



Laser System or Equipment Audit Checklist

Budget Unit: _____ Research Group: _____ Laboratory #: _____

Laser Safety Officer: _____ Manufacture: _____ Model #: _____

Intended Purpose: _____

HOW TO USE THESE CHECKLIST

1. Complete each relevant checklist by placing a tick in the appropriate box next to each checklist item (**C=Compliant**, **NC=Not Compliant**, **NA=Not Applicable**).
2. Forward a copy of each completed checklist to the laser safety officer.
3. Forward a copy of each completed checklist to the Safety and Wellbeing.

Laser Classification:

- ☐ Class 1
- ☐ Class 2
- ☐ Class 3A
- ☐ Class 3B
- ☐ Class 4

Are there any modifications that may affect classification? Yes No

Comment: _____

THE LASER

Is the laser?

- ☐ *Fixed*
- ☐ *Mobile*
- ☐ *A part of* _____

Specification:

- *CW* or *Pulsed* (repetition frequency _____ Hz) or *pulse duration** (___ s)
- Wavelength*, or wavelength range (nm): _____
- Max operating - Output power* (W): _____
- Energy (J): _____
- Beam irradiance (W/cm²): _____
- Radiant exposure (J/cm²): _____
- Emergent Beam diameter (mm): _____
- Beam divergence (mrad): _____
- Hazard range (calculated, m): _____ or $> 5\text{ m}$

*These values should be on the label.

Is the laser suitable for its intended purpose?

Yes

No

Is the Laser equipment compliant with AS/NZS IEC 60825.1: 2014?

Yes

No

THE LASER SYSTEM

Checklist 1: Administrative controls

Item	C	NC	NA	Comment
Is the instruction manual available?				
Are labelling/Warning signs present on: Instrument (i.e. class label) Access panels Apertures Service entry label				
Is remote operation available?				
Is good housekeeping maintained?				

Checklist 2: Operational Controls

Item	C	NC	NA	Comment
Is protective housing/enclosure present for class 3A, 3B and/or 4 Lasers?				
Are interlocks for class 3B or 4 Lasers ☐ Emergency master disconnect interlock, or ☐ Door interlock, or ☐ Fixture interlock or ☐ Momentary override switch to shut down the <i>laser power</i> or stop <i>Beam path</i> .				
Is key operated master control present for class 3B and/or 4 lasers?				
Audible or Visible ON indicator is located for class 3B and/or 4 lasers.				
Emission indicator/warning sign is located for class 3A, 3B and/or 4 lasers.				

Is there an access panel cabinet interlock for class 3A, 3B and/or 4 lasers?				
Is a remote control connector located for class 3B and/or 4 lasers?				

Is the laser equipment compliant?

Yes

No

Checklist 3: Beam Path

1. Beam Path is:

- ☐ Fixed
- ☐ Mobile
- ☐ Fully enclosed
- ☐ Partially enclosed
- ☐ Fully open/ accessible.
- ☐ Terminated at the end of useful path

Yes

No

2. Beam Height _____ (m) above floor.

3. Beam Stop characteristics appropriate for class 3B and/or 4 lasers:

- ☐ Experiment
- ☐ Fire resistance
- ☐ Diffuse
- ☐ Low reflectivity

4. Is target enclosed for class 3A, 3B and/or 4 lasers?

- ☐ Yes
- ☐ No

5. Is laser beam adequately controlled?

- ☐ Yes
- ☐ No

Item	C	NC	NA	Comment
Side shields, table shields with a non-shiny surface are installed for class 3A, 3B and/or 4 lasers.				
Rigid mounting of laser head, lenses, beam stops are installed for class 3A, 3B and/or 4 lasers are: ☐ Mirrors, beam splitters etc.				

☐ Or strictly controlled movement ☐ Or scanning safeguards				
Beam Shutter, attenuator and/ or collimator are installed in the system for class 3A, 3B and/or 4 lasers.				
Lenses are used to expand the beam to a safe level.				
Beam stops are installed for class 3A, 3B and/or 4 lasers.				

General comments: _____

Risk Assessment: Considering the above checklist, what is the overall risk of injury to **users** and **bystanders**?

- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Extreme

High or Extreme risk system or equipment **MUST** have appropriate approval in accordance with the ANU risk approval process (Chapter 3.1 of WHSMS handbook).

Auditor's name: _____ Date: ____ / ____ / ____