



# Clark County Fire Department

## FIRE PREVENTION BUREAU

4701 W. Russell Road • Las Vegas, NV 89118

**John Steinbeck, Fire Chief**

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## PERMIT GUIDE

### SPRAYING, DIPPING, AND POWDER COATING

This guide is to assist in the permitting process for obtaining an annual renewable operational permit to conduct a spraying or dipping operation utilizing flammable or combustible liquids or powder coating regulated by Chapter 24. An annually renewable operational permit is required per section 105.6.45 of the IFC.

Additional permits must be obtained prior to utilizing the Spraying and Dipping permit. The following permits are listed below:

1. **APPROVED BUILDING PLANS/PERMIT:** for the spray booth, dip tank or powder room.
2. **FLAMMABLE/COMBUSTIBLE(F/C) LIQUIDS PERMIT:** If amount exceeds permit threshold, a permit is required for storage of F/C liquids when the amount in storage exceeds the following:
  - Flammable Liquid (flashpoint < 100 °F): 5 gallons indoors / 10 gallons outdoors
  - Combustible Liquid (flashpoint > 100 °F): 25 gallons indoors / 60 gallons outdoors
3. **EXTINGUISHING SYSTEM PERMIT:** Provide verification an automatic fire extinguishing system is provided for the Spray Booth, Dip Tank or Powder Coating Room. Please Note: If a fire sprinkler system is installed in the building then it shall be extended to the booth. If the building is not sprinklered, a dry chemical system can be used.

### **APPLICABLE CODES:**

The following codes and standard apply to this permit.

- *International Fire Code, 2018 edition (IFC)*
- *Clark County Fire Code Amendments, 2018 edition (CCFC)*

**Link to CCFC:** See the amendments to codes using the link below:

[https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty\\_FireCodeAmendments2018.pdf?t=1598331770575&t=1598331770575](https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty_FireCodeAmendments2018.pdf?t=1598331770575&t=1598331770575)

### **SUBMITTAL REQUIREMENT CHECKLIST:**

**The listed requirements in this guide are not intended to be all inclusive, nor do they entail a limit to the extent of the information, etc., which may be necessary to properly evaluate the submitted plans and documents. Not all items may apply to your project.**

**Construction Documents: Provide all applicable information that pertains to your permit;**

1. Project name, address, and APN (Assessor's Parcel Number).

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2. Contractor's/Owner's contact information.
3. Provide **Plan** showing the following information:
  - a. **BUILDING:**
    - Provide a detailed floorplan of the building locating the booth indicating spray booth location, include site plan with dimensions to property lines.
    - The spray booth(s) cannot exceed 10% of the total square footage of the suite or business to a maximum size of 1,500sq.ft.
  - b. **Provide enlarged plan showing the following information depending on which process is being permitted.**

**SPRAY BOOTH:**

- Provide dimensioned floor plan of booth indicating doors, duct and filter locations.
- Location of F/C Liquid storage.
- Show exhaust duct location through roof including the distance from exhaust to roof (termination shall be at least 6ft above roof, 10ft from building openings, and 30ft from lot line), HVAC units, swamp coolers, and skylights.
- Clarify if booth is grounded.
- Fire extinguisher locations
- Signage

**DIP TANK:**

- Provide a dimensioned floor plan of dip tank and also showing the locations of the overflow drain, bottom drains, temperature controls, covers and supports.

**POWDER COATING:**

- Provide a dimensioned floor plan of powder coating room.
- Provide Minimum Explosivity Concentration (MEC) and provide calculations to show MEC is less than 50% inside. If the exhaust is NOT vented to the exterior, then show by calculation the MEC inside the building and outside of the powder coating room is less than 50%
- Provide extinguisher location
- Provide Hazardous Material Inventory Statement (HMIS)
- Provide the volatile content of the powder
- Show the exhaust routing
- Please Note: If utilizing an Industrial Oven; a separate permit may be needed. Refer to Industrial Oven Permit Guide for additional information.

**c. VENTILATION:**

- Provide information on the interlocks:
    - Mechanical ventilation shall operate at all times the booth is being used The spraying equipment must be interlocked with the booth ventilation such that spraying operations cannot be conducted unless the ventilation system is operating
    - Ensure no spraying can occur if doors are open. If the doors are providing make-up air
    - Clarify process to prevent spraying during 3-minute purge time before using drying heater if so equipped
  - State the set points of the high temperature limit switch, eg during heating cycle set at no more than 200°F
  - Show by calculations that the air velocity across the open cross-section of the booth is greater than 100 linear ft/min
  - Show that a pressure differential manometer is provided to monitor condition of the filters. This will serve two purposes; it will ensure that the filters are not too overloaded to allow the minimum air flow and if the differential pressure is too low it will indicate a breach in the filter assembly
4. Provide a copy of manufacturer's specification sheets for all components including engineering standard to which unit has been designed to. If booth is a manufactured booth, provide a copy of the manufacturer's literature identifying that booth is a listed assembly. All equipment shall be listed for its use.

**PERMIT DURATION:**

Spraying, Dipping, and Powder Coating are Operational Permits and are limited to a duration of one (1) year and shall be renewed annually. If any changes are made; revisions will need to be submitted.