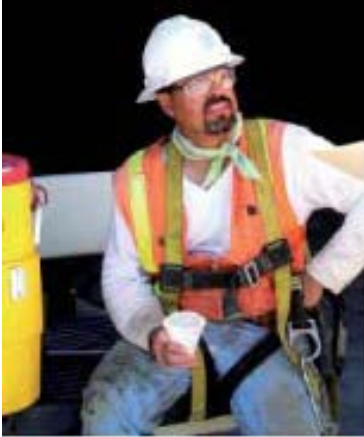


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Heat Illness Prevention Plan for Blythe Solar Power Project, LLC

Employer Name: **Blythe Solar Power Project, LLC**

Address: **4000 Dracker Dr. Blythe CA 92225**

Contact Person(s)/Program Administrator: **Gil Makabenta**

California Employers with any outdoor places of employment must comply with the Heat Illness Prevention Standard T8 CCR 3395. These procedures have been created to assist the employer in crafting their heat illness prevention procedures, and to reduce the risk of work related heat illnesses among their employees.

These procedures are not intended to supersede or replace the application of any other Title 8 regulation, particularly T8 3203 Injury and Illness Prevention Program (IIPP). Title 8 CCR 3203 requires an employer to establish, implement, and maintain an effective IIPP. The measures listed here may be integrated into the Employer's Injury and Illness Prevention Program.

The employer must also be aware that other standards apply to Heat Illness Prevention such as the requirement to provide for drinking water, first aid and emergency response.

HEAT ILLNESS PREVENTION ELEMENTS

The elements reflected within this Heat Illness Prevention guide are those contained in Title 8 of the California Code of Regulations, Section 3395 (T8 CCR 3395) and consist of the following:

- Provision of Water
- Access to Shade
- Written Procedures



> PROVISION OF WATER

Water is a key preventive measure to minimize the risk of heat related illnesses.

3395 (c) Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable. Where the supply of water is not plumbed or otherwise continuously supplied, water shall 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. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in (e), shall be encouraged.

Blythe Employees Shall:

- **Water accessibility is available throughout the facilities and in the following bullets are recommendations to employees to ensure sufficient amounts of drinking water.**
- Ensure at least 2 quarts per employee is available at the start of the shift.
- Production Leader will monitor water containers every day, and employees are encouraged to report to him/her low levels or dirty water.
- Production Leaders will provide frequent reminders to employees to drink frequently, and more water breaks will be provided during extreme weather conditions.
- Every morning there will be short tailgate meetings to remind workers about the importance of frequent consumption of water throughout the shift.
- Place water containers as close as possible to the workers, not away from them.

- When drinking water levels within a container drop below 50%, the water shall be replenished immediately; or water levels should not fall below the point that will allow for adequate water during the time necessary to effect replenishment.
- Disposable/single use drinking cups will be provided to employees, or provisions will be made to issue employees their own cups each day.

To ensure access to sufficient quantities of potable drinking water, the following steps will be taken:

- The site will maintain a contract for delivered purified drinking water.
- The O&M building will maintain a chilled 5 gallon water dispenser for drinking and a 100 gallon water tank to service the ice makers.
- Bottled water will also be delivered and supplied to all technicians without limit.
- Well water will provide water to the sinks, bathrooms and restrooms.
- For field work, plastic jugs, (Igloos) will be supplied as a “take along” water supply source in the field.

To encourage frequent drinking of potable water, the following steps will be taken:

- Tailboards at the beginning of each shift will identify measures to ensure frequent water breaks during extreme weather conditions.
- Training will occur frequently during the summer months when temperatures are above 100 degrees F.
- Safety observations will identify those personnel that require close heat illness supervision.

> ACCESS TO SHADE

Access to rest and shade or other cooling measures are important preventive steps to minimize the risk of heat related illnesses.

3395 (d) Employees suffering from heat illness or believing a preventative recovery period is needed, shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. Except for employers in the agriculture industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

- Employees have access to the O&M building with air conditioning. When out in the field the technicians will always have a vehicle with working air conditioning. The Siemens inverter containers are also air conditioned.

- Every morning there will be short tailgate meetings to remind workers about the importance of rest breaks and the location of shade.
- Non-agricultural employers can use other cooling measures **if** they demonstrate that these methods are as effective as shade.
- Whenever possible, provide areas for employees to take their breaks which are:
 - Readily accessible
 - In the shade and open to the air, and ventilated or cooled
 - Near sufficient supplies of drinking water

To ensure access to shade at all time, the following steps will be taken:

The Blythe Solar Power Project has access to shade at all times. While working in the solar field, individuals have access to inverter shelters that are out of direct sunlight. The backside of the solar panels also provide shading.

To ensure that employees have access to a preventative recovery period, the following steps will be taken:

To effect a positive preventative recovery period the Blythe Solar Power Project will ensure that every effort is made to ensure the safety of plant personnel. Water and shade will be placed in the forefront of every job tailboard to ensure over heating or heat illness is prevented.

Production Leaders will ensure that production technicians are aware of the temperature controlled areas and make every effort to utilize these areas during their work scope as the heat of the day progresses.

> WRITTEN PROCEDURES

Written procedures help reduce the risk of heat related illnesses, and ensure that emergency assistance is provided without delay.

3395 (e) (3) The employer's procedures required by subsections (e) (1) (B), (G), (H), and (I) shall be in writing and shall be made available to employees and to representatives of the Division upon request.

These include:

- (B) Procedures for complying with the requirements of this standard,
- (G) Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary,
- (H) 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;

(l) Procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

The following procedure is in compliance with the standard 3395(e) (3), subsection (e) (1) (B) (G)

- All employees will be trained prior to working outdoors.
- Some Work scopes will be modified to be performed during the cooler hours of the day, when possible.
- When a modified or shorter work-shift is not possible, more water and rest breaks will be provided.
- Production Leaders will continuously check all employees, and stay alert to the presence of heat related symptoms.
- Co-workers will use a “buddy system” to watch each other closely for discomfort or symptoms of heat illness.
- Production Leaders and co-workers are encouraged never to discount any signs or symptoms they are experiencing, and will immediately report them.
- Production Leaders will ensure that emergency services can be called, and check that these are functional at the worksite prior to each shift.
- Workers will be periodically reminded about worksite and emergency procedures.

To reduce the risk of heat-related illness (HI) and respond to possible symptoms of HI, the following steps will be taken:

Heat emergencies are of three types: heat cramps (caused by loss of salt), heat exhaustion (caused by dehydration) and heat stroke (shock). Remove the victim from the heat and have him lie down. Apply cool compresses, elevate the feet, drink fluids and use a fan to blow cool air. Get medical help if needed.

The following are common causes of heat emergencies:

- [High temperatures](#) or humidity
 - [Dehydration](#)
 - Prolonged or excessive [exercise](#)
 - Excess clothing
 - [Alcohol use](#)
 - Medications, such as [diuretics](#), [neuroleptics](#), phenothiazines, and [anticholinergics](#)
 - [Cardiovascular](#) disease
 - Sweat gland dysfunction
-
- Provide plenty of drinking water and ensure the production team recognizes the importance of pre-hydration.
 - Provide training that covers the symptoms and effects of heat illness.
 - Provide adequate shade in areas that is in direct sun light outside of buildings and in areas where temperature controlled buildings do not exist.
 - When possible, schedule work at night.

To ensure that emergency medical services are provided without delay, the following steps will be taken:

Our procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary, are:

First Aid

1. Have the person lie down in a cool place. Elevate the person's feet about 12 inches.
2. Apply cool, wet cloths (or cool water directly) to the person's skin and use a fan to lower [body temperature](#). Place cold compresses on the person's neck, groin, and armpits.
3. If alert, give the person beverages to sip (such as Gatorade), or make a salted drink by adding a teaspoon of salt per quart of water. Give a half cup every 15 minutes. Cool water will do if salt beverages are not available.
4. For [muscle cramps](#), give beverages as above and [massage](#) affected muscles gently, but firmly, until they relax.
5. If the person shows signs of [shock](#) ([bluish lips and fingernails](#) and [decreased alertness](#)), starts having [seizures](#), or loses consciousness, call 911 and administer first aid accordingly.

Our 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 are:

Call immediately for emergency medical assistance if

Call 911 if:

- The person loses consciousness at any time.
- There is any other change in the person's alertness (for example, confusion or seizures).
- The person has a fever over 102°F.
- Other symptoms of heat stroke are present (like rapid pulse or rapid breathing).
- The person's condition does not improve, or worsens despite treatment.

Our procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders are.

- Call 911
- Have a technician meet the emergency responders at the gate
- Lead the emergency responders to the victim
- Solar Site Manager or designee will accompany victim to hospital emergency room.

> TRAINING

Training is critical to help reduce the risk of heat related illnesses and to assist with obtaining emergency assistance without delay.

3395 (e) (1) Employee training: Training in the following topics shall be provided to all supervisory and non-supervisory employees:

- (A) The environmental and personal risk factors for heat illness;
- (B) The employer's procedures for complying with the requirements of this standard;
- (C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;
- (D) The importance of acclimatization;
- (E) The different types of heat illness and the common signs and symptoms of heat illness;
- (F) The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers;
- (G) The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;
- (H) The employer's 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;
- (I) The employer's procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Note: T8 CCR 3203(a) (3) requires that communication for employees shall be in a form readily understandable by all affected employees.

(e) (2) Supervisor training: Prior to assignment to supervision of employees working in the heat, training on the following topics shall be provided:

- (A) The information required to be provided by section (e) (1) above.
- (B) The procedures the supervisor is to follow to implement the applicable provisions in this sequence of events.
- (C) The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Sample written procedures include but are not limited to the following:

- All employees will receive heat illness prevention training prior to working outdoors. Especially all newly hired employees
- On hot days, and during a heat wave, supervisors will hold short tailgate meetings to review this important information with all workers.

- All workers will be assigned a “buddy” or experienced coworker to ensure that they understood the training and follow the company procedures.
- Supervisors will be trained prior to being assigned to supervise outdoor workers.
- Primary (Farm Labor Contractors, staffing companies, etc) and secondary employers will ensure that all employee’s (including temporary) working outdoors are trained in heat illness prevention.
- **We provide Acclimatization to our employees and train them on its importance:**
 - **Acclimatization** – means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.
 - **Real Time Communication** - we will establish and use a system to readily communicate with our workers in the field. Stay alert to the weather by monitoring weather conditions throughout the work shift at your specific work locations. Based on current weather information and worker input from the field, make the proper adjustments in your work practices, or summon emergency response personnel if necessary.
 - To accomplish this we have a supervisor or “designated person(s)” at the worksite with the authority to communicate and implement any measures necessary to address heat illness.
 - Using our two-way communication system allows workers to report to supervisors, co-workers or other designated persons how they are feeling on a real time basis.
 - We will account for the whereabouts of our crews at appropriate intervals throughout the work shift and at the end of the work shift
 - **Extra Measures During Heat Waves** - because of extreme environmental conditions during a heat wave, employees’ physical and mental condition can change rapidly into a serious medical condition. The onset of heat illness may be confused with other problems and may not always be obvious before it becomes life-threatening. Therefore, extra measures may be required to prevent and/or respond to heat illness.
 - **Stay Alert to the Weather** – make sure to monitor the weather and the specific locations where work activities are occurring. Continue to stay updated throughout the work shift on the changing air temperatures and other environmental factors. **Use current weather information to make the appropriate adjustments in work activities throughout the workday.**
 - **Workers who were previously fully acclimatized are at risk for heat illness during a heat wave** because during a heat wave, the body does not have enough time to adjust to a sudden, abnormally high temperature or other extreme conditions.
 - **Extra Vigilance** - Real Time Communication and the “Buddy System” - account for the whereabouts of employees at more frequent intervals throughout the work shift and at the end of the work shift.

- **Additional Water Consumption** - encourage employees to drink small quantities of water more frequently and have effective replenishment measures in place for the provision of extra drinking water to ensure that supplies are reliable
- **Additional Cooling Measures** - you may need to use other alternative cooling measures in addition to shade, (e.g. allowing employees to spend time in air conditioned places or having them spray themselves with water). Blythe Energy has purchased “cooling cloths” that are designed to keep body temperatures down and assist in cooling the body during extreme temperatures. These cloths can be refrigerated before use and worn under hard hats, around the neck or tied around the head.
- **Additional and /or Longer Rest Breaks** - we may need to allow employees to take more frequent and longer breaks.
- **Changing Work Scheduling and Assignments** - we may need to put into place one or more of the following additional measures:
 - Start the work shift even earlier in the day or later in the evening
 - Cut work shifts short or stop work altogether
 - Reduce the severity of work by scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day

To ensure employees are trained, the following steps will be taken:

- All employees will be trained prior to working outdoors.
- Some Work scopes will be modified to be performed during the cooler hours of the day, when possible.
- When a modified or shorter work-shift is not possible, more water and rest breaks will be provided.
- Production Leaders will continuously check all employees, and stay alert to the presence of heat related symptoms.
- Co-workers will use a “buddy system” to watch each other closely for discomfort or symptoms of heat illness.
- Production Leaders and co-workers are encouraged never to discount any signs or symptoms they are experiencing, and will immediately report them.
- Production Leaders will ensure that emergency services can be called, and check that these are functional at the worksite prior to each shift.
- Workers will be periodically reminded about worksite and emergency procedures.

To ensure supervisors are provided training, the following steps will be taken:

Supervisor training will be provided in May, July and August of every year. The Heat Illness Prevention Plan will be reviewed during these training sessions. CPR/First Aid training will be given annually to those that need recertification.

Signed logs documenting training will be kept on site.