 Laser Safety Program

**Laser Hazard Evaluation**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessor Name:** | | | **Email:** | | | | | | | | |
| **Telephone:** | | | **Department:** | | | | | | | | |
| **Room:** | | | **Date:** | | | | | | | | |
| **Brief Description of the Experiment** | | | | | | | | | | | |
|  | | | | | | | | | | | |
| **Laser Specifications** | | | | | | | | | | | |
|  | **Laser 1** | **Laser 2** | | | | | | **Laser 3** | | | |
| **Laser Class 3B or 4** |  |  | | | | | |  | | | |
| **Manufacturer** |  |  | | | | | |  | | | |
| **Model** |  |  | | | | | |  | | | |
| **Continuous Wave or Pulsed** |  |  | | | | | |  | | | |
| **Maximum Power** |  |  | | | | | |  | | | |
| **Wavelength Range** |  |  | | | | | |  | | | |
| **Wavelength in Use** |  |  | | | | | |  | | | |
| **Beam Shape** |  |  | | | | | |  | | | |
| **Diameter or Dimensions** |  |  | | | | | |  | | | |
| **Beam Divergence** |  |  | | | | | |  | | | |
| **Engineering Control Measures** | | | | | | | | | | | |
| Protective Housing | | | | **□** Yes | | | | | **□** No | | |
| Interlocks on Removable Protective Housing | | | | **□** Yes | | | | | **□** No | | |
| Service Access Panel | | | | **□** Yes | | | | | **□** No | | |
| Key Control | | | | **□** Yes | | | | | **□** No | | |
| Viewing Windows, Display Screens and Collecting Optics | | | | **□** Yes | | | | | **□** No | | |
| Nominal Hazard Zone for Fully Open Beam Path | | | | **□** Yes | | | | | **□** No | | |
| Nominal Hazard Zone for Limited Open Beam Path | | | | **□** Yes | | | | | **□** No | | |
| Laser Radiation Emission Warning | | | | **□** Yes | | | | | **□** No | | |
| Class 4 Laser Controlled Area | | | | **□** Yes | | | | | **□** No | | |
| Entryway Controls | | | | **□** Yes | | | | | **□** No | | |
| Protective Barriers and Curtains | | | | **□** Yes | | | | | **□** No | | |
| **Explanation for any “No” Answers Above** | | | | | | | | | | | |
|  | | | | | | | | | | | |
| **Administrative Controls** | | | | | | | | | | | |
| Standard Operating Procedures | | | **□** Yes | | | | **□** No | | | | |
| Output Emission Limitations | | | **□** Yes | | | | **□** No | | | | |
| Laser-Specific Training | | | **□** Yes | | | | **□** No | | | | |
| Authorized Personnel | | | **□** Yes | | | | **□** No | | | | |
| Laser Controlled Area | | | **□** Yes | | | | **□** No | | | | |
| Nominal Hazard Zone | | | **□** Yes | | | | **□** No | | | | |
| Controlled Operations | | | **□** Yes | | | | **□** No | | | | |
| Outdoor Control Measures | | | **□** Yes | | **□** No | | | | | **□** N/A | |
| Alignment Procedures | | | **□** Yes | | | | **□** No | | | | |
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| **Non-Beam Hazards** | | | | | | | | | | | |
| **Hazard** | | | **Control(s)** | | | | | | | | |
| Electrical: | | |  | | | | | | | | |
| Chemical: | | |  | | | | | | | | |
| Pressure: | | |  | | | | | | | | |
| Thermal: | | |  | | | | | | | | |
| Waste: | | |  | | | | | | | | |
| Reaction/Activation Products: | | |  | | | | | | | | |
| Radiation: | | |  | | | | | | | | |
| X-ray: | | |  | | | | | | | | |
| Laser-generated Air Contaminants: | | |  | | | | | | | | |
| UV: | | |  | | | | | | | | |
| Noise: | | |  | | | | | | | | |
| **Other Hazards and Controls** | | | | | | | | | | | |
| **Hazard** | | **Control(s)** | | | | | | | | | |
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| **Persons Who May Be at Risk** | | | | | | | | | | | |
| **Name** | | **Trained Laser User?** | | | | | | | | | |
|  | | **□** Yes | | | | **□** No | | | | | **□** N/A |
|  | | **□** Yes | | | | **□** No | | | | | **□** N/A |
|  | | **□** Yes | | | | **□** No | | | | | **□** N/A |
|  | | **□** Yes | | | | **□** No | | | | | **□** N/A |
|  | | **□** Yes | | | | **□** No | | | | | **□** N/A |
| **Laser Safety Eyewear** | | | | | | | | | | | |
| **Manufacturer** | **Wavelength** | **Emission Type** | | | | | | **Scale Number** | | | |
|  |  |  | | | | | |  | | | |
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| **Emergency Actions** | | | | | | | | | | | |
| In the event of an emergency, it is important to understand the control measures below: | | | | | | | | | | | |
| Fire | ✓ Switch off the power supply to the laser if it is safe to do so.  ✓ Do not put yourself in danger.  ✓ Activate the fire alarm.  ✓ As long as it does not compromise your safety, you can attempt to extinguish the fire  with the appropriate equipment.  ✓ Evacuate to an assembly point. | | | | | | | | | | |
| Laser Eye Injury | ✓ If an accident occurs, seek help from someone nearby.  ✓ Press the emergency button to disable laser(s).  ✓ Do not hesitate to call 911 if the injury is severe.  ✓ Report to Emergency Room even if you believe the injury is minor.  ✓ Report to your supervisor as soon as you are able. | | | | | | | | | | |
| **ALL ACCIDENTS/INCIDENTS MUST BE REPORTED TO THE LASER SAFETY OFFICER AND ENVIRONMENTAL HEALTH & SAFETY.** | | | | | | | | | | | |
| **Signatures** | | | | | | | | | | | |
| **Assessor’s Signature** | | | | | **Date** | | | | | | |
| **Authorizing Signature (LSO)** | | | | | **Date** | | | | | | |