

# Clark County Fire Department FIRE PREVENTION BUREAU

4701 W. Russell Road • Las Vegas, NV 89118



#### John Steinbeck, Fire Chief

Kelly Blackmon, Sr. Deputy Fire Chief/Fire Marshal
Danny Horvat, Assistant Fire Chief • Wayne Dailey, Assistant Fire Chief

# PERMIT GUIDE COMBUSTIBLE FIBERS

This guide is to assist in the permitting process for obtaining an annual renewable operational permit for the storage and handling of Combustible Fibers in excess of 100 cu.ft. regulated by IFC Chapter 37. An annually renewable operational permit is required per section 105.6.7 of the IFC.

## **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)
- Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids, NFPA 654 2017 Edition

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

https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty\_FireCodeAmendmens2018.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).
- **2.** Contractor's/Owner's contact information.

# 3. Describe the operational process and clarify the storage that occurs on the site.

Provide a copy of the Dust Hazard Analysis (DHA) of the processes and facility compartments.
This report should be a systematic review to identify and evaluate the potential for flash-fire,
and explosion hazards associated with the presence of one or more combustible particulates
in a process or facility. It should clarify the safeguards in-place to mitigate any hazards.

#### 4. Clarify the Products;

- Clarify the physical and chemical properties of the product and establish the hazardous characteristics of the material.
- Natural or synthetic fibers?

Permit Guide: Combustible Fibers, (cont'd)

- Readily ignitable/free burning?
- Fibrous/shredded form?
- Examples;
- Agricultural products: Such as cocoa fiber, cloth, cotton, excelsior, hay, hemp, henequen, istle, jute, kapok, oakum, rags, seed, sisal, spanish moss, straw, tow, wastepaper, or similar.
- Baled Cotton: a natural seed fiber wrapped in and securely with industry accepted material
- Loose Fiber storage: type of storage classified as not in bales or packages and stored outdoors in the open.

# 5. Clarify Type of Storage;

- Agricultural, Baled Cotton, or Loose Fiber Storage
- Clarify if indoor/outdoor and provide size of storage provided (length x width).
- For maximum storage sizes see information below based on type of storage provided;

# A. Agricultural Storage:

# **Indoor Storage:**

- Agricultural product storage such as hay, straw, seed, and cotton are limited to storage stacks of 100-ton piles (4,000 cu. ft.).
- ➤ Required separation between stacks= 20ft clear space
- Stacks cannot be stored adjacent to structures or combustible materials unless clear space is provided (the size of a distance equal to the height of the pile).

# **Outdoor Storage:**

no permit required/no limitations

#### **B.** Baled Cotton Storage:

- Limited to stockpiles not more than 25,000cu.ft.
- > Required separation between piles = 5ft or option to use flash-fire barrier
- ➤ For Sisal or other fibers in bales bound with combustible tie ropes must provide 3ft clearance around stack.
- ➤ Please Note: For products determined to create a fire or explosion hazard; maximum size per control area = 1,000 cu.ft for storage or use in a closed system and 200 cu.ft allowed in open system.

#### C. Loose Fiber Storage:

- ➤ For products determined to create a fire or explosion hazard; maximum size per control area= 100 cu.ft for storage or use in a closed system and 20 cu.ft allowed in open system.
- Refer to chart below for indoor storage of loose combustible fibers in amounts exceeding the values above and the required safe guards;

Permit Guide: Combustible Fibers, (cont'd)

STORAGE SIZE	STORAGE DESCRIPTION
100 cu.ft or less	shall be stored in metal/metal lined bins equiped with self-closing covers
100 cu.ft- 500 cu.ft	shall be stored in rooms with 1hr fire barriers with protected openings
500 cu.ft - 1,000 cu.ft.	shall be stored in rooms with 2hr fire barriers with protected openings
more than 1,000cu.ft.	shall be stored in rooms with 2hr fire barriers with protected openings
detached storage	not more than 2,500cu.ft

# 6. Provide plans showing the following items and information;

- A site plan that provides a clear indication of how far materials are stored from property lines and on-site buildings.
- A complete floor plan for the project showing the operation locations, equipment, and storage locations.
- If using Dust Collection equipment or machinery within a building that generates or emits combustible fibers the machine shall be equipped with a dust collecting exhaust system.
- Show the fire extinguisher location(s) and type(s):
  - ➤ Provide extinguishers in accordance with IFC 906 as required for an extra-hazard occupancy per IFC Table 906.3(1). 4-A rated, Maximum floor area per unit =1,000sq.ft, Maximum floor area for extinguisher = 11,250sq.ft, Maximum travel distance =75ft
- No smoking signs;
  - In rooms where materials are stored or dispersed
  - Within 25ft of outdoor storage or use
- **7.** Provide a copy of manufacturer's specification sheets for any equipment associated with this permit. All equipment shall be listed for its use.

# **PERMIT DURATION:**

Industrial Oven permits 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.