials in uncovered storage yards.
- Servicing external equipment (e.g., commercial backflow preventers, booster pumps) in direct sunlight.

SECTION 2: ROLES & DESIGNATED RESPONSIBILITIES

2.1 Program Administrator

The person with overall authority and responsibility for implementing, auditing, and updating this HIPP is:

- **Dave Nelson: Safety Manager**
- **Email:** dave@bonanzaplumbing.com **Phone:** 951-751-2846

2.2 Field Supervisors and Foremen

Supervisors have the primary field responsibility to ensure compliance. They must:

- Verify that adequate water and shade are set up *before* work begins each day.
- Monitor daily local weather forecasts and adjust workloads during heat waves.
- Actively observe crew members for signs of heat illness.
- Ensure new or returning employees are acclimated to hot environments.
- Initiate emergency response protocols if an employee exhibits heat-related symptoms.

2.3 Employee Expectations

Every field plumber, apprentice, and laborer is required to:

- Drink small amounts of water frequently throughout the day (ideally 1 cup every 15 minutes).
- Report any personal feelings of heat discomfort or illness to their supervisor immediately.
- Watch out for their coworkers using the company-mandated "Buddy System."
- Utilize provided shade structures for preventative cool-down rest periods when needed.

SECTION 3: THE PROVISION OF POTABLE WATER

3.1 Water Specifications

Bonanza Plumbing will provide fresh, pure, suitably cool drinking water free of charge to all employees.

- **Volume Requirement:** Supervisors must ensure at least **1 gallon** of water is available per employee for every full 8-hour shift.
- **Replenishment:** Water supplies will be continuously monitored and refilled throughout the shift to prevent shortages.
- **Temperature:** Water must be kept cool (ideally 50°F to 60°F) using insulated water coolers packed with fresh ice.

3.2 Accessibility and Placement

- Water coolers must be placed as close as practically possible to the actual work area.
- For plumbers working inside open trenches, a water cooler must be placed directly at the top of the access ladder.
- If a jobsite requires lateral movement (such as running long utility mains), water stations must move along with the crew to remain within easy reach.
- Single-use disposable cups will be provided daily at every water station. Sharing drinking cups is strictly prohibited.

SECTION 4: ACCESS TO SHADE

4.1 Activation Thresholds

Temperature Under 80°F ──► Shade available upon request.

Temperature At/Over 80°F ──► Shade must be fully erected and open for use.

4.2 Shade Structure Specifications

- **Capacity:** The shade structure (e.g., pop-up canopy, commercial umbrella) must be large enough to accommodate the number of employees on recovery or rest periods at any given time. It must allow workers to sit comfortably without touching each other.
- **Location:** Shade must be placed as close as safe and feasible to the work zone. It must be located in an area that does not expose workers to other construction hazards (e.g., out of the swing radius of excavators).
- **Cooling:** The structure must provide true shade that blocks direct sunlight and allows air to circulate freely. Vehicles with running air conditioning may be used as a supplement, provided they are clean and comfortably cooled.

4.3 Preventative Cool-Down Rest

- Employees have a legal right to take a **Preventative Cool-Down Rest** break whenever they feel the need to protect themselves from overheating.
- The access to shade for this purpose is unconditional. Workers taking a cool-down rest must be monitored continuously for symptoms of heat illness.
- Workers must not be ordered back to work until all signs of heat distress have completely passed (minimum 5-minute recovery period).

SECTION 5: HIGH-HEAT PROCEDURES (95°F AND ABOVE)

5.1 Mandatory Triggers

When local outdoor temperatures reach or exceed **95°F**, supervisors must activate our specialized High-Heat Procedures. These steps are mandatory and run in addition to standard water and shade requirements.

5.2 Mandatory 10-Minute Rest Cycles

Supervisors must implement a structured, mandatory rest cycle:

[Work for 2 Hours] ──► [Mandatory 10-Minute Rest in Shade] ──► [Repeat Cycle]

- Employees cannot skip these mandatory rest periods, even if they feel fine.
- The 10-minute clock begins only after the employee sits down completely inside the shaded area.

5.3 Communication and Monitoring

- **Buddy System:** Supervisors will pair workers up into 2-person teams. Buddies must stay within sight and vocal range of each other to monitor for flushing, heavy sweating, confusion, or sluggish movement.
- **Pre-Shift Huddle:** A dedicated high-heat tailgate meeting must be held at the start of the shift to review emergency contact procedures, first-aid locations, and symptom recognition.
- **Electronic Monitoring:** For solo service plumbers working in remote or rural locations, the foreman must initiate mandatory check-in phone calls or radio pages every two hours.

