The Occupational Safety and Health Administration has the right to inspect your facility and issue citations and fines in case of a safety or health violation

- General violation about $1K; willfull violation up to $70K per violation

Main reasons for an OSHA inspection

- Serious injury
- Complaint
- Media
- Referral
29 CFR 1910.133 requires employers to ensure that

- Affected employees who wear prescription lenses while engaged in operations that involve eye hazards wear eye protection that incorporates the prescription in its design, or wears eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.

- Affected employees use PPE with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.
29 CFR 1910.133 requires employers to ensure that

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- Affected employees use PPE with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.
Fed-OSHA General Duty clause section 5.a requires employers to furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees;

- Many OSHA inspectors enforce the ANSI Z136.1 standard as an underground regulation even though it has not been referred to in 29 CFR 1910 or 1926
- Cal/OSHA can use the Injury and Illness Prevention Program (IIPP) GISO 3203 similar to the Fed-OSHA 5a

OSHA can cite you for not following your own written laser safety program so be careful what you require.

- Shall vs Should
- Fed-OSHA construction standard 1926.54 requires that only qualified and trained employees be assigned to install, adjust, and operate laser equipment.
  - Regulation does not differentiate with respect to class of lasers and, thus, all lasers are covered (de minimus).
  - Proof of qualification of laser equipment operator shall be available and in possession of the operator at all times.
- Employees, when working in areas in which a potential exposure to direct or reflected laser light greater than 5 mW, shall be provided with antilaser eye protection.
- Areas in which lasers are used shall be posted with standard laser warning placards.
Before

Develop an Inspection Response Team (IRT).
- Designate primary and backup person that are fully familiar with the site safety program to meet and escort the OSHA inspector.
- Inform receptionist on who to contact upon arrival of the OSHA inspector.

Stage the documents that OSHA may ask to see during the opening conference and organize them for easy access.
- Place each written program in a separate binder so as to not increase the scope of inspection.
- The inspector will want to see the written Injury & Illness Prevention Program (IIPP) in California as well as the written laser safety program (A1.2.1).
- The inspector will want to see the current year and last 3 years of OSHA 300 logs.
- Keep each year’s OSHA 300 log in a separate folder.
Before

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SLIDE-8

- Hazard evaluation:
  - Has every hazardous laser been evaluated by the LSO per A1.2.3
  - Has every laser been classified
- Has the LSO approved Class 3B & 4 SOPs? (A1.2.5) SOP required for 4 and recommended for 3B (4.4.1)
- Has the LSO approved the PPE?
- Has the LSO approved the laser installation prior to use?
- Laser Safety Committee
  - Required if complex laser operations
Training:
- Make sure the written program details training requirements (1.3.2.2)
- Recommend including a copy of the laser safety awareness and laser user training handout as an attachment to the written laser safety program
- Recommend keeping the roster of those who have taken laser safety training as an attachment to the written laser safety program
- Recommend keeping copy of the LSO and DLSO certificate
- In California training must be effective therefore recommend test at end of class to prove effectiveness.
• Labels: Make sure class 3B and 4 lasers have the following labels:
  – Aperture
  – Protective housing
  – FDA classification/certification
• Has the LSO ensured that contractors working on lasers are qualified?
• Unattended use of 3B or 4 laser approved by LSO?
• Signs:
  – Has the LSO approved the laser sign?
  – The laser sign outside the laser control area must list the laser wavelength, maximum power and ANSI class
  – Grandfathered if before year 2000

• Collateral Hazards:
  – Determine if equipment specific Lock Out tag Out (LOTO) procedure is needed (live, capacitor, previous accident, multiple energy source, etc.)
Before

- Periodic Inspection:
  - All laser interlocks inspected (4.3.2)
  - All PPE inspected at least annually (4.6.2.8)
  - Recommend including a copy of the latest laser safety audit as an attachment to the written laser safety program
- NOHD & NHZ:
  - Determine the NOHD & NHZ for each class 3B & 4 laser
- Laser Generated Air Contaminants (LGAC):
  - Perform Industrial Hygiene (IH) monitoring of LGACs of concern (7.3.1)
- Recordkeeping:
  - Recommend keeping a copy of each type of class 3B and 4 laser operation manual
  - Recommend having a copy of ANSI Z136.1
ANSI Z136.1 Table 10:

- Recommend ensuring class 3B and 4 lasers comply with Table 10 requirements for engineering and administrative controls.
- If a shall requirement has not been implemented detail additional control measures that provide equivalent protection (4.2).
- Are barriers selected to withstand direct beam exposure (4.6.4)?

