



LASER SAFETY HAZARD EVALUATION

Occupational Health, Safety & Environment
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General Information	
Principal Investigator	
Department	
Building and Room Number	
E-mail or Phone Number	

1. INVENTORY ITEM		COMMENTS
Manufacturer:		
Model:		
Serial Number:		
Hazard Class:	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3R <input type="radio"/> 3B <input type="radio"/> 4	
Technical Specifications		
Type (lasing media):		
Wavelength(s) (nm):		
Output Power(s)		
Pulsed? <input type="radio"/> No	<input type="radio"/> Yes:	
	Pulse Energy (J):	
	Pulse Length (s):	
	Repetition Rate (Hz):	
Beam Diameter (mm):	_____ (check one) <input type="radio"/> 1/e <input type="radio"/> 1/e ²	
Divergence (mrad):	_____ (check one) <input type="radio"/> 1/e <input type="radio"/> 1/e ²	
MPE:H Radiation Exposure (J/cm ²)		
MPE (W/cm ²):		
Diffuse NHZ (m):		
Intrabeam NOHD (m):		
Minimum OD:	_____ for _____ nm	
2. WARNING SIGNS AND LABELS		Y / N / NA
Warning label(s) visible (on house and or control panel)		
Beam aperture label at beam port		
Warning label(s) on beam path enclosure (> 1 m long)		
Warning sign(s) visible at entrance		
Warning light assembly at entryway		
Key control for on/off switch (class 4); master switch		
Protective housing interlocks tested		
Protective housing intact		
If not:	Access restricted & area control	
	PPE (including eye protection) available	
		ITEM
		1
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	Barriers, beam stops		10
3. ADMINISTRATIVE PROCEDURES AND DOCUMENTATION		Y / N / NA	ITEM
Manufacturer's operational manual available			11
Supporting documentation (MPE & OD Calculations)			12
SOP written & available (last revision date: _____), including			13
	Authorized users & training dates available		
	General safety precautions & NHZ description		
	PPE requirements & use		
	Alignment procedures		
	Emergency procedures		
Laser safety manual available			14
4. LABORATORY PERSONNEL: TRAINING & EYE EXAMS			15
	Name	Date of Last Training	Eye Exam (Y/N)
5. LABORATORY PROTECTIVE MEASURES & EQUIPMENT		Y / N / NA	ITEM
ENGINEERING SAFETY CONTROLS			
Laser secured to table			16
Laser optics secured to prevent stray beams			17
Laser not at eye level			18
Beam is enclosed			19
Remote viewing of beam			20
Fiber optics used			21
Windows in room covered			22
Reflective material kept out of beam path			23
No physical evidence of stray beams			24
BEAM HAZARDS			
Beam stops (present at end of all beam paths & non-combustible)			25
Barriers/screens if present (non-combustible & no burn holes)			26
Beam path enclosures if present			27
Beam condensed or enlarged			28
Beam focused			29
Beam intensity reduced through filtration			30
NON-BEAM HAZARDS			
Fire extinguisher available (type: _____; last inspection date: _____)			31
Emergency egress maintained			32
Electrical Safety			
No exposed circuits (V > 50V)			33
Insulation, cords, etc. in good condition			34
"Power-up" warning lights clearly visible			35
"Buddy System" or other safety measure during alignment			36



No wires/cables on floor creating trip hazards		37
Optical tables properly grounded		38
Chemical Safety (7.3)		
Dyes/Solvents used? <input type="radio"/> No <input type="radio"/> Yes	Dye/solvent _____	39
	MSDS available	40
	Double containment (spill tray, etc.)	41
	Chemical PPE specified & available	42
	Fume hood available	43
Cryogenics		44
Compressed gases		45
Collateral radiation hazard		46
Explosion Hazard		47
Fire Hazard		48
LGAC Production		49
6. PERSONAL PROTECTIVE EQUIPMENT		50
Eye protection available & in good condition		
Manufacturer		
Model		
OD/Wavelength Marked		
No. of pairs		
Proper storage used		
Other PPE (face shield, gloves, lab coats, etc.)		
7. COMMENTS / RECOMMENDATIONS		

Supervisor: _____ Date: _____
(Signature)

Laser Safety Officer: _____ Date: _____
(Signature)