**Laser Self Inspection Form**

**This form need only be completed for an initial laser set-up. This form is not required to be completed on an annual basis, but you may complete it as a guide to prepare for an in-person audit. You may attach a print out of the EHS laser registration form for this laser if you wish to avoid filling out the “Laser Supervisor Information” or the “Laser System Information” tables on this page. If this form is being used for a Class 1 laser system with an embedded Class 3B or 4 laser, you may skip to the note on page 5.**

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| **Laser Supervisor Information** | | | | | |
| Last Name |  | | First Name |  | |
| Campus |  | Building |  | Office# |  |
| Office Phone # |  | E-mail Address |  | | |
| College |  | | Department |  | |

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| **Laser System Information** | | | | | |
| Campus |  | Building |  | Room# |  |
| Serial # |  | EHS Laser ID # |  | Class |  |
| Embedded Class |  | Type |  | Wavelength |  |
| Output Type |  | Manufacturer |  | Model |  |
| Beam Diameter |  | Pulsed Energy |  | Power Output |  |
| Pulse Width |  | Repetition Rate |  | Beam Delivery |  |
| Is laser used in a class room setting? | | | | | |

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| **Laser Inspection Information** | | |
| Inspection Date |  | |
| Person(s) Conducting Inspection |  | |
| EHS Present for Inspection | Yes | No |
| Corrective Actions Required | Yes | No |

During the inspection the following items were checked and were found to be Satisfactory,

Not Satisfactory, or Not Applicable. Check Applicable Box.

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| **Entrance properly posted** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: All signs shall be conspicuously displayed in locations where they best will serve to warn onlookers. Templates for printing your own signs are available on the laser safety page of the EHS web site. | | | |

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| **Room Security adequate** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Are engineering or administrative controls in place to prevent someone from entering the area while the laser is running and being exposed to the beam? | | | |

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| **Entryway Controls** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: If a lab contains a class 4 laser, is there a form of entryway control on the exterior of the lab preventing accidental access to the lab while the laser is running? Is there an audible and/or illuminated sign outside of the laser area that indicates that the laser is being activated or in use? | | | |

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| **Laser hazard label in place** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Commercial laser products manufactured in compliance with Federal Laser Product Performance Standard (FLPPS) will be certified by the manufacturer and will incorporate this control. Home-made lasers shall also be labeled with laser information. | | | |

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| **Laser aperture label in place** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Commercial laser products manufactured in compliance with Federal Laser Product Performance Standard (FLPPS) will be certified by the manufacturer and will incorporate this control. | | | |
| **Protective housing in place** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Commercial laser products manufactured in compliance with Federal Laser Product Performance Standard (FLPPS) will be certified by the manufacturer and will incorporate this control. | | | |

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| **Interlock on housing functioning** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: If the laser has an interlock on the housing, it must be checked annually or after each removal for maintenance for functionality. To check the interlock, remove the housing and try to actuate the laser. If the laser does not start the interlock is functioning. Please take safety precautions in the event the interlock is faulty and the laser activates during this test. | | | |

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| **Beam shutter present** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Does the protective housing have a beam shutter or attenuator that is capable of preventing access to laser radiation when the laser or laser system output is not required, as in warn up procedures? | | | |

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| **Key operation** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Laser labs that are accessible by non-laser-trained personnel shall remove the key controls form any class 4 lasers within the lab area. | | | |

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| **Laser secured to table** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Is the laser in such a state that it can not be inadvertently bumped causing a stray beam? | | | |

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| **Laser optics secured to prevent stray beams** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Are the optics secured to prevent inadvertent bumping causing a stray beam? Are any reflective materials located within the beam path that are not required for the experimental set-up? i.e. screwdrivers, unused optics. | | | |

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| **Laser not eye level** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Make sure the laser beam is not at a level that would be eye level for a person casually walking through room. | | | |

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| **Window in room covered** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Are there any lasers in the room pointing at a window, or have enough power that they can travel beyond the area of the room? If so, are the windows covered to protect those on the other side? | | | |

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| **Physical evidence of stray beams** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Check the area for burn marks and signs of smoke residue. | | | |

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| **Proper laser eye protection is available** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Verify that the proper eye protective is available for the laser users. Ensure there are enough pairs of LEP for all potential users. | | | |

**Note:** Skip to this section if the laser is a class 1 system

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| **SOP available** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: The laser safety SOP must be available in the general area of the laser. | | | |

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| **All users have completed EHS laser safety training** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Training certificate must be in the laser safety program folder in the general area of the laser. | | | |

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| **Documentation that all users have been trained in the SOP** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: Specific training must be documented in the specific training documentation form. | | | |

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| **Toxic Laser media in use** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: **Toxic Dye Hazards**  The fluorescent dyes (used with dye lasers) can present substantial hazards due to their toxicity. Some of these dyes are suspected of being carcinogenic or mutagenic. The solvents used for mixing the dyes may be flammable, toxic, or present other health hazards. Safety Data Sheets (SDS) on dyes or solvents are available from your department or by contacting EHS.  Users of lasers with Dye media shall be aware of the associated safety hazards and plan for them accordingly. | | | |

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| **Fire hazard** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: **Fire Hazards**  Class 4 lasers can present fire hazards. Lasers being operated in a CW mode with a beam power that exceeds 0.5 Watt can ignite or cause off-gassing in combustible materials left in the beam path. Beam stops, barriers, and curtains used with Class 4 lasers must be made of non-combustible materials. Flammable materials shall not be in or around the beam path of a class 4 laser. All Class 4 laser labs should have an ABC Type extinguisher readily available as a fire precaution. | | | |

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| **LGAC production** | Satisfactory | Not Satisfactory | N/A |
| Description of Deficiency:  Corrective Action (s) Implemented:  Corrective Action (s) Completed on Date: | | | |
| Guidance: **Hazards from Laser Generated Air Contaminants (LGAC)**  The interaction of the laser beam with target materials may produce toxic dusts, vapors or gases called LGAC. This is particularly true during material processing (welding, cutting, vapor deposition, etc.). Toxic products resulting from laser processing must be properly controlled through the use of adequate ventilation and filtration. The RSO should be consulted whenever LGAC may result from the laser use. | | | |

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| **Comments:** |
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