

# Procedure – Protection from Ultraviolet Radiation and the Issue of Personal Protective Clothing and Equipment

<b>Version</b>	1.0
<b>TRIM file number</b>	
<b>Short description</b>	A procedure on the issue and wearing of personal protective clothing and equipment for protection from the sun and artificial Ultraviolet sources for staff of the Division of Facilities Management.
<b>Relevant to</b>	All DFM staff who undertake outdoor activities or maintenance activities involving artificial Ultraviolet sources.
<b>Authority</b>	This Procedure has been approved by the Executive Director Division of Facilities Management in accordance with the Policy on Delegations and Authorisations - Delegation Schedule 1, GOV10.
<b>Responsible officer</b>	Director, Operational Services
<b>Responsible office</b>	Division of Facilities Management – Operations and Maintenance
<b>Date introduced</b>	
<b>Date(s) modified</b>	
<b>Next scheduled review date</b>	September, 2015
<b>Related University documents</b>	Radiation Safety Manual - Guidelines for the Protection of Workers from Ultraviolet Radiation in Sunlight DFM staff identification Policy
<b>Related legislation</b>	Work Health & Safety Legislation Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Occupational Exposure to Ultraviolet Radiation 2006.
<b>Key words</b>	Procedure, UV Radiation, Personal Protective Clothing

## 1. PURPOSE

The Division of Facilities Management is committed to providing a healthy and safe working environment and supplying our staff with comfortable protective clothing that not only projects our professionalism but maintains the safety of our staff from potential work place hazards.

This procedure is designed to provide DFM staff with information on the requirements to minimise any adverse health effects from Solar Ultraviolet (UV) Radiation and to protect their skin from other hazards while undertaking their duties.

## 2. SCOPE

This procedure applies to all DFM staff, whether full time, part time or casual, who work outside of a built environment and/or who maintain items that produce artificial Ultraviolet sources or carry out welding activities or service electrical equipment.

This procedure will abide by the following principles in the provision of protective clothing that is:

- a reasonable requirement and directly relevant the job
- equally applicable to both males and females
- compatible with cultural or religious beliefs
- fair to people with disabilities
- meets Original Equipment Manufacturer (OEM) requirements for personnel servicing Ultraviolet source equipment

## 3. GLOSSARY

**Outdoor workers:** For the purposes of this policy, outdoor workers are those who in the course of their normal duties spend a more than 7 minutes of their time in the open (outside of enclosures).

Reference: Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Occupational Exposure to Ultraviolet Radiation 2006.

**Protective Clothing:** Clothing designed to protect other clothing, such as dust coats, overalls, aprons, wet weather gear, etc, or clothing that provides direct protection to the wearer, such as UV protection by way of material selection, design or both, cold weather protection, such as thermal underwear, duffle coats, etc. Hats with broad brims or panels that protect neck, ears and face are also protective clothing.

**Protective Equipment:** Items designed to protect the wearer from specific hazards, eg. safety glasses, goggles, face shields, ear muffs, ear plugs, sunglasses in UV environments, chainsaw chaps, a range of specific gloves, hard-hats or sunscreen.

**UV Radiation:** Ultraviolet radiation is classified as a non-ionising form of radiation, and is a component of the Electromagnetic Radiation (EMR) spectrum emitted by the sun. It is comprised of wavelengths (unit for characterising EMR) from 100 – 400 nanometres. Artificial Ultraviolet sources include UV radiation lamps in water sterilisation units, welding activities and electrical equipment.

**Workplace:** The area or place where a staff member is required to work, to undertake his/her normal duties.

#### **4. RESPONSIBILITIES**

##### **4.1 Staff/ Workers**

- Follow the requirements contained within this procedure
- Treat all Personal Protective Equipment and Clothing with care.
- Wear the Personal Protective Equipment and Clothing at all times during work hours
- Wear the Personal Protective Equipment as required to protect the wearer from workplace hazards.
- Wear the Personal Protective Equipment and Clothing in the correct manner.
- Ensure that protective Clothing is kept clean, repaired and presentable.
- Request replacement Personal Protective Equipment and Clothing if it becomes badly faded/stained, ripped or torn or damaged.
- Report any problems in achieving compliance to their supervisor immediately

##### **4.2 Supervisors/ Managers**

- Ensure all applicable workers comply with this procedure.
- Ensure that the prescribed and suitable Personal Protective Equipment and Clothing is available.
- Provide training for all staff and students in the correct use of personal protective equipment and other hazard control measures

#### **5. OPERATIONAL STAFF AND TYPICAL HAZARDS**

Workers should always wear the appropriate personal protective equipment for the type of work they are to perform. Refer to the relevant Standard Operating Procedure, Safe Work Method Statement or Risk Assessment documentation.

