# COLORADO SCHOOL OF MINES

# LASER REGISTRATION FORM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| LABORATORY INFORMATION | | | | | |
| **Lab Name/Description:** | | | | **Department:** | |
| Location: | | | | Lab Phone Number: | |
| Laser Owner: | | | | PI (if other than owner): | |
| Laser Owner Phone#: | | | | Date: | |
|  | | | | | |
| LASER INFORMATION | | | | | |
| Laser Manufacturer: | | | | **Laser Model:** | |
| Laser Type (HeNe, Nd-YAG, etc): | | | | **Laser Serial Number:** | |
|  | | | | | |
| Manufacturer’s Hazard Classification: | | | | | |
| Class 3B | Class 4 | Class 1 laser system with a Class       laser embedded | | | |
|  | | | | | |
| Is a standard operating procedure (SOP) written for this laser? | | | | |  |
| Yes (If yes please provide a copy of the SOP) | | | | |  |
| No | | | | |  |
|  | | |  | |  |
| LASER CHARACTERISTICS | | | | | |
|  | | | Pulsed | | Continuous Wave |
| Lasing medium | | |  | |  |
| Wavelength (unit      ) | | |  | |  |
| Wavelength range (unit      ) | | |  | |  |
| Beam diameter (mm) | | |  | |  |
| Beam divergence (mrad) | | |  | |  |
| Maximum output power (unit      ) | | |  | |  |
| Average output power (unit      ) | | |  | |  |
| Energy/pulse (J) – peak power | | |  | |  |
| Pulse rate (Hz) – repetition frequency | | |  | |  |
| Pulse duration(unit      ) | | |  | |  |
|  | | |  | |  |
| Q-switched? Yes  No | | | If yes, pulse width | |  |
| Has the laser been modified from its original design/configuration? Yes  No | | | | | |
| If yes, describe | | | | | |
|  | | | | | |

|  |  |  |
| --- | --- | --- |
| **SAFETY AND CONTROL MEASURES Safety** | | |
| **Yes** | **No** | **Please verify the use of the following controls.** |
| **Access / Postings** | | |
|  |  | Posted Entrance |
|  |  | Laboratory Security (key card or limited laboratory access) |
|  |  | Established Control Area |
|  |  | Warning Signs |
| **Administrative Controls** | | |
|  |  | Written Standard Operating Procedures |
|  |  | Written Alignment Procedures |
|  |  | Personnel Trained In Standard Operating Procedures |
|  |  | Emergency Contacts Posted |
|  |  | Personnel Authorization |
|  |  | Laser Classification Label |
|  |  | Laser Hazard Label |
| **Engineering Controls** | | |
|  |  | Enclosed Beam |
|  |  | Protective Housing and interlock |
|  |  | Protective curtain used |
|  |  | Service Panel Interlock |
|  |  | Key / Access Pad Control |
|  |  | Beam Stop / Attenuator |
|  |  | Activation Warning Systems |
|  |  | Window / Doorway Covered |
|  |  | Reflective Materials Removed |
| **Personal Protective Equipment** | | |
|  |  | Laser Protective Eyewear |
|  |  | Skin Protection Procedures |
| **Safe Practices** | | |
|  |  | Laser and Optics Secured to Table or Work Surface |
|  |  | Beam Intensity Reduced for Alignment |
|  |  | Laser Located Below Eye Level |
|  |  | Use of Optical Viewing Aids With Procedures in SOP |
| **Non-Beam Hazards** | | |
|  |  | Laser Dyes in Use |
|  |  | Compressed Gases in Use |
|  |  | Cryogenic Material in Use |
|  |  | Local Exhaust Ventilation in Use |
|  |  | Fire Hazards Evaluated |
|  |  | Electrical Hazards Evaluated |

|  |
| --- |
| **Additional Information/Comments** |
|  |