Laser Safety & Other Hazardous Optical Sources on the Exhibit Floor

(Due by: March 24, 2017)

Operation of your laser will be permitted only if it meets the following guidelines. Make sure that your laser safety enclosure is complete and complies with these guidelines before setting up your laser system in the exhibit hall. The Laser Safety Checklist must be completed with initials next to each item that applies to your laser equipment, signed by your Laser Safety Manager, and emailed or fax to Jamie Barbera, ASCRS•ASOA Exhibits Manager, by **March 24, 2017**.

As an inducement to ASCRS•ASOA to accept our exhibit of lasers or other hazardous optical sources, we agree to, and shall abide by, the foregoing guidelines, and we do hereby further agree to, and shall defend, hold harmless, and indemnify ASCRS•ASOA, its Directors, Officers, Employees, Agents, and Representatives from and against any and all costs, expenses, claims, liabilities, damages, and judgments asserted against, imposed upon, or incurred by them, or any of them, as a result of our exhibition of lasers or other hazardous optical sources.

PLEASE LIST CLASS OF LASER(s)_____
Please mark all that apply below or N/A if not applicable.

_____ MECHANICAL STABILITY
The laser safety enclosure (LSE) is mechanically strong enough to withstand accidental manipulation during the meeting.

_____ BEAM TERMINATION
The LSE terminates the laser beam. Note that even dark plastics are usually transparent to infrared Nd: YAG radiation.

_____ ENCLOSURE REFLECTIONS
Any specular reflection from the laser beam must be terminated within the LSE. Hand-held laser delivery tips (e.g., fiber-optic end-pieces used in endoscopic surgery) must be tethered to assure that the beam cannot be pointed outside an opening in the LSE and to prevent removal of the tip from the LSE.

_____ BEAM ACCESS
The LSE denies easy access to the laser beam path for any object greater than 1 cm. in diameter to prevent potentially hazardous specular reflections (e.g., from a ring, pen or watch crystal).

_____ AIRBORNE CONTAMINANTS
Any compressed gas canisters contain no more than the minimum gas quantity required for the show, and any airborne contaminants produced are below ACGIH TLVs.

_____ INOPERATIVE LASERS
Inoperative lasers or aiming beam only devices will be clearly labeled as such.

_____ EXHIBIT COMPANY & BOOTH NUMBER

_____ DATE

_____ EXHIBIT COMPANY LASER SAFETY MANAGER
Please print

_____ SIGNATURE

_____ EMAIL OF LASER SAFETY MANAGER
Please print

_____ CELL PHONE FOR ONSITE

Please email or fax this form to ASCRS•ASOA prior to March 24, 2017 to:
Jamie Barbera, ASCRS•ASOA Exhibits Manager, jbarbera@ascrs.org OR **FAX directly to:** (703) 547-8840

Laser Safety and Other Hazardous Optical Sources on the Exhibit Floor

Exhibitors at the ASCRS•ASOA exhibits assume sole responsibility for operating all lasers or other hazardous optical sources in their exhibit in full compliance with applicable health and safety codes so that no safety hazard is presented to meeting attendees, to other exhibitors or to themselves. The following guidelines are provided as an aid for specifying these responsibilities.

Exhibit Management

A. Each exhibit operating lasers or other hazardous optical sources shall have one knowledgeable individual who is the designated safety manager and who is responsible for providing reasonable safety training and surveillance within the exhibit.

B. Identification signs stating the Class of "Laser Inoperable" or "Not FDA Approved At This Time" are required to be displayed for such lasers. Signage must be displayed at all times during the show or equipment housing the laser will be removed immediately, at the expense of the exhibitor

C. No laser equipment shall be left unattended in operable condition.

D. All laser maintenance must be performed in accordance with procedures given in American National Standards Institute (ANSI), Standard Z136.1-2000, "Safe Use of Lasers," (available from the Laser Institute of America, Orlando, FL).

E. No patient care shall be rendered within an exhibit.

F. All operating laser products must have been certified as meeting the requirement of Federal Laser Product Performance Standards, (21CFR1040).

Exposure Guidelines

A. Laser intrabeam viewing: Access to all laser apparatus should be restricted so as to prevent direct (intrabeam) viewing of the laser beam, or its specular reflection, if exposure levels are above the Maximum Permissible Exposure (MPE) limits provided in ANSI Standard Z136.1-2000 (these limits are identical to limits published in IEC Standard 60825-1.2-2001 and those of the International Commission on Non-Ionizing Radiation Protection at http://www.icnirp.org). All beams must be confined to the limits of each exhibit.

B. Laser diffuse viewing: Diffusely reflected beams may also be hazardous to view. The standards for viewing diffuse reflections are based on a laser beam incident on a diffuse Lambertian target (assuming 100% reflection). The incident beam intensities are acceptable if they are at or below the guidance provided in ANSI Standard Z136.1-2000.

C. Arc and Flash Lamps: The standards for viewing extended non-laser sources such as xenon arcs are given in Threshold Limit Value for Chemical Substances and Physical Agents for 2002 provided by the American Conference of Governmental Industrial Hygienists (Cincinnati, OH).

Safety Inspection (Friday, May 5, 2017 between 4:00pm-6:00pm) (Specialty Day – Friday, May 5 between 7:00am-7:30am)

A. Each exhibit operating lasers or other hazardous optical sources will furnish the contact information of the exhibit's safety manager by returning the Laser Safety Checklist.

B. Each exhibit will be inspected by an outside technical expert on laser safety and a staff member of ASCRS to ensure compliance with the preceding guidelines. Exhibits not in compliance will not be permitted to operate laser systems. Inspection does not obviate the exhibitor's sole responsibility and liability for the safe operation of their exhibit.

C. Each laser is required to have proper signage listing the Class of Laser, if the equipment is NOT FDA Approved, or is inoperable. The signage must be posted in the booth at all times during the exhibition.

We are confident your exhibit and instrumentation will satisfy the foregoing precautionary measures. Thank you for your attention to this matter.

Based on guidance in ANSI Z136.1-2000 and predecessor documents and Sliney, D.H., and Mainster, M.A., Laser Safety at Medical and Scientific Exhibitions, Ophthalmology, 91(Suppl. 1):58-61, (September 1984).