

## OHS INFORMATION SHEET 22: LASER POINTERS & CONTROLLED WEAPONS ACT

September 2004

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### OCCUPATIONAL HEALTH AND SAFETY ISSUES

#### **Background**

Laser pointers, whilst a useful training tool, can present a hazard that is capable of causing harm to eyes. It is difficult for many people to believe that a device that looks like an ordinary pen-light and runs on AAA batteries can be dangerous. However, within each pointer is a small yet powerful laser diode. Laser pointers have recently become relatively common and have unfortunately been misused on humans. An incident in 1999 in Western Australia resulted in permanent eye damage to a 12 year old boy.

Laser classification gives an indication to their degree of hazard:

- Class 1 and 1M lasers are safe for normal viewing under reasonably foreseeable conditions.
- Class 2 and 2M lasers would not cause permanent eye damage under reasonably foreseeable conditions. Damage is usually avoided by your blink reflex or aversion response.
- Class 3R lasers (previously called class 3A) have the potential to cause eye injury, especially in the hands of an unaware, untrained, or careless operator. The resultant injury can range from temporary flash blinding (similar to a visual after image) to a slight retinal lesion.
- Class 3B lasers can cause eye injury but will not generally damage the skin.
- Class 4 lasers are extremely hazardous to the eye and skin (either directly or by a reflection).

Laser pointers of Class 1 and 2 are readily available commercially. Unfortunately 3R lasers can still also be purchased at some shops and at many market stalls. As detailed above class 3R lasers have the potential to cause eye injury and legislation has been introduced in Victoria and other states to ban the use of class 3R laser pointers, thus you must check the class and emission level of any laser pointer before you purchase it.

#### **Legislative Requirements for Laser Pointers**

The Control of Weapons (Amendment) Regulations 1998 came into effect on 23 November 1998. Under these regulations it is prohibited to import, sell, manufacture, possess and use laser pointers which emit a laser beam with an accessible emission limit greater than 1mW, i.e. Class 3R. Laser pointers are not commercially available in Class 3B or 4.

Any laser pointers of Class 3R should be handed in to your nearest police station. Penalty for possession and use is \$6000 or 6 months imprisonment.

Monash University strictly prohibits the use of laser pointers that are not Class 1 or Class 2 on all University premises.

## **SAFE USE OF LASER POINTERS**

Laser pointers are effective tools when used properly. The following considerations should be observed when using laser pointers:

- Use only laser pointers with AS/NZS 2211 classification Class 1 or Class 2.
- Do not use or purchase a laser pointer that has a stated emission level of greater than 1 mW
- Class 2 lasers are labelled "Caution: Laser Radiation. Do not stare into the beam. Class 2 Laser Product."
- Never look directly into the laser beam.
- Never point a laser beam at a person.
- Do not aim the laser at reflective surfaces.
- Do not allow children to use laser pointers unless under the supervision of an adult.

### **For Further Information**

Contact Occupational Health, Safety and Environment on Tel: (03) 9905 1016, Fax: (03) 9905 3098 or Email: [ohsehelpline@adm.monash.edu.au](mailto:ohsehelpline@adm.monash.edu.au)