Enclosed footwear is essential and must be worn at all times. The type of shoe or boot is determined by the staff category and the activity to be performed.

Personal Identification must be worn at all times. Refer to the Division of Facilities Managements' 'Staff Identification Policy'

##### **Typical hazards can include:**

##### **5.1 Security Staff and Supervisors**

- UV radiation from the sun
- Aggressive persons, physical restraint
- Materials of Biological origin (Human products)

## **5.2 Grounds Staff and Supervisors**

- UV radiation from the sun
- Physical hazards from Grounds Maintenance activities

## **5.3 Janitors and Supervisors**

- UV radiation from the sun
- Physical hazards from Janitorial activities

## **5.4 Maintenance staff and Supervisors**

- UV radiation from the sun
- UV radiation from UV lamps, High Voltage switching operations, welding activities and electrical equipment.
- Physical hazards from Maintenance activities

## **5.5 Any DFM staff member working outside the built environment eg site meetings**

- UV radiation from the sun

## **6. PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING PRINCIPLES**

The Division of Facilities Management requires that all workers be presented in a manner befitting the Divisions corporate image and to provide protection for our workers in the course of their work.

All Personal Protective Clothing and Equipment remains the property of CSU, however full responsibility for maintaining and cleaning will remain with the worker.

All personal protective equipment and clothing will be fit for purpose, address the risks that are presented from the hazards in the particular workplace and meet relevant Australian Standards.

## **7. PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING ISSUE ALLOWANCES**

All CSU shirts and jumpers will have CSU branding and may have the staff members name embroidered on them. See DFM Staff Identification Policy.

### **Protective Clothing issue allowance**

#### **7.1 Security staff**

- Shirts, long sleeve (x5), with high vis vest as required
- Trousers, long legged (x3)
- Sloppy Joe/ Jumper (2) with high vis vest as required
- Wet weather / cold weather jacket/ coat high vis component
- Safety Boots or shoes (x1 pair)
- Hard Hat (1)

Protective gloves (1)  
Wet weather clothing (1)  
Hat (x 1) wide brimmed  
Safety Sunglasses (2 pr)  
Lip balm as required  
Sunscreen as required  
Jacket (1)

## **7.2 Grounds staff**

Shirts, long sleeve (x3), with high vis component or high vis vest  
Trousers, long legged (x3)  
Sloppy Joe (2) with high vis component or high vis vest  
Wet weather / cold weather jacket/ coat high vis component  
Overalls (x1) with high vis component or high vis vest  
Safety Boots (x1 pair)  
Hard Hat (1)  
Hard hat brim and sun flap  
Protective gloves (2)  
Gum boots (1)  
Wet weather clothing (1)  
Hat (x 1) wide brimmed  
Safety Sunglasses (2 pr)  
Lip balm as required  
Sunscreen as required

## **7.3 General Assistants and Janitorial staff**

Shirts, long sleeve (x3), with high vis component or high vis vest  
Trousers, long legged (x3)  
Sloppy Joe (2) with high vis component or high vis vest  
Wet weather / cold weather jacket/ coat high vis component  
Overalls (x1) with high vis component or high vis vest  
Safety Boots (x1 pair)  
Hard Hat (1)  
Hard hat brim and sun flap  
Protective gloves (2)  
Gum boots (1)  
Wet weather clothing (1)  
Hat (x 1) wide brimmed  
Safety Sunglasses (2 pr)  
Lip balm as required  
Sunscreen as required

#### **7.4 Maintenance staff**

Dustcoat  
Shirts, long sleeve (x3), with high vis component or high vis vest  
Trousers, long legged (x3)  
Sloppy Joe (2) with high vis component or high vis vest  
Wet weather / cold weather jacket/ coat high vis component  
Overalls (x1) with high vis component or high vis vest  
Safety Boots (x1 pair)  
Hard Hat (1)  
Hard hat brim and sun flap  
Protective gloves (2)  
Gum boots (1)  
Wet weather clothing (1)  
Hat (x 1) wide brimmed  
Safety Sunglasses (2 pr)  
Lip balm as required  
Sunscreen as required

