Lasers are devices which emit light through a process of optical amplification based on the stimulated emission of electromagnetic radiation. Low and medium-power lasers can be found in many different applications including pointers, distance measurement tools, CD/DVD Rom devices, safety area scanners, bar code readers and surveying equipment. High-powered lasers are typically used for materials processing tasks like cutting and welding.

**Hazards Involved/Arise**
- Eye injury from prolonged exposure to low power lasers or short exposure to higher powered lasers
- Skin burns from higher powered lasers
- Fire hazard from higher powered lasers
- Chemical exposure from laser plume (created from combustion with high powered lasers)
- Other forms of radiation generated by high-powered lasers

**People Affected**
- Anyone working with or in the vicinity of lasers
- Welders
- Field workers
- Surveyors
- Technicians
- Store cashiers
- Store clerks

**Existing Controls**
- Always follow manufacturer’s instructions
- Avoid eye contact; never point at anyone
- Obtain training for use and handling of high-powered lasers
- Proper installation of fixed lasers to prevent inadvertent exposure either directly or indirectly
- Safety glasses designed for use with lasers
- Using care when setting up or using portable lasers to prevent direct or indirect exposure
- Higher powered lasers (Class 3B or 4) require the employer to appoint a Laser Safety Officer (LSO)
- Appropriate respiratory protection when the possibility of exposure to laser plume is possible

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