Table 10. Control Measures for the Seven Laser Classes

<table>
<thead>
<tr>
<th>Engineering Control Measures</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1   IM  2   2M  3R  3B  4</td>
</tr>
<tr>
<td>Protective Housing (4.3.1)</td>
<td>X   X   X   X   X   X   X</td>
</tr>
<tr>
<td>Without Protective Housing (4.3.1.1)</td>
<td>LSO shall establish Alternative Controls</td>
</tr>
<tr>
<td>Interlocks on Removable Protective Housings (4.3.2)</td>
<td>V   V   V   V   V   X   X</td>
</tr>
<tr>
<td>Service Access Panel (4.3.3)</td>
<td>V   V   V   V   V   X   X</td>
</tr>
<tr>
<td>Key Control (4.3.4)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Viewing Windows, Display Screens and Collecting Optics (4.3.5.1)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Collecting Optics (4.3.5.2)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Fully Open Beam Path (4.3.6.1)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Limited Open Beam Path (4.3.6.2)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Enclosed Beam Path (4.3.6.3)</td>
<td>None is required if 4.3.1 and 4.3.2 fulfilled</td>
</tr>
<tr>
<td>Remote Interlock Connector (4.3.7)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Beam Stop or Attenuator (4.3.8)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Activation Warning Systems (4.3.9.4)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Indoor Laser Controlled Area (4.3.10)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Class 3B Indoor Laser Controlled Area (4.3.10.1)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Class 4 Laser Controlled Area (4.3.10.2)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
<tr>
<td>Outdoor Control Measures (4.3.11)</td>
<td>X   +   NHZ  X   NHZ  X   NHZ  X   NHZ</td>
</tr>
<tr>
<td>Laser in Navigable Airspace (4.3.11.2)</td>
<td>X   +   NHZ  X   NHZ  X   NHZ  X   NHZ  X   NHZ</td>
</tr>
<tr>
<td>Temporary Laser Controlled Area (4.3.12)</td>
<td>V   MPE  V   MPE  V   MPE  V   MPE  V   MPE</td>
</tr>
<tr>
<td>Controlled Operation (4.3.13)</td>
<td>—   —   —   —   —   —   —   —</td>
</tr>
<tr>
<td>Equipment Labels (4.3.14 and 4.7)</td>
<td>X   X   X   X   X   X   X</td>
</tr>
<tr>
<td>Laser Area Warning Signs and Activation Warnings (4.3.9)</td>
<td>—   —   —   —   —   —   X</td>
</tr>
</tbody>
</table>

LEGEND:  
X    Shall  
·    Should  
—    No requirement  
V    Shall if enclosed Class 3B or Class 4  
MPE  Shall if MPE is exceeded  
NHZ  Nominal Hazard Zone analysis required  
+    May apply with use of optical aids
Upon arrival of inspector meet them and take them to a conference room.

- Ask the inspector for their agency ID and get a business card.

Recommend notifying your safety consultant or legal council to join the inspection as soon as possible.

Enviro Safetech does not recommend denying entry to inspectors.

Be friendly but not too friendly

- Do not joke with the inspector cause they may take it wrong

Grab a notepad and pen and document everything as it happens
• If the inspector does not tell you why they are there (complaint, accident investigation, referral) ask them why.
  – Make sure you know the scope of the inspection and try and prevent them from increasing the scope of the inspection

• Do not bring all safety documents to the conference room.
  – Only give the inspector the document that they ask for and nothing else.
  – Document what specific documents they looked at
  – If you give them a copy of a document make and keep a second copy

• Do not lie but do not volunteer information either.
  – Only answer their question and then stop talking
  – If they ask you a question that you do not understand do not answer, ask them to clarify.
  – Don't feel you have to always provide an instant response. You don't.
The employer's representative must be mindful that any statements or answers made during the inspection will be binding on the company.

- Inspectors do not have to advise you of your miranda rights.
Walkthrough

- The inspector may ask that the union representative be informed of the inspection and be given the right to accompany the inspector during the inspection.
- Control the route the inspector takes through the facility, and how information is communicated to the inspector.
  - Choose a route that exposes the least amount possible to inspection (if the inspector is there to see a specific area).
- If they take a picture you take a picture.
- Correct unsafe conditions on the spot if it can be done safely.
- If they ask to see how a piece of equipment works make sure person operating it has been trained on how to operate the unit.
Walkthrough

- If the inspector asks to talk to an employee before allowing it advise the employee that an OSHA inspector wants to talk to them.
  - Stay within eyesight of the employee
  - Track who was interviewed by OSHA
The inspector will usually ask to have the most senior person in company attend the closing conference.
- Advise senior person not to argue with the inspector or agree to any violations
- They should only listen and not say much

Take notes on everything that the inspector asks or says

Do not agree to any corrective actions or violations.

Ask the inspector to submit any requests in writing.

After the inspection:
- Chat with employee interviewed by the OSHA inspector as to what was asked and what was replied
- Go over your notes and make sure you can read it
- File your notes for later reference
• If a citation is issued, the employer will have 15 working days from the receipt of the citation to contest the citation.
  – Failure to contest in writing within 15 working days will result in the citation becoming final.
  – Enviro Safetech recommends that all citations be contested by the employer through a consultant or legal council.
  – Invoke all affirmative defenses when contesting otherwise cannot use it during trial

• Enviro Safetech recommends that the:
  – Informal conference with OSHA be attended only by the company’s safety consultant or legal council.
  – Pre trial phone conference with judge and OSHA should be done only by the company’s safety consultant or legal council.
After

Questions?

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