ATTACHMENT H
Carnivals, Fairs, & Other Outdoor Assemblies

H.1 HOW TO USE THIS ATTACHMENT

This attachment contains information related to carnivals, fairs, and other outdoor events where large groups of people may congregate.

In addition to the generic event information listed in the “Submittal Requirements” section in Guideline S-01, the information in the “Additional Submittal Requirements” section of this attachment must be provided with your permit application.

The “Technical Information” section of this attachment outlines code requirements and safety provisions. The specifications for many of the items listed as submittal requirements can be found here, so review of the entire attachment is recommended as you prepare your special event application. As you organize and set up your event, go over the information in this attachment with the crew, operational personnel, and other responsible parties to facilitate a successful fire safety inspection and a safe and code-compliant event.

H.2 ADDITIONAL SUBMITTAL REQUIREMENTS

In addition to the standard special event information listed under the “Submittal Requirements” section in Guideline S-01, the information listed in this “Additional Submittal Requirements” section shall be provided as part of the application. While permits from OCFA may not be required for all outdoor events, an application is still necessary in order convey relevant information to fire stations in the area that may be impacted by the event and to coordinate with other agencies.

On the Exterior Plans

- Show the location of any barricades, ropes, k-rail, fencing, or other devices that may obstruct emergency evacuation of attendees from the event or prevent or delay use of a roadway by emergency vehicles or obstruct existing vehicle or foot access to structures. Where barriers are moveable, indicate how they will be identifiable to emergency responders and the personnel and procedure that will be used to remove them when needed.
- Show the location of any tents or canopies associated with the event. Note their dimensions and whether they will be equipped with one or more sidewalls.
- Show the location of stages, bleachers, booths, seating or display areas, portable restrooms, staging areas, queuing lines, or other potential obstructions to emergency evacuation or access by emergency responders.
- Show the designed location that emergency vehicles will respond to and the route they will take to get there from a main roadway serving the event site.

Other Information

- Indicate the expected number of attendees at any one time and the total attendance over the course of the event. This number includes all staff, vendors, security, and the general public within the event area.
- Describe how emergency medical incidents will be handled (i.e., medical staff will be on site, contracting with an ambulance company, etc.).

As the scope, attractions, and other amenities can vary widely from one event to another, requirements from other attachments, such as for tents and parades, may also be applicable.

TECHNICAL INFORMATION

H.3 SCOPE

The requirements that follow are intended to provide a minimum level of safety for carnivals, fairs, and similar outdoor assembly events. For the purposes of this attachment, the term "outdoor assembly" shall include a carnival, festival, fair, outdoor theater, outdoor skating rink, dance floor, or other similar temporary event or attraction taking place outdoors and any associated amenities, such as tents, canopies, and booths; stages, bleachers, and other temporary event structures; rides or inflatable attractions; or special amusement buildings. It does not include sporting events or concerts in indoor or outdoor arenas, amphitheaters, or similar approved permanent structures expressly constructed for that purpose.

H.4 DEFINITIONS

The following definitions are provided to facilitate communication between the applicant and fire inspector and the appropriate application of these guidelines.

Air-inflated structure: A structure that uses air-pressurized membrane beams, arches or other elements to enclose space. Occupants of such a structure do not occupy the pressurized areas used to support the structure.

Air-supported structure: A structure wherein the shape of the structure is attained by air pressure, and occupants of the structure are within the elevated pressure area.

Membrane structure: An air-inflated, air-supported, cable or frame-covered structure as defined by the California Building Code and not otherwise defined as a tent.

Outdoor assembly event: An outdoor gathering of persons for any purpose.

Overcrowding: A condition that exists when either there are more people in an area than have been authorized or posted by the fire code official, or when the fire code official determines that a threat exists to the safety of the occupants due to persons sitting and/or standing in

locations that may obstruct or impede the use of aisles, passages, corridors, stairways, exits or other components of the means of egress.

Sky lantern: An unmanned device with a fuel source that incorporates an open flame in order to make the device airborne.

Special amusement area: A building (or portion thereof) that is temporary, permanent or mobile that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available because of the mode of conveyance through the building or structure.

Temporary special event structure: Any temporary ground-supported structure, platform, stage, stage scaffolding or rigging, canopy, tower supporting audio or visual effects equipment or similar structures not regulated within the scope of the California Building Code.

Tent: A structure, enclosure, umbrella structure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported in any manner except by air or the contents it protects (see "Umbrella structure").

Umbrella structure: A structure, enclosure or shelter with or without sidewalls or drops, constructed of fabric or pliable material supported by a central pole or poles (see "Tent").

