

Sample Laser Standard Operating Procedure

| | |
|-------------------|-----------------|
| Laser: _____ | Date: _____ |
| Department: _____ | Location: _____ |

1. LASER SAFETY CONTACTS

Primary Laser Operator: _____ Phone: _____
Laser Safety officer _____ Phone: _____
Maintenance/Repair _____ Phone: _____
Medical Emergencies _____ Phone: _____

1. LASER DESCRIPTION

- Location of laser or laser system (site, building, room).
- Diagram of area layout with beam path, include locations of emergency shut-off's, fire extinguishers, protective equipment (eye-wear), barriers.(attachment).
- Description of each laser, including classification, lasing medium, and beam characteristics (divergence, aperture diameter, pulse length, repetition rate, and maximum output, as applicable.)
- Purpose/application of beam(s).

2. LASER SAFETY PROGRAM

Clearly outline each category below:

- Responsibilities of the laser operator(s)
- Security / warning system activation / key control
- Safety Procedures
- Laser Training Requirements
- Personnel Protective Equipment Requirements

3. OPERATING PROCEDURES

- Initial preparation of laboratory environment for normal operation (key position, outside status indicator on, interlock activated, warning sign posted, personnel protective equipment available, other):
- Target area preparation:
- Special Procedures (**ALIGNMENT PROCEDURES**, safety tests, maintenance tests, other):
- Operating procedures (power settings, Q-switch mode, pulse rate, other) are as follow:
- Shutdown procedures are as follows:

4. CONTROL MEASURES

| LASER/LASER SYSTEM CONTROLS | | |
|-----------------------------|--|----------|
| Check if applicable | CONTROL | COMMENTS |
| <input type="checkbox"/> | Entryway (door) Interlocks or controls | |
| <input type="checkbox"/> | Laser Enclosure interlocks | |
| <input type="checkbox"/> | Laser Housing Interlocks | |
| <input type="checkbox"/> | Emergency Stop/Panic button | |
| <input type="checkbox"/> | Master Switch (operated by key or code) | |
| <input type="checkbox"/> | Laser secured to base | |
| <input type="checkbox"/> | Beam Stops/Beam Attenuators | |
| <input type="checkbox"/> | Protective Barriers | |
| <input type="checkbox"/> | Warning Signs | |
| <input type="checkbox"/> | Reference to Equipment manual | |
| <input type="checkbox"/> | Extra Eyewear Available | |
| <input type="checkbox"/> | | |

COMMENTS:

| HAZARDS AND CONTROLS | | |
|--------------------------|---|----------|
| Check if applicable | HAZARD | CONTROLS |
| <input type="checkbox"/> | Unenclosed beam/ Access to direct or scattered radiation | |
| <input type="checkbox"/> | Laser at eye level of person sitting or standing | |
| <input type="checkbox"/> | Ultraviolet Radiation/ Blue Light Exposure | |
| <input type="checkbox"/> | Reflective Material in Beam Path | |
| <input type="checkbox"/> | Hazardous Materials/Waste(dyes, solvents, other) | |
| <input type="checkbox"/> | Fumes/Vapors | |
| <input type="checkbox"/> | Electrical | |
| <input type="checkbox"/> | Capacitors | |
| <input type="checkbox"/> | Compressed Gasses | |
| <input type="checkbox"/> | Fire | |
| <input type="checkbox"/> | Housekeeping | |
| <input type="checkbox"/> | Trip Hazard | |

COMMENTS:

5. PERSONNEL PROTECTION EQUIPMENT

A. Eyewear

| LASER EYEWEAR | | | | | |
|--------------------|--------|-----------------------|-------------------------------------|------------------------|---------|
| For this laser.... | | | ...Wear this eyewear | | |
| Acquisition# | Type | Wavelength(s) (nm) | Wavelength(s) Attenuated (nm) | Optical Density(OD) | Remarks |
| Example | Nd:YAG | 1064,532 | 1064,532 | 5+ | UVEX |
| | | | | | |

B. Other Protective Equipment Required within Nominal Hazard Zone

| ITEM | LOCATION | USAGE CONDITION |
|-------|----------|-----------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

6. OPERATOR REVIEW

I have read and understood this procedure and its contents, and agree to follow this procedure each time I use the laser or laser system.

| Name (print) | Signature | Date |
|--------------|-----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |