**Section 315.140 Additional Requirements for Entertainment Laser Light Show**

a) The operator shall notify the Agency in writing or facsimile, at least 10 working days in advance of the proposed laser light show, and shall include the following information:

1) Name, address and telephone number of:

A) Laser registrant;

B) Laser safety officer;

C) Individual in charge of the laser light show;

2) The location, time and date of the show;

3) Documentation that a variance has been obtained in accordance with 21 CFR 1040.11;

4) For outdoor performances, a copy of the notification to the Federal Aviation Administration;

5) Manufacturer, class, wavelength and output power of the laser systems to be used; and

6) Sketches showing the location of the laser systems, operators, performers, laser beam paths, viewing screens, walls, mirror balls and other reflective or diffusive surfaces that may be struck by the laser beam.

b) The operator shall also supply additional information as may be required by the Agency for the evaluation of the safety of the proposed laser light show.

c) Requirements for Safe Operations

1) Laser radiation emissions outside the spectral range of 400 to 700 nanometers shall not exceed the limits of a Class 1 laser.

2) Levels of laser radiation where the audience is located, and where operators, performers and employees are located if the laser radiation is intended to be viewed by them, shall not exceed the limits of a Class 1 laser.

3) Operators, performers and employees shall be able to perform their functions without being exposed to laser radiation exceeding the limits of a Class 2 laser when the laser radiation is not intended to be viewed by them.

4) Areas where levels of laser radiation exceed the limits of a Class 2 laser shall be identified by posting of warning signs and through use of barriers or guards to prevent individuals from entering these areas.

5) Scanning lasers shall not, as a result of scan failure or any other failure causing a change in either angular velocity or amplitude, permit audience exposure to laser radiation in excess of the limits of a Class 1 laser.

6) Where a mirror ball is used with a scanning laser, the conditions of subsections (c)(1) and (c)(2) shall be met with the mirror ball stationary or during any failure mode resulting in a change in rotational speed of the mirror ball.

7) Laser light shows shall be, at all times, under the direct and personal supervision of the laser operator, except:

A) In cases in which the maximum laser output power level is less than 5 milliwatts (all spectral lines);

B) When the laser beam path is located at least 6 meters above any surface upon which an individual in the audience is permitted to stand; or

C) When the laser beam path is located at least 2.5 meters in lateral separation from any position where an individual in the audience is permitted during the performance.

8) Laser radiation levels shall not exceed the limits of a Class 2 laser at any point less than 3 meters above any surface upon which any individual in the audience is permitted to stand, and 2.5 meters in lateral separation from any position where an individual in the audience is permitted, unless physical barriers are present that prevent human access to these levels.

9) All safety devices and procedures necessary to comply with this Part shall be functionally tested and evaluated after setup and prior to the laser light show to ensure compliance.

10) The laser system, when not in use, shall be secured against unauthorized operation or tampering.

11) Laser alignment procedures shall be performed with the laser output power reduced to the lowest practicable level, and protective eyewear shall be worn where necessary to prevent exposure to laser radiation levels exceeding the MPE. Unless specifically authorized by the laser safety officer, only individuals required to perform the alignment shall be present during these procedures.

12) The operator shall ensure that no laser light show is conducted except as specifically authorized in a variance issued in accordance with 21 CFR 1040.11 and applicable requirements of this Part.

(Source: Amended at 37 Ill. Reg. 20200, effective December 9, 2013)