#### **CHAPTER 17**

# **FUMIGATION AND THERMAL INSECTICIDAL FOGGING**

### SECTION 1701 GENERAL

**1701.1 Scope.** Fumigation and thermal insecticidal fogging operations within structures shall comply with this chapter.

**1701.2 Permits.** Permits shall be required as set forth in Section 105.6.

### SECTION 1702 DEFINITIONS

**1702.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**FUMIGANT.** A substance which by itself or in combination with any other substance emits or liberates a gas, fume or vapor utilized for the destruction or control of insects, fungi, vermin, germs, rats or other pests, and shall be distinguished from insecticides and disinfectants which are essentially effective in the solid or liquid phases. Examples are methyl bromide, ethylene dibromide, hydrogen cyanide, carbon disulfide and sulfuryl fluoride.

**FUMIGATION.** The utilization within an enclosed space of a fumigant in concentrations that are hazardous or acutely toxic to humans.

**THERMAL INSECTICIDAL FOGGING.** The utilization of insecticidal liquids passed through thermal fog-generating units where, by means of heat, pressure and turbulence, such liquids are transformed and discharged in the form of fog or mist blown into an area to be treated.

## SECTION 1703 FIRE SAFETY REQUIREMENTS

**1703.1 General.** Structures in which fumigation and thermal insecticidal fogging operations are conducted shall comply with the fire protection and safety requirements of Sections 1703.2 through 1703.7.

**1703.2 Sources of ignition.** Fires, open flames and similar sources of ignition shall be eliminated from the space under fumigation or thermal insecticidal fogging. Heating, where needed, shall be of an approved type.

**1703.2.1 Electricity.** The structure's electrical service shall be disconnected and locked out at the main service disconnect during fumigation or thermal insecticidal fogging operations.

**Exception:** Circulating fans that have been specifically designed for utilization in hazardous atmospheres and installed in accordance with the *International Code Council Electrical Code Administrative Provisions*.

**1703.3 Notification.** The fire code official and fire chief shall be notified in writing at least 24 hours before the structure or

ship is to be closed in connection with the utilization of any toxic or flammable fumigant. Notification shall give the location of the enclosed space to be fumigated or fogged, the occupancy, the fumigants or insecticides to be utilized, the person or persons responsible for the operation, and the date and time at which the operation will begin. Notice of any fumigation or thermal insecticidal fogging shall be served with sufficient advance notice to the occupants of the enclosed space involved to enable the occupants to evacuate the premises.

**Exception:** In warehouses or other structures used for the storage of produce, tarp-enclosed fumigation of not more than 5 percent of the total volume of the warehouse is allowed without notification when the fumigation is conducted by a licensed fumigator.

1703.3.1 Warning signs. Approved warning signs indicating the danger, type of chemical involved and necessary precautions shall be posted on all doors and entrances to the premises and upon all gangplanks and ladders from the deck, pier or land to the ship. Such notices shall be printed in red ink on a white background. Letters in the headlines shall be at least 2 inches (51 mm) in height and shall state the date and time of the operation, the name and address of the person, the name of the operator in charge, and a warning stating that the occupied premises shall be vacated at least 1 hour before the operation begins and shall not be reentered until the danger signs have been removed by the proper authorities.

**1703.3.2 Breathing apparatus.** Persons engaged in the business of fumigation or thermal insecticidal fogging shall maintain and have available approved protective breathing apparatus.

1703.3.3 Watch personnel. During the period fumigation is in progress, except when fumigation is conducted in a gas-tight vault or tank, a capable, alert watcher shall remain on duty at the entrance or entrances to the enclosed fumigated space until after the fumigation is completed and the premises properly ventilated and safe for occupancy. Sufficient watchers shall be provided to prevent persons from entering the enclosed space under fumigation without being observed.

**1703.4 Thermal insecticidal fogging liquids.** Thermal insecticidal fogging liquids with a flash point below 100°F (38°C) shall not be utilized.

**1703.5 Sealing of buildings.** Paper and other similar materials that do not meