C.2.1.6 (Procedure) Heat Stress

Responsible Department: Associate Vice Chancellor of Human Resources Based on Board Policy: C.2.1 – Environmental Health and Safety Approved: 11-17-10 Last Amended: 6-9-15

Heat Stress – Working in Hot Environments

I. Introduction.

During the heat and humidity of a Texas summer, we must take necessary steps to minimize the potential of heat borne illnesses to District employees. The Office of Enterprise Risk Management is especially concerned for the health of District employees whose primary job requires work in extremely hot conditions. Therefore, we have prepared safety guidelines to address this important issue. This procedure is intended to enlighten supervisors and their employees about the danger of possible heat exposure illness and to provide information to protect them while working in a hot environment.

II. Heat Disorders and Health Effects.

Excessive exposure to a hot work environment can bring about a variety of heat-inducted disorders. Some are:

<u>Heat Stroke</u> occurs when the body cannot rid itself of its heat by cooling from evaporation of sweat. This is considered to be a "MEDICAL EMERGENCY". In the early stage, the individual's skin is usually hot, red, and dry, with a high body temperature. Move the person to a cool location, immerse the individual in cool water or pour water on him/her. The most important objective is to lower the body temperature as quickly as possible and immediately call for medical assistance.

<u>**Heat Exhaustion**</u> occurs due to excessive salt loss and dehydration. It is characterized by profuse sweating, headache, and by some tingling in the extremities. In addition, the skin may be pale, moist and cool.

<u>Heat Cramps</u> are the result of excessive loss of salt from the body causing the muscles of the extremities to cramp.

Fainting (heat syncope) may be a problem for the worker unacclimatized to a hot environment that simply stands for long periods in the heat. Victims usually recover quickly after a brief period of lying down.

Heat Rash, also known as prickly heat, may occur in hot and humid environments where sweat is not easily removed from the surface of the skin by evaporation. Heat rash can be so uncomfortable that it inhibits sleep and impedes a worker's performance or even results in temporary total disability.

III. Preventative Measures.

- Please acclimatize employees whose jobs require them to work primarily outside in the hot environment. This is necessary regardless of an individual's physical condition.
- Establish a work/rest schedule to afford employees the opportunity to take frequent breaks out of the hot environment. This should prove to be very beneficial.

- If feasible, try to schedule outside workload during the coolest part of the day (i.e. the morning or late afternoon).
- When working in a hot environment (outside), wear loose clothes to allow for better air circulation. Never wear spandex or other tight fitting clothes because they restrict circulation and impede movement of air over the skin.
- Provide employees with cool (i.e. with ice) drinking water while they are working in the hot environment to prevent dehydration. A person must not depend on thirst as a signal when and how much water to drink. Instead, the worker should drink 5 to 7 ounces of fluids every 15 to 20 minutes to replenish the necessary fluids in the body. The supervisors must strictly enforce this guideline.
- If feasible, employees scheduled to work outside in the afternoon heat, should avoid eating a heavy, hot meal at lunch. Avoid using over the counter and prescription drugs while working in a hot environment; they markedly impair heat loss when the temperature is high.
- If doable, the Facilities Department and Alamo Colleges Police Department (ACPD) should adopt and implement the buddy system for all employees working prolonged periods outside in the hot environment. The employees can observe each other for signs of a heat illness, provide immediate assistance, and seek immediate medical attention if needed
- Use a sun block lotion or crème with a protection factor of 15 or greater on any exposed skin (i.e. hands, face, neck, legs, and arms) while working outside. This will help protect against sunburn and possible future skin cancer.
- Moving around, rather than standing still, will usually reduce the possibility of fainting.
- Resting in a cool place and allowing the skin to dry can prevent heat rash.

IV. Action.

Heat injuries can be very dangerous, especially to the employees who have not been properly acclimatized to an extremely hot environment. <u>Heat Stress Injuries are Preventable</u> if the abovementioned guidelines are followed and strictly enforced. Each campus shall disseminate this information to all their employees. Facilities and ACPD employees shall sign an acknowledgment (sign-in-sheet) indicating they have reviewed this procedure no later than <u>May</u> of each calendar year. The department shall maintain a copy of the sign-in-sheets and send a copy to the District Safety Office.