H.5 GENERAL REQUIREMENTS

H.5.1 GENERAL REQUIREMENTS

- Personnel shall be posted at entrances/exits to ensure occupant load is not exceeded at any time.
- Fire department access roads shall be provided so that all areas with structures are within an approved distance from a fire lane, generally 150 feet. Fire lanes may be used as pedestrian walkways, but shall otherwise remain unobstructed at all times. A minimum clearance of 20’ wide and 13’-6” high shall be maintained.
- Emergency vehicle response areas shall be readily accessible from a main road serving the event site and dedicated to use by emergency personnel. The response area and route to it shall not be one that is liable to be obstructed by vehicle or pedestrian traffic.
- All decorative material shall be inherently fire resistive or treated with fire retardant. Registration documentation is required.
- Any compressed gas cylinders, such as helium tanks used for filling balloons, shall be secured from falling.

- All staff working the event, including security and crowd control, shall be familiar with the public safety plan.
- A safety briefing shall be held prior to the start of the event and as needed during the course of the event if it takes place over multiple days. A representative from each participating group and vendor shall attend and be instructed on safety rules and procedures including, but not limited to:
  - Fire safety
  - The location and appearance (if in uniforms, vests, or other easily recognizable clothing) of safety monitors, crowd control personnel, and/or other event staff who should be notified of or can assist in an emergency.
  - The contact number of a safety coordinator who they can call should event personnel not be present or recognizable.
- Electrical equipment and installations shall comply with the electrical code. A permit from the Building Department for electrical work and/or generators may be required.

H.5.2 FIRE PROTECTION EQUIPMENT

- Clearance around fire protection equipment shall be maintained. Do not restrict access to, block, and/or cover fire hydrants, fire department connections, or any control valves.
- Where tents, canopies, booths, rides or attractions, displays of combustible goods, or similar hazards are present, fire extinguishers with a minimum rating of 2-A:10-B:C shall be provided.
  - Extinguishers shall be placed so that the maximum travel distance to an extinguisher does not exceed 75 feet.
  - Tents, canopies, etc. exceeding 3000 square feet will need additional extinguishers.
  - Extinguishers shall either be new or serviced within the past year.
  - All extinguishers shall be visible and accessible at all times, preferably mounted near a point of egress.

H.5.3 CONTROL OF IGNITION SOURCES

- Portable heaters using gaseous, liquid, or solid fuel are prohibited indoors or within 10 feet from a structure and exits. Any ducting used to connect these heaters to the structure shall be an appropriate length to maintain the required separation.
- All heating equipment shall be in good working order with proper LPG connections and hoses.
- Open flames, candles and devices capable of igniting combustible material are prohibited in or near tents, canopies, or membrane structures.
- Flammable or combustible liquids shall not be stored inside any tent or within 50 feet of structures.
- Sky lanterns are prohibited and shall not be ignited or released into the air.
- The use of open flame devices such as candles is prohibited in tents and canopies.

- Smoking is prohibited in any tent/canopy/membrane structure and in or near any area where hay or other highly flammable materials are kept. These and other areas designated by the fire inspector shall have approved “NO SMOKING” signs conspicuously posted.
- Combustible vegetation that could create a fire hazard shall be removed from the area and at least 50 feet from all tents, canopies, and membrane structures.
- Combustible refuse shall be removed at regular intervals to prevent an unsafe accumulation within the site.
- Dumpsters in excess of 1.5 cubic yards with tight fitting noncombustible lids shall be kept a minimum of five feet from booths or stands. All other dumpsters shall be kept a minimum of 30 feet from booths or stands.
- The following safety precautions shall be complied with for stages, bleachers, display areas, and other static structures:
  - Portable heaters using gaseous, liquid, or solid fuel are prohibited indoors or within 10 feet from a structure and exits.
  - Open flames, candles and devices capable of igniting combustible material are prohibited.
  - Flammable or combustible liquids shall not be stored inside or within 50 feet of structures. LPG shall not be stored closer than 10 feet.
  - Any compressed gas cylinders, such as those used for filling balloons, shall be secured from falling.
  - Portable LPG containers shall be securely fastened in place to prevent unauthorized movement.
  - Decorative materials in areas occupied by 50 or more people shall be inherently flame-resistant or treated with an approved flame retardant.

H.5.4 TENTS, CANOPIES, AND MEMBRANE STRUCTURES

- Tents and membrane structure shall be located at least 20 feet from property lines, buildings, parked vehicles, and generators.
- Canopies over 700 square feet (individual or aggregate area) shall be located at least 20 feet from property lines, buildings, parked vehicles, and generators.
- Canopies under 700 square feet (individual or aggregate area) shall be located at least 12 feet from buildings and at least 20 feet from property lines, parked vehicles, and generators.
- A method of controlling parked cars shall be provided to maintain clearance from tents, canopies, and membrane structures. Vehicles necessary to the operation of the tent/canopy/membrane structure shall be located at least 20 feet away. Other vehicles shall be located at least 100 feet away unless parked on a public street, in which case a 20 foot separation is required.

