**Clark County Department of Building & Fire Prevention** 



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> > Permit Type: 105.7.9,105.6.24 Control Number: A.0 Effective Date: October 3, 2011

### TITLE: INDUSTRIAL OVENS

**SCOPE:** Clark County Department of Building & Fire Prevention requirements for the submittal and approval of the installation and operation of industrial ovens and furnaces. Note that permits are not required for coal or other fuel-firing systems, and permits are not required for listed equipment with a heating system(s) that supplies a total input not exceeding 150,000 Btu/hr (44 kW).

**PURPOSE:** To standardize plan/permit requirements required by the Fire Prevention in accordance with the Clark County Fire Code. Permits are valid through the duration of construction. Work must commence within 180 days, and remain active with no period of inactivity exceeding 180 days, or the permit becomes invalid.

# **DEFINITIONS:**

**ASSESSOR'S PARCEL NUMBER (APN):** A unique number assigned to each property by the Clark County Assessor's office.

**FURNACE CLASS A:** An oven or furnace that has heat utilization equipment operating at approximately atmospheric pressure wherein there is a potential explosion or fire hazard that could be occasioned by the presence of flammable volatiles or combustible materials processed or heated in a furnace.

**FURNACE CLASS B:** An oven or furnace that has heat utilization equipment operating at approximately atmospheric pressure wherein there are no flammable volatiles or combustible materials being heated.

**FURNACE CLASS C:** An oven or furnace that has a potential hazard due to a flammable or other special atmosphere being used for treatment of material in process. This type of furnace can use any type of heating system and includes a special atmosphere supply system. Also included in the Class C classification are integral quench furnaces and molten salt bath furnaces.

**FURNACE CLASS D:** An oven or furnace that operates at temperatures from above ambient to over 5,000 degrees F (2,760 C) and at pressures normally below atmospheric using any type of heating system. These furnaces can include the use of special processing atmospheres.

### ANNUAL RENEWABLE PERMIT PROCEDURE:

After issuance of your initial permit(s), your permit(s) will be valid for one year. Approximately 30-60 days prior to the expiration of your permit, a renewal notice will be mailed to you with instructions for the annual permit renewal.

If you do not receive this notice, it is your responsibility to submit the renewal application. Please refer to the website for additional information.

#### PERMIT FEES:

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the Clark County Fire Code. For applications that are expedited, additional fees shall apply.

### SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of three sets of plans shall be submitted with the permit application. Plans shall show compliance in accordance with NFPA 86 and Chapter 21 of the Clark County Fire Code as adopted and amended. All submittals must be legible and readable or the plan shall be issued a correction letter for cause.

Plans shall address the following:

- 1. Indicate the project name, address, and APN (Assessor's Parcel Number).
- 2. Provide a narrative describing the manufacturing operations and processes taking place within the building and within the oven(s), including facility emergency procedures as applicable.
- 3. Describe type, class, and location of ovens.
- 4. Indicate doorways, corridors, means of egress, and evacuation routes for the building.
- 5. Indicate locations of ventilation and exhaust equipment. Show duct locations, including intake, exhaust, and path of travel through walls, floors or roofs.
- 6. Indicate fuel piping locations.
- 7. Describe and indicate locations of safety controls, including but not limited to interlocks for ventilation & conveyor operations and excessive temperature controls.
- 8. Wiring diagrams and sequence of operations for all safety controls shall be provided.
- 9. Describe explosion relief if required by code.
- 10. List all fire protection systems serving the building.
- 11. Describe the fire protection system(s) provided for each oven, if required or provided.
- 12. Indicate clearances for inspection and maintenance.
- 13. Provide manufacturer specification sheets for the ovens and shall show at a minimum the operating temperatures, construction material of ovens, and insulation type & amount.
- 14. Any additional information determined necessary by the fire code official.

# PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, a detailed list of changes is required.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

### PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to: <u>www.clarkcountynv.gov/building/fire-prevention</u>

### **INSPECTION SCHEDULING INSTRUCTIONS:**

If approved, an inspection will need to be scheduled. To schedule an inspection, go to: <u>www.clarkcountynv.gov/building/fire-prevention</u>

A fire inspector will review your site in accordance with the approved plans and this guideline.

The Fire Prevention (FP) may witness and accept inspection, testing and maintenance of fire and life safety systems conducted by approved individuals as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Fire Code and does not take precedence over any Fire Code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.

Technical Assistance, when required by the fire chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.