SECTION 6: ACCLIMATIZATION PROTOCOLS

6.1 Understanding Acclimatization

Acclimatization is the temporary adaptation of the human body to work in hot environments. The body needs time to adjust its sweat rate, heart rate, and internal cooling mechanisms. Unacclimated workers are at the highest risk for fatal heat stroke.

6.2 The New-Hire Ramp-Up Schedule

All newly hired plumbers, apprentices, or employees returning from an extended absence of 14 days or more must follow a modified work schedule during their first two weeks in hot weather:

Days 1–2: Maximum 20% of normal workload / duration in direct sun.

Days 3–5: Maximum 40% of normal workload / duration in direct sun.

Days 6–7: Maximum 60% of normal workload / duration in direct sun.

Days 8–10: Maximum 80% of normal workload / duration in direct sun.

Day 11+: Full 100% normal workload / duration.

6.3 Heat Wave Protocols

A heat wave is defined by Cal/OSHA as any day where the predicted high temperature is at least 80°F and is at least 9°F higher than the average high temperature of the preceding 5 days.

- During an official heat wave, **all employees**—even experienced crew members—must be monitored closely by supervisors.
- Work schedules should be shifted to earlier morning hours (e.g., 5:00 AM to 1:30 PM) to avoid peak afternoon temperatures.

SECTION 7: TRAINING & EDUCATION REQUIREMENTS

7.1 Employee Training Modules

Before beginning any outdoor field assignments, all Bonanza Plumbing employees must complete formal Heat Illness Prevention Training. This training must cover:

- The environmental and personal risk factors for heat illness (e.g., physical exertion, hydration habits, alcohol consumption, certain prescription medications).
- The concept of acclimatization and company policies regarding new hires.

- The absolute requirement to consume small amounts of water frequently throughout the shift.
- The distinct types of heat illness and their corresponding symptoms (see Section 8).
- The right to take preventative cool-down rest periods in the shade without fear of retaliation.

7.2 Supervisor Training Modules

In addition to general employee training, all foremen, superintendents, and project managers must receive advanced instruction on:

- How to track local weather forecasts via the National Weather Service (NWS) and utilize the OSHA Heat Safety Tool mobile application.
- How to calculate water requirements based on crew size and shift length.
- Steps to verify that shade structures are set up correctly and safely.
- How to conduct effective high-heat pre-shift meetings.
- Executing the company's Emergency Medical Response plan and providing precise geographic coordinates to emergency responders.

SECTION 8: RECOGNIZING HEAT ILLNESS SYMPTOMS

Employees and supervisors must know how to differentiate between mild heat distress and a life-threatening medical emergency.

8.1 Mild to Moderate Heat Illness

- **Heat Cramps:** Muscle spasms, typically in the legs or abdomen, caused by a loss of salt from heavy sweating.
- **Heat Exhaustion:** Characterized by heavy sweating, pale or flushed skin, rapid heart rate, headache, dizziness, nausea, weakness, and mild confusion. The body temperature may be elevated but remains under 104°F.

8.2 Severe Medical Emergency (Heat Stroke)

- **Heat Stroke:** This is a fatal condition where the body's internal cooling system fails completely.
- **Symptoms include:** Confusion, irrational or combative behavior, fainting/unconsciousness, seizures, slurred speech, hot/dry skin or profuse sweating, and a core body temperature exceeding 104°F.
- **Action Required:** If heat stroke is suspected, call 911 immediately. Heat stroke can cause permanent brain damage or death within minutes.

SECTION 9: EMERGENCY RESPONSE PROCEDURES

9.1 Step-by-Step Response Matrix

If any employee exhibits signs of severe heat illness or heat stroke, the following emergency steps must be initiated immediately:

[Step 1: CALL 911] Provide dispatch with the exact location and clear symptoms.

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[Step 2: MOVE TO SHADE] Safely relocate the worker to the shaded canopy.

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[Step 3: ACTIVE COOLING] Apply ice packs to groin/axilla, loosen clothing, fan vigorously.

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[Step 4: MONITOR] Stay with the worker. Do NOT give water if they are unconscious.

9.2 Providing Site Directions

Plumbing crews often work in new housing developments or remote utility easements without fixed street addresses.

- Every jobsite foreman must print out and attach a precise geographic map or global positioning system (GPS) coordinate log to their daily JHA form.
- A designated crew member must be sent to the nearest major intersection or paved public roadway entrance to wave down and guide the ambulance directly to the injured worker.

SECTION 10: PROGRAM LOGS, FORMS, & COMPLIANCE TOOLS

10.1 Employee Training Acknowledgment Form

By signing below, the employee verifies that they have completed the Bonanza Plumbing Heat Illness Prevention Training, understand how to recognize heat stroke symptoms, and know their right to access water and shade freely.

Employee Name (Print): _____

Employee Signature: _____

Date of Training: _____

Instructor Name: _____