- Where rows of tents or canopies are placed end-to-end, a clear space of at least 9 feet shall be provided between the end of one group and the beginning of the next group. A clear space of at least 12 feet shall be provided on all other sides of each group, unless otherwise approved by the fire inspector.
- Tents, canopies, and membrane structures shall be adequately braced and anchored to withstand the elements of weather and collapse. They shall be put together with proper securing pins; the use of common nails is prohibited.
- All tents, canopies, and membrane structures must be certified flame retardant and have a State Fire Marshal seal attached.
- See Attachment A for detailed requirements for tents, canopies, and membrane structures.

H.5.5 COOKING

- Cooking in tents, canopies and in booths of combustible construction shall conform with the following:
  - Cooking on a device that has exposed flame, such as a stove-top burner or camp stove, is prohibited.
  - Equipment used exclusively for warming of prepared food, such as crock pots and chafing dishes/fuel, is permitted.
  - Cooking demonstrations that do not pose an ignition hazard are permitted. Preparation of flaming food is prohibited.
  - Cooking equipment shall be on sturdy and ignition resistant tables and separated from tent and booth walls and other combustible materials by a minimum of 18 inches.
  - Cooking equipment must be separated from the general public by barriers or other approved means that prevents accidental contact with hot surfaces.
- Cooking shall be separated from structures and uses as follows:
  - Cooking with open flame is prohibited within 10 feet of tents and canopies and booths with combustible walls.
  - Cooking that produces sparks, grease-laden vapors, or flying embers is prohibited within 20 feet of a tent or canopy, booths of combustible construction, or other temporary structures.
  - Cooking is prohibited within 10 feet of exits serving the public.
  - Cooking is prohibited within 10 feet of amusement rides or similar devices.
  - Cooking equipment must be separated from the general public by fencing, enclosure, or other approved means that prevents accidental contact with hot surfaces.
- All cooking equipment shall be in good working order.
- Only electrical starters or charcoal lighter fuels are permitted to start fires. Fuel may not be stored in booths.

- Cooking equipment must be separated from the general public by fencing, enclosure, or other approved means.
- A fire extinguisher serviced within the last year with a minimum rating of 2-A:10-B:C shall be provided near the cooking area.
- For cooking equipment where butter, oil, lard, or other animal or vegetable fats are used:
  - A type K fire extinguisher is required within 30 feet of the appliance or device.
  - A noncombustible lid of sufficient size to cover the cooking well completely shall be immediately available.
  - The equipment shall be placed on a noncombustible surface.
- All fires and cooking equipment shall be constantly attended and extinguished when no longer needed.

H.5.6 LP GAS

- All LP tanks and containers shall be a minimum of 10 feet from any ignition source, including open-flame cooking equipment.
- All LP tanks and containers shall be secured in an upright position.
- All flammable liquid/gas fueled appliances shall be equipped with an accessible on/off valve. Turn off cylinders when not in use.
- Fuel supply lines shall be in good condition without splices, deterioration or damage. All fuel lines shall be approved for the intended use and a pressure regulator shall be attached to pressurized lines. The testing of all connections of pressurized supply lines must be conducted using a soapy water solution.
- All fuel gas piping, tanks, and containers shall be protected from damage, tampering and vehicular traffic.
- Flammable liquid/gas fueled appliances shall have the fuel capacity to operate for the entire day. Refueling in the booth or space is prohibited.
- Spare compressed gas cylinders shall be limited to one 20lb cylinder for each cooking appliance. Spare tanks shall not be stored in the booth.
- LPG shall not be stored closer than 10 feet from any tent, canopy, or membrane structure.

H.5.7 ELECTRICAL EQUIPMENT

- Electrical equipment and installations shall comply with the electrical code. A permit from the City for electrical work and/or generators may be required.
- Extension cords shall be UL-listed and suitable for the intended use.
- Extension cords shall be located so they do not present a tripping hazard and are placed out of foot traffic areas. Secure cords as necessary with tape or ties.
- Extension and appliance cords shall be in good condition without splices, deterioration or damage.

- Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplug adapter and shall, except for approved multiplug extension cords, serve only one portable appliance.
- Extension cords shall not be plugged into other extension cords.
- The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

H.5.8 GENERATORS

- Generators shall be located at least 10 feet from combustible materials and 20 feet from tents, canopies, and membrane structures.
- Generators shall be isolated from contact with the public by physical guards, fencing, or an enclosure installed at least three feet from the generator.
- Generators shall have the fuel capacity to operate uninterrupted for the event operating hours. If refueling is required, the generator must shut down and cooled.
- All cords from generators must not create a tripping hazarded or cross fire lanes unprotected.
- One 2-A:20-B:C fire extinguisher must be located within 50 feet of the generator and it must be readily accessible.
- Contact the Building Department to obtain permits (if applicable) and grounding requirements.

