**Example Standard Operating Procedure for Class IIIB and IV Lasers**

|  |  |
| --- | --- |
| Principal Investigator: | Date: |
| Department: | Location: |

1. LASER SAFETY CONTACTS

 Principal Investigator: Phone:

 Laser Safety Officer: Phone:

 Service Contractor: Phone:

 Emergencies: Phone:

1. LASER DESCRIPTION

 Type: Wavelength: Classification:

 Manufacturer: Model: Serial#:

 Continuous Wave Laser

 Maximum Power:

 Pulsed Laser:

 Maximum Energy: Pulse Duration:

 Pulse Repetition Frequency:

 Description of Application:

1. OPERATING PROCEDURES:
2. Laboratory preparation and start-up procedures.

 b. Target area preparation.

 c. Normal operating procedures.

 d. Shut down procedures.

 e. Special operating procedures, including alignment, interlock bypass, maintenance and service.

 f. Emergency procedures.

IV. CONTROL MEASURES

|  |  |  |
| --- | --- | --- |
| **Y/N/NA** | **CONTROL** | **COMMENTS** |
|  | Entryway interlocks or controls are present. |  |
|  | Protective housing interlocks are present. |  |
|  | Enclosure interlocks are present. |  |
|  | Emergency stop/panic button is present. |  |
|  | Master switch is present. |  |
|  | Laser and associated equipment is secured to base. |  |
|  | Beam stops or attenuators are present. |  |
|  | Protective barriers are present. |  |
|  | Warning signs are posted. |  |
|  | Personal protective equipment is secured to base. |  |
|  | Nominal Hazard Zone is defined. |  |
|  | Manufacturer’s operating manual is available. |  |

ADDITIONAL COMMENTS:

5. HAZARDS AND CONTROLS

|  |  |  |
| --- | --- | --- |
| **Y/N/NA** | **HAZARD** | **CONTROL MEASURES** |
|  | Unenclosed beam. |  |
|  | Potential exposure to direct beam or reflections. |  |
|  | Laser positioned at eye level. |  |
|  | Reflective materials in beam path. |  |
|  | Exposure to ultraviolet or blue light. |  |
|  | Hazardous materials are used. (Dyes, solvents, etc.) |  |
|  | Hazardous waste is generated. |  |
|  | Laser generated air contaminants are generated. |  |
|  | Exposure to high voltage. |  |
|  | Compressed gases are used. |  |
|  | Fire hazards are present. |  |
|  | Plasma radiation is generated. |  |

ADDITIONAL COMMENTS:

6. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Laser Eyewear

|  |  |
| --- | --- |
| **FOR THIS LASER** | **WEAR THIS EYEWEAR** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  Laser | Wavelength(s) (nm) | Wavelength(s)Attenuated (nm) |  Optical Density | Manufacturer |
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Other PPE Required

7. Operator Review

 I have read this procedure and understand its contents.

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| Name | Signature | Date |
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