# City of Bellevue



# Fire and Mechanical Inspections

June 2011

Public Information Handout **B-6** 

This document is not intended to include all inspections. Its primary purpose is to provide guidance where overlap may occur between Fire and Mechanical inspections.

# **Type 1 Hoods**

# Fire inspects for:

- Suppression system canister, piping nozzle locations, cooking appliance locations and fire extinguisher(s). I.F.C. 904.11, 906, BCC 23.11, NFPA 96, 96A, 17A, 10, & 72
- Pull stations, signage, posting approved appliance plasticized drawing.
- Fire suppression system activation to verify appliance shut-down, exhaust fan operation when makeup air shuts down, and occupant fire alarm notification if applicable; no splices within ottoman. (Inspector issues operational permit.)

# Mechanical inspects for:

- Appliances and gas piping. IFGC 411.1.1, 409.5
- Balance report and containment test. IMC 507.16
- Hood, duct installation, clearance to combustibles and support. IMC 506, 507
- Automatic activation of exhaust fan whenever cooking operations occur and MUA interlock. IMC 507.2.1.1, 508.1
- Pollution control units and their protection. Manufacturer installation instructions
- Fire wrap. IMC 506.3.10.2
- Shaft clearances. IMC 506.3.10.1

## Building inspects for:

• Shaft wall construction. IBC 708

# **Buildings with Fire/Smoke Dampers, Duct Detectors, and Smoke Control**

# Fire inspects for:

- Signal at panel and panel programming. IFC 907, Dev. Stds. Chapter 11
- Final smoke control report and summary letter (smoke control only). BCC 23.11,
- Verification that FH permit has been approved "Okay to test" by Building, Mechanical, and Electrical prior to final approval by Fire.
- Smoke control posturing with additional 10% of device testing (inspector must witness), as required by an NFPA 72.

## Mechanical inspects for:

- Installation, access, labeling and operation of dampers. IMC 607.3, 607.4 IBC 716.3, 909.12
- Duct detector shutdown of equipment. IMC 607.3.3.2, WA ST Amendment IMC 606.2.2
- Duct detector pressure differential testing using digital manometer. Manufacturer installation instructions.
- Installation and testing building exhaust fans and ducting i.e. garage, generator. IMC 404
- Fan belt requirements. IBC 909.10.5

#### **UPS Rooms**

## Fire inspects for:

- Fan requirement 24/7 operation monitored for trouble if off, fire alarm test and reporting. NFPA 72
- Switching requirement and location. BCC 23.11
- Warning signage on door for Fire personal.
- Spill control measures. IFC 608

### Mechanical inspects for:

Ventilation. IMC 502.4 and 502.5

#### Building inspects for:

• Wall construction and containment if applicable. IBC 508.2.5

# **Medical Gas and Cryogenic Storage Rooms**

### Fire inspects for:

- Storage areas for medical gases and cryogenics. IFC 3006, BCC 23.11
- Spill control. IFC Chapter 27
- Signage.
- Issued and posted operational permits.

### Mechanical inspects for:

Ventilation. IMC 502

#### Plumbing approves

• Distribution piping, supply manifolds, valves, pumps. 3<sup>rd</sup> party testing UPC Chapter 13

# **Tanks and Fuel Piping**

### Fire inspects for:

- All tanks except 500 gallons or less residential. BCC 23.11, IFC Ch.22,27,35,38, Dev. Stds. 10.02
- Dispensing location and operations.
- Seismic on tanks. ASCE Chapter 13

# Mechanical inspects for:

- Fuel/Oil piping. IMC Chapter 13
- Residential tanks less than 500 gallons. NFPA 58 appendix I

#### **Generators**

## Fire inspects for:

- Fuel tank venting and locations. BCC 23.11, NFPA 110, 111, IFC 604
- Fueling station and locations.
- Fuel tank location.
- · Signage and issue operational permits.

### Mechanical inspects for:

- Engine exhaust, engine cooling ventilation and combustion air. (emergency generator ventilation shall be from outside bldg. NEC 700.12, NFPA 110 7.7.1) NFPA 110, manufacturer installation instructions
- Fuel piping to generator. NFPA 110 section 7.9
- Physical protection of equipment. IFGC 303.4

# Building inspects for:

• Building-required separations, 1- or 2-hour. IBC 405.9.1, NEC level one requirements Electrical Inspects for:

# National Electrical Code requirements

Seismic/gravity support and restraint. ASCE Chapter 13