

Laser Safety Inspections

Monitoring compliance is part of the Laser Safety Officer's duties, but the LSO may ask others to assist in carrying out inspections, for example, research supervisors and others with safety responsibilities.

Inspections should normally be carried out at least once a year.

Ask questions, look around, observe working practices and use a checklist like the one below.

Use your authority as LSO to stop work if necessary and follow up any necessary actions.

Others should be consulted as necessary, especially if you have concerns about hazards associated with the laser.

Give praise and encouragement where appropriate.

Report any significant findings to your safety committee.

Laser Safety Inspection Checklist

Lasers throughout the University vary widely in their application and control measures. The following detailed checklist includes checks on work practices and control measures that are common to many laser applications. Please amend the form to suit you – add anything you think is relevant or simplify the form as necessary, and don't forget to follow up any actions.

Laser Safety Inspection Checklist

Inspection carried out by:

Date:

			OK? ✓, ✗ or N/A	Comments
1.	Risk Assessment	Does the risk assessment appear to be suitable and sufficient		
		Does it cover all laser activities including alignment		
		Have necessary actions been implemented		
		Has the risk assessment been reviewed within the last year and revised when necessary		
2.	Local rules	Are these documented following the format in University policy		
		Do they contain contingency plans, brief description of work, control measures, procedures covered...?		
		Have local rules been reviewed within the last year and revised when necessary		
3.	For Normal use	Are Safe working procedures in operation		
		Are they documented either in the local rules or separately		
		Have possibilities of faults occurring or misuse considered		
		Have possible inadvertent reflections been assessed		
4.	For procedures where risk is greater than during normal use (e.g. alignment, maintenance)	Are Safe working procedures in operation		
		Are they documented either in the local rules or separately		
5.	Are engineering controls utilised as far as practicable			
6.	Is justification for open beams included in risk assessment			

7.	Are all enclosures securely fixed			
8.	Are all optical components securely fixed			
9.	Is key control maintained (keys must not be left in unattended laser equipment)			
10.	Are suitable administrative control measures in place Is there evidence that these are followed (e.g. from observations of work carried out if applicable)			
11.	Are others protected from hazards (e.g. are appropriate warning signs displayed and interlocks fitted if necessary)			
12.	Are interlocks failsafe			
13.	Is there evidence of maintenance of engineering controls (e.g. log book of regular checks on interlocks, shields, interconnections etc)			
14.	Laser work and non-laser work separated and isolated (e.g. screen between laser work area and write-up area)			
15.	Laser working area designed with regard for safety	Is the layout suitable		
		Has an assessment of NOHD been carried out		
		Are access arrangements and restrictions appropriate		
16.	Service work – done by external service engineers	Have any hazardous activities been identified		
		Are appropriate arrangements in place for service work e.g. temporary restrictions on access		
17.	Contingency plans	Are these documented in local rules		
		Do they follow University policy		
		Are they easily accessible		
		Are staff/ students aware of the arrangements (ask staff/students – what are the likely contingencies?)		
18.	Emergency arrangements	Are arrangements for Emergency-Stop in place		
		Has safe entry for security and emergency services been considered (e.g in the event of security investigating an alarm sounding?)		
		Are staff/ students aware of the arrangements (ask staff/ students – how would you quickly shut off the equipment in an emergency?)		

19.	Eye protection	Is appropriate eyewear readily available		
		Is it maintained in good condition		
		Is it appropriately marked (CE and according to EN 207/EN 208)		
		Is there evidence that eyewear is used when necessary (carry out spot checks if necessary)		
	Any other checks			
20.	Check Interconnections for electricity, water, gases			
21.	Control measures in place for laser dyes			
22.	Risk assessments in place for other hazardous activities			
23.	Is the laboratory free from clutter (particularly optical benches and walkways)			
	Other Comments:			

List of Actions Required

Action	Name of person responsible	To be completed by (agreed date)	Completed? (date/ signature of LSO)