

POLICY ON WORKING IN OUTDOOR SEASONAL (TRANSIENT) HEAT

28 May 1993

1. PURPOSE

This Policy aims to prevent health and safety problems and serious discomfort arising from workers' exposure to high seasonal heat levels at work. This occurs during summer months to both indoor and outdoor workers. Problems which have occurred and which need to be prevented include:

- reduced concentration (and increased likelihood of accidents);
- increased discomfort in use of protective clothing and equipment;
- aggravation of effects of other hazards, e.g. noise;
- aggravation of pre-existing illnesses;
- induction of heat exhaustion and fainting.

2. SCOPE

This policy covers staff working outdoors including Landscaping staff and academic and technical staff on excursions or field work. For indoor workers the *VPSA - La Trobe University Agreement: Working in Hot Conditions* - released in 1989, applies. The *La Trobe University Code of Practice: Prevention of Occupational Skin Cancer Developing from Excessive Exposure to Ultraviolet Radiation From the Sun* may also be relevant.

The line manager is expected to exercise discretion in accordance with sections 4 and 6.

3. AUTHORITY

The first draft was written by a working party consisting of the Curator, Landscaping, health and safety representative Landscaping, and the Safety Officer. The draft was circulated for comment on 24.10.91. This policy was taken to the Occupational Health and Safety Committee meeting of 7.11.91 when minor modifications were recommended, and was approved by the Meeting of 10.2.92 (minute reference 25.3.8).

4. HEAT LEVEL MEASUREMENT

A satisfactory practical compromise measure of seasonal hot conditions is provided by the (ordinary) dry-bulb thermometer temperature reading. The policy recognises that other environmental factors which contribute to thermal discomfort and heat stress include radiant heat, humidity and air speed (see Appendix). Definite rules cannot be made based on dry bulb thermometer readings alone. However the following may be taken as a guideline for action in outdoor heat situations. Where extreme unusual conditions are encountered, such as working in a trench or dressed in a plastic spray suit, the guidelines will need to be interpreted accordingly.

5. PROTECTION PROCEDURES

Measures to be taken include:

- changing the rate of work (e.g. taking longer to do jobs);
- providing lighter, alternative work;
- use of shade cloths; (see 2.1 UV Policy);
- provision of constant supplies of cool drinking water. (i.e. immediately accessible drinking water or portable drinking water, temperature of which should be approx. 15° C or less);
- alternative hours of work;
- provision of hats and light clothing (see reference 7.2);
- changing the work location.

6. REST BREAKS

Where the temperature at work exceeds 32° C, workers should be allowed to take regular paid work breaks to allow their bodies to recover some degree of thermal equilibrium. Rest breaks should be introduced and modified to suit local conditions and meet individual requirements.

As the basis for negotiation of agreed procedures:

When the dry bulb temperature reaches 32° C, paid rest breaks of 15 minutes in the hour should be allowed, taken as the last 15 minutes in the hour.

At 38° C workers should be on stand by on full pay and may retire to their rest area, or common room.

However, it should be noted the stand by periods can also impose a workload and must not be regarded as non-work.

Tea breaks or "smokos" shall constitute all or any part of the agreed breaks and are not be in addition to them.

7. APPENDIX

Example of complexity of relationship of comfort to temperature, humidity, and air velocity.

One measure of heat stress quoted in a National Health and Medical Research Council Report (reference 8.3) is the "Effective Temperature" (ET) of the American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE). "In still air an Effective Temperature of 26° C corresponds , for people wearing shirts and long trousers, to an air temperature of 28° C with 75% relative humidity or to one of 35° C with 18% relative humidity. With an air velocity of 2 m/s the same ET of 26° C corresponds to an air temperature of 30° C with 84% relative humidity or to one of 38.5° C with 12% relative humidity."

8. REFERENCES

8.1 *Health and Safety Bulletin* No. 70 (untitled)

(VTHC Occupational Health and Safety Unit, July 1991)

8.2 *Health and Safety Bulletin No. 64 - Working in Heat Guidelines. Part 1: Seasonal Heat* (VTHC Occupational Health and Safety Unit, December 1989).

8.3 National Health and Medical Research Council: *Effects of heat on Health, Comfort, and Performance*. Adopted at the 88th Session of Council, October 1979.