H.5.9 SIGNAGE

- Any space used for assembly having an occupant load of 50 or more and enclosed by fences, barricades, or other obstructions shall have an occupant load sign posted. Letters shall be a minimum of one inch in height and in a color that contrasts with the background.
- Where there is not sufficient natural illumination during the day or when an area is used after daylight hours, exit signs shall be illuminated so as to be clearly visible at all times the space is occupied. Exit signs shall not be modified with “after market” switches.
- Smoking is not permitted in or adjacent to tents, canopies, or generators. “NO SMOKING” signs shall be posted.

H.5.10 EXITING REQUIREMENTS

- Buildings or fenced areas shall have two exits when the occupant load is 50 or more. Each exit shall be a minimum of 32 inches wide.
- Tents with an occupant load of 10 or more shall have at least 2 exits, and 3 exits are required when the occupant load is 200 or more. Each exit shall be a minimum of 72 inches wide.

- All exit panels in tents shall be free sliding on a metal cable or metal support and be of a contrasting color of the tent. The Velcro portion of the exit panel shall be removed or rolled back and secured as not to allow contact with the adjacent wall.
- In public areas, unobstructed aisles having a minimum width of at least 44 inches shall be provided. This aisle width may need to be increased depending on the number of occupants served by the aisle.
- Exits and exit access aisles shall not be obstructed at any time. Exit paths shall have even surfaces. Utility services to booths and stands shall be located so that they do not create a trip hazard. It is preferred that they be run to the rear of booths and stands or overhead when practical.
- Where there are more than 200 seats arranged in rows, the seats shall be fastened together in groups of not less than 3 with zip-ties or by another approved method.

H.5.11 CROWD MANAGEMENT

- For events where more than 1,000 persons congregate, an approved security contractor that specializes in crowd control of special events shall be on site during the event to control the maximum capacities of tents and fenced areas and ensure that conditions are maintained safely.
- For events where more than 1,000 persons congregate, trained crowd managers shall be provided at a ratio of at least one manager for every 250 people.
- The focus areas related to crowd management include the following:
  - Crowd Managers: Individual persons or job/staff positions designated as crowd managers shall be identified in the written emergency procedures part of the public safety plan and/or approved fire safety and evacuation plan. It is recommended that alternate crowd managers also be designated and be trained as required.
  - Crowd Manager Training: Designated crowd managers shall be familiar with the approved public safety plan and/or approved fire safety and evacuation plan and be properly trained in the emergency procedures described in the plan.
  - Crowd Manager Duties: Designated crowd managers shall appropriately implement the emergency procedures described in the approved public safety plan and/or approved fire safety and evacuation plan. In addition, crowd managers shall also act as fire watch personnel and keep diligent watch for fires, obstructions to means of egress, and other hazards during the time such place is open to the public or such activity is being conducted, and take prompt measures for remediation of hazards, extinguishment of fires that occur, and assist in the evacuation of the public from the event areas (i.e., structures, premises.).
  - Crowd Management Plan: The crowd management plan is part of the public safety plan and should clearly identify all crowd manager stations, positions and their duties, including those persons responsible for calling 911 and meeting emergency responders.

H.5.12 FIRE WATCH

- Fire watch personnel, other than designated crowd managers, may be required by the Fire Marshal depending on the unique circumstances related to the event. Final determination related to the actual number and special duties of designated fire watch personnel may be identified during the review of the application or subsequent inspection.
- All attendants, employees, and staff should maintain a constant fire watch, which involves keeping a diligent eye for smoke and fire, obstructions to means of egress and emergency vehicle routes, and other hazards during the event. Attendants, employees, and supervisors should take prompt measures to remediate hazards, calling 911 when required, and assisting with the evacuation of impacted areas in accordance with the written emergency plan.

H.5.13 BLEACHERS AND GRANDSTANDS

- Bleachers, grandstands, and similar structures shall comply with ICC 300. Structures shall have been inspected within the last year for compliance with this standard, and a tag or plaque documenting compliance shall be posted on the structure.
- Bleachers and grandstands shall be maintained structurally sound and shall be placed so that the structure bears uniformly on the ground in a manner that does not pose a threat to the public health, safety, or welfare.
- Wood bleachers must be at least 10 feet away from any building.
- Provisions for evacuation of the bleachers/grandstands seating 300 or more occupants shall be included in the event safety plan. Event staff shall be familiar with the evacuation procedure and safety plan.
- Areas below bleachers must be kept free of flammable and combustible material, including any storage, vending operations and vehicles, except for:
  - ticket booths
  - toilet rooms
- Guards must be installed where the aisles and other walking surfaces on the bleachers are more than 30 inches above finish grade, unless the uppermost seat is less than 55 inches above the ground.