

IPC

HEAT ILLNESS PREVENTION PLAN

Industrial Projects Consulting recognizes that working in hot and extremely hot conditions can cause severe health effects for our employees. The following procedures will be put in place to mitigate the hazards of exposing our employees to high heat working conditions.

TRAINING

EMPLOYEE TRAINING- All Industrial Projects Consulting employees will receive training on the following prior to working in high heat conditions. The training will be supplemented with reminders and updates in our daily toolbox meetings on days where high heat conditions are expected.

- Signs and symptoms of heat stress
- The effects of heat on your body
- Proper care to prevent heat related illness including:
 - Proper rest and care during off work hours
 - Hydration
 - Cool down breaks
- Acclimatization
- Emergency response plan
- High Heat and Heat Wave Procedure

SUPERVISOR TRAINING- All Industrial Projects Consulting supervision who will be running a crew that may be exposed to high heat conditions will receive the following training.

- Signs and symptoms of heat stress including:
 - The difference between heat exhaustion and heat stroke
 - Recognizing when an emergency response is needed
- Emergency Response procedures
- Heat Wave and High Heat procedures include:
 - Monitoring employees during a heat wave
 - Providing proper communication and supervision during heat wave conditions
 - Required break protocol
- Monitoring the temperature and the Heat Index
- Managing work activities to reduce heat exposure
- Acclimatization

ACCESS TO WATER

- Employees will be reminded of and encouraged regularly to drink plenty of water in the morning safety meeting and throughout the day by their supervisors and safety
- All employees will be given access to drinking water throughout the day.
- Adequate water supply in each work area will be monitored and managed by supervision.
- The following methods will be used to maintain water at a cool palatable temperature close to the work areas.
 - 5-gal water dispensers are provided at all work areas
 - Refrigerated 5-gal water dispensers are located inside job trailers.

BREAKS

- In addition to their regularly scheduled breaks, employees will be allowed and encouraged to take breaks throughout their work shift in shade shelters.
 - Employees will be informed of the locations of the cool down areas and notified any time the locations change
 - Employees will be informed that cooldown breaks should be no less than 5 minutes long from the time they reach the shelter/ cool down area
 - Supervision will not place a time limit on employees' cool down breaks
- Shade shelters will be provided near each work area so that access is reasonably convenient
- For situations where it is not safe or feasible to provide a shade area near a work area adequate provision will be documented to provide those employees with reasonably prompt access to a cool down area and the employees notified of those provisions. IE: prompt transport to a shade shack or air conditioning
- At no time will a vehicle be considered a cool down area unless the air conditioning works and is on.
- Each shade shelter will meet the following minimum criteria
 - Completely block the sun
 - Provide adequate cooling and ventilation
 - Adequate seating will be provided so that all employees expected to use that shelter can sit without touching one another
 - Are positioned close to the work area and do not require employees to cross hazardous conditions or obstacles to access
 - Do not pose or contain any hazards to the employees while being used

MONITORING

The following monitoring procedures will be followed so that the supervision and crew can be adequately prepared, and appropriate measures can be taken prior to high heat conditions.

- Weekly Monitoring- Prior to the first shift of each week the local weekly weather forecast will be evaluated. This will enable supervision to make adequate preparations to alter the work shift, make changes to scheduled work activities, and ensure adequate supplies are on site for the following week.
- Daily Monitoring- Prior to each shift the local daily forecast will be evaluated so that the crew can be informed in the morning safety meeting of any high heat conditions existing that day, reminded of high heat procedure, and so that shade shelters can be set up prior to the temperature reaching 80 degrees Fahrenheit.
- Task specific/Area specific monitoring- Since certain tasks or work locations may increase the employees' exposure to high heat conditions these locations and activities will be identified and will be individually monitored using a thermometer. Every effort will be made to position the thermometers so that they read out the actual temperature that the employees are exposed to. These activities include but are not limited to:
 - Confined space work
 - Welding
 - Concrete pouring and finishing
 - Work inside any structure that lacks adequate or continuous air movement
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ACCLIMATIZATION

Acclimatization is the process by which one's body adapts to working in heat and high heat conditions. An individual usually takes anywhere from 4 to 14 days to become acclimated to working in hot weather. The following procedure will be followed for all periods of acclimatization.

- Once the temperature nears 80 degrees Fahrenheit employees and supervision will be reminded of the heat illness prevention training and procedure
- For all newly assigned employees the following procedures will be followed to ensure that adequate time is given for them to acclimate.

- Employees will receive Heat Illness prevention training upon arrival to site.
- Employees will be questioned upon arrival on site as to the temperature and environment in which he was working for the previous 10 days
- Employees will be closely monitored by supervision for signs and symptoms of heat stress or will be paired with another employee who has demonstrated the ability recognize signs and symptoms of heat stress and proper reporting procedure
- Employees will be reminded to take regular cool down breaks and to drink adequate water throughout the day.

HEAT WAVE PROCEDURE/HIGH HEAT PROCEDURE.

For the purpose of this procedure a heat wave is defined as any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

Because heat waves and extreme high heat increase the risk to employees, the following procedures will be followed for days exceeding 95 degrees Fahrenheit or for heat wave conditions.

- Will be required to take regularly scheduled breaks in a shade shack or air-conditioned area.
- The buddy system will be implemented for crew members not easily seen by supervision
 - Effective communication either by radio or cell phone will be established for work teams not easily seen by supervision.
 - Supervision will verbally or visually check on work teams throughout the workday.
- Supervision will be responsible for monitoring no more than 20 people throughout the shift
 - Supervisor training in this procedure will be given to all crew leads to ensure there is adequate supervision with the appropriate training to act as a monitor during high heat and heat wave conditions.

HEAT STRESS/ HEAT RELATED ILLNESS PROCEDURE

Because heat related illnesses can come on very quickly it is imperative that both workers and supervision are able to recognize the systems of heat related illness. The signs and symptoms and emergency procedure will be included in the heat illness prevention training and the crew are reminded regularly in the morning safety meeting. Crew will be instructed and encouraged to immediately report any signs or symptoms of heat stress to their supervisor.

If supervision receives a report that a crew member is exhibiting signs or symptoms of heat stress or heat related illness supervision will take the following steps:

- Instruct an affected employee to report immediately or assist/escort them to a shade shack or air-conditioned location.
- Speak with the employee about their symptoms and evaluate their general state
 - If evaluation determines that the employee needs medical attention the supervisor will initiate the emergency procedure below.
 - If the evaluation determines that the employee needs basic first aid or cool down, supervisor will inform site safety to assist.
- At no time will the employee be left alone until they no longer exhibit signs of heat stress/ heat related illness
- Employee will not be sent home until they no longer exhibit signs or symptoms of heat stress
- If employee's state continues to diminish emergency procedure will be followed

EMERGENCY RESPONSE PLAN

If heat related illness becomes an emergency, the supervision will take the following steps.

- Call Mayday, Mayday, Mayday on Mine Radio CH-1 to initiate MRT to the area
- Call over Phoenix radio Channel 5 to inform PHX site management and Safety
- Site First Responder will immediately report to the location of the emergency
- Supervisor or safety will notify SNC

ADDITIONAL

In addition to the required procedures above the following methods and procedures will be used if needed and feasible to help prevent heat-related illness and to promote employee well-being during high heat working conditions.

- Alter work shift so that more of the shift is during cooler hours
- Scheduling heat producing or higher heat exposure activities during cooler hours
- Provide employees with assorted cooling clothing
- Provide employees with electrolyte drinks or supplements
- Provide additional ventilation or shade in the work areas as safe and feasible
- Move work activities to better ventilated or shaded areas as safe and feasible.