#### **7.5 Painters**

Shirts, long sleeve (x3), and high vis vest as required  
Trousers, long legged (x3)  
Sloppy Joe (2) and high vis vest as required  
Wet weather / cold weather jacket/ coat high vis component  
Overalls (x3)  
Safety Boots (x1 pair)  
Hard Hat (1)  
Hard hat brim and sun flap  
Protective gloves (2)  
Hat (x 1) wide brimmed  
Safety Sunglasses (2 pr)  
Lip balm as required  
Sunscreen as required

### **8. REPLACEMENT OF ISSUED PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING**

Personal Protective Equipment and Clothing will be issued annually, at the discretion of the Manager or if excessively worn or damaged.

Items will be replaced on production of a previously issued worn, damaged or faulty item. If an item of equipment is lost or stolen, a written statement of the circumstances of loss is required for replacement consideration.

## **9. PROTECTION FROM UV RADIATION (UVR)**

### **9.1. PROTECTIVE CLOTHING:**

To provide an adequate level of protection from UVR, it is necessary to wear long sleeved shirts with collars that are loose-fitting to allow air to circulate, to reduce heat stress. Long-legged trousers provide protection to the legs. Cuffs, ankles and waistbands should be loose, providing they do not create a "catch" hazard. Light coloured clothes are cooler and reflect the heat away. Natural fibres such as cotton permit better sweat evaporation than synthetic fibres.

### **9.2. EYE PROTECTION:**

Eye protection glasses and/or sunglasses must conform to the Australian Standards for protection against the sun and also, if relevant, against impact hazards. An assessment must be made to determine the most appropriate type of eye protection required for the duties undertaken. Glasses that provide protection from the side are recommended.

Appropriate goggles or face shields or welding helmets, meeting Australian Standards, shall be worn to protect against UVR from artificial sources, welding activities or UVR generated during maintenance or operation of electrical equipment.

### **9.3. HATS:**

Hats provide shade and the broader the brim, the greater the amount of shade that is provided. Hats with a brim of 8-12cm and neck flap (if bending) are recommended. The duties performed may have to be taken into account when recommending the construction, size and shape of the hat required. If hard hats are required, attachable brims and neck flap protectors can be used to provide greater protection from the sun. Care must be taken to ensure that their inclusion will not create further hazards to the user.

### **9.4. SUNSCREEN:**

Sunscreen should be applied at least 15 minutes before exposure to the sun and at approximately 2 hourly intervals thereafter. More frequent applications may be required depending on the individual, the type of work being performed and environmental factors, i.e. during excessive sweating. Sunscreens should be broad- spectrum and selected in accordance with the skin type, working conditions and must meet or exceed Australian Standard requirements (SPF 30+).

### **9.5. LIP PROTECTION:**

Lip protection is a very important part of sun protection. The lips do not contain melanin, which provides natural protection. Lip cancer from prolonged exposure to sunlight is common in outdoor workers. To avoid damage by solar UV radiation, lips should be protected with sunscreen or a lipstick, which has an Australian Standard approved rating. Shading from broad brimmed hats may also contribute to some protection to the lips. Lip balms must not be shared between individuals for health reasons.

## **10. REFERENCES**

Charles Sturt University Enterprise Agreement 2013-2016

Charles Sturt University, Radiation Safety Manual, *Guidelines for the protection of Workers from the Ultra Violet Radiation in Sunlight*

Cancer Council of Australia, Cancer Council of NSW and Cancer Council of Victoria

Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Occupational Exposure to Ultraviolet Radiation 2006.

(State) Work Health and Safety Act and Regulation

Safe Work Australia *Guide on Exposure to Solar Ultraviolet Radiation (UVR)* August 2013

## **11. RESOURCES**

Cancer Council & NSW Government – Toolbox Talk: Skin Cancer Prevention

Cancer Council & NSW Government – UV risk control for outdoor work



### Table of amendments

<b>Version number</b>	<b>Date</b>	<b>Short description of amendment</b>
V1.0	12/12/14	First approved copy