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DIVISION OF FIRE PREVENTION  
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**Flame Effect Display Checklist**  
**2006 NFPA 160, Standard for Flame Effects Before an Audience**  
(Show information on the diagram or by other documentation where applicable)

Per A.3.3.19:

- 1) Identify the flame effect classification (Class I-VII)—Examples of flame effects are as follows:
  1. Group I. Hand-held burning torches, cigarette lighters, candles, matches, and lighting paper in an ashtray.
  2. Group II. Unattended torches, burning urns, and small fires.
  3. Group III. Effects used by traveling shows and concerts and effects used for limited-duration special events, such as the Olympics.
  4. Group IV. A burning cabin or bonfire and large single or multiple flaming brazier entrance features used to create a “theme” atmosphere. A stand-alone-type flame effect control system without any significant control supervision by a main show control system is used.
  5. Group V. A simulated building or vehicle explosion that is part of a larger theme-type attraction. The flame effect control system is totally dedicated to the operation of the flame effect elements. The flame effect control system maintains all its internal safety features, with the interface between the flame effect control system and the main show control system limited to those commands and status indicators that cannot alter or override the flame supervisory system control logic.
  6. Group VI. A live-action stunt show that is part of a larger theme-type attraction. The flame effect control system is totally dedicated to the operation of the flame effect elements. The flame effect control system maintains all its internal safety features, with the interface between the flame effect control system and the main show control system limited to those commands and status indicators that cannot alter or override the flame supervisory system control logic.
  7. Group VII. A fire created as part of an illusion used to make an item or individual disappear.

- 2) Provide a site plan showing:
  1. A narrative description of the effect.
  2. The location of devices to be fired and their controls and control sequence.
  3. The area affected by the flame effect device.
  4. The audience location.
  5. Types of fuels to be used and their estimated consumption—include MSDS sheets on each.
  6. Air for combustion and ventilation.
  7. Flammable materials piping.
  8. Storage and holding areas—All flammable flame effect materials and loaded devices that have been removed from storage areas in anticipation of use shall be stored in a holding area acceptable to the authority having jurisdiction. Flammable flame effect materials and loaded devices in holding areas shall be secured or supervised continuously by an attendant trained in emergency response procedures.
  9. Supplemental fire protection features.
  10. Emergency response procedures—Standby fire safety personnel shall be positioned in accordance with the fire safety analysis along with operational supplemental equipment.
  11. Provide documentation proving combustible materials used for construction of the effects or located near the effects have been rendered flame retardant. (NFPA 160 5.3.1.2 (8))
- 3) Standby fire safety personnel shall have a working knowledge of the supplemental fixed or portable firefighting equipment used in the area of the flame effects. (NFPA 160 11.4.2)
- 4) Provide at least 2 pressurized water and 2 Class 10-BC extinguishers. (NFPA 160 11.3.2.1)
- 5) Where the effects require the interruption of fire protection and life safety systems, provide an approved fire watch capable of directing the operation of all fire protection and life safety systems. (NFPA 160 160 5.5.1)