Department of Health and Human Services Population Health



Radiation Protection Act 2005 – Section 17

CERTIFICATE OF COMPLIANCE:

STANDARD FOR RADIATION PLACE

FOR RADIATION APPARATUS: LASER and Intense Pulsed Light

SECTION 1: REQUIREMENTS FOR CERTIFICATES OF COMPLIANCE FOR PLACES WHERE RADIATION APPARATUS IS TO BE USED AND/OR STORED

SECTION 2: COMPLIANCE REQUIREMENTS: PLACE - RADIATION APPARATUS LASER OR IPL

This information can also be accessed at http://www.dhhs.tas.gov.au/peh/radiation protection

Section I – REQUIREMENTS FOR CERTIFICATES OF COMPLIANCE FOR PLACES WHERE RADIATION APPARATUS IS TO BE USED AND/OR STORED.

This Standard is to be used when assessing a place where the following radiation apparatus is to be usually or primarily used and/or stored:

Radiation Apparatus, classified on Radiation Protection Act 2005 licences as "Laser" or "IPL"

A "place" is defined in the Radiation Protection Act 2005 as including "vacant land, premises and a vehicle".

"premises" is further defined as including

- (a) a building or structure; and
- (b) land on which a building or structure is situated; and
- (c) a part of any such building, structure or land.

"vehicle" is defined as meaning anything used for transporting any thing or person by land, water or air.

In order for a certificate of compliance to be issued the Place must be shown to fully comply with the requirements in Section 2.

Section 2 – COMPLIANCE REQUIREMENTS: PLACE - RADIATION APPARATUS LASER OR IPL

I. General

a. Protection of people from radiation exposure when the apparatus is in use

All persons entering the treatment area or room must be able to access appropriate laser or IPL safety eyewear prior to entering the room or treatment area.

Windows in the treatment area or room must be opaque at the laser or IPL wavelengths used in the room. In some cases glass may be sufficient for the wavelengths used, but in other cases blinds may need to be used.

2. Warning signs

All entrances to individual rooms or areas where a laser or IPL is to be usually or primarily used must bear a laser warning sign. Signs must be of the form



with accompanying wording appropriate to the usage

such as:



For mobile laser or IPL equipment, temporary signs must be situated at all entrances to the treatment room or area.

No warning sign is required if a unit is solely to be stored in a place and not used but the place must be secure against theft or unauthorized use of the source.

3. Spatial requirements

Areas within the room or treatment area where the laser or IPL beam's irradiance or radiant exposure exceeds the appropriate corneal maximum permissible exposure (MPE), including the possibility of accidental misdirection of a laser beam, must be organized so as to reduce the likelihood of specular reflection occurring. For example, this area must use drapes over reflective surfaces, or only have non-reflective equipment stored in it while the laser or IPL is in use.

4. Interlocks

For medical or therapeutic usage the laser or IPL does not need to be interlocked to entrance doors to the treatment room or area provided access to these rooms is controlled.

5. Materials within the treatment room

Storage of flammable material - For some types of lasers, the storage of anesthetics, solvents and the like may pose a fire hazards due to laser ignition of the materials. When flammable materials are stored near lasers that can potentially ignite the materials these ignition risks must be mitigated by appropriate means.

6. Patient induced fire -Where there is a risk of a patient induced fire (in the case of surgical lasers), there must be access to an appropriate fire extinguisher, wet drapes and similar to manage any fire.

7. Vehicles - Storage

Where a (mobile) laser or IPL is to be primarily stored in a road vehicle, then it must be securely located in the vehicle to protect it from damage during transport.

A road vehicle, in which a laser or IPL is to be primarily stored, and which is not a trailer, must have an alarm and an engine immobiliser.

8. Vehicles – Use – Lasers are used on vehicles such as aircraft and road vehicles.

Aircraft lidar - the laser must have a shutter that stops exposure occurring if the aircraft is at an altitude whereby the MPE at the ground is exceeded.

Road vehicle – the laser must have a shutter that stops exposure if the vehicle rolls over or becomes oriented such that exposure of persons above the MPE is possible.

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Page 4 of 4