Chapter 10: Laser Safety

Laser Controlled Area Visitor Requirements

1 Purpose

The purpose of these requirements is to ensure that visitors are aware of conditions under which they can enter a laser controlled area (LCA), and that the LCA will be in a state of minimal hazard during the visit. They cover entering laser controlled areas. They apply to qualified laser operators (QLOs), laser controlled area workers (LCA workers), laser controlled area visitors, system laser safety officers (SLSOs), and the laser safety officer (LSO).

2 Requirements

Laser controlled area visitors, defined as personnel, not including service subcontractors or the laser safety officer (LSO), who have not been approved as a qualified laser operator (QLO) or LCA worker in a SLAC laser facility, may only be permitted access to an LCA if the following requirements are met, unless an exception is approved by the LSO. These conditions must be posted at the laser entry if a laser visitor is permitted in an LCA in Class 1 or Class 4 operation mode.

<table>
<thead>
<tr>
<th>Operation Mode</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Laser OFF      | - The SLSO or designee is responsible for ensuring that the LCA’s lasers are not operating.  
- Unescorted access is permitted. Laser eyewear protection is not required. |
| Class 1        | - Visitors must be escorted by one of the facility’s QLOs or LCA workers.  
- Lasers may be operating but the laser beams are fully enclosed in approved Class 1 enclosures and there are no open beams. The escorting QLO or LCA worker is responsible for ensuring Class 1 laser conditions during the visit.  
- Laser eyewear protection is not required. |
| Class 4        | - **Visitor access is strongly discouraged** because high-power laser beams may be accessible. Access may, however, be permitted subject to the following conditions:  
  - Visitors must be 18 years of age or older.  
  - A QLO/LCA worker must escort the visitor at all times in the laser facility. (Approval from the SLSO is required for LCA workers to escort visitors.)  
  - Prior to entry, the visitor and QLO/LCA worker must discuss the visit’s purpose, scope, and plan for a safe method of completing the task. WPC requirements must be followed. The QLO/LCA worker will explain relevant aspects of laser hazards and controls for the facility. This generally includes a restriction that no laser alignment takes place during the time the visitor is in the LCA. |
Operation Mode Requirements

- Prior to entry by the visitor, the QLO/LCA worker will check the laser facility to ensure the laser system is in and will stay in a state of minimal hazard during the visit.
- Prior to and during entry, the QLO/LCA worker ensures the visitor wears appropriate laser eyewear protection.
- Visitors are not allowed to operate or manipulate the laser beams or perform work on equipment associated with the laser safety system.

3 Forms

The following are forms required by these requirements:
- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:
- None

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)
- Chapter 10, “Laser Safety”
  - Laser Safety: Class 3B and Class 4 Laser Operation Requirements (SLAC-I-730-0A05S-004)
  - Laser Safety Program Site (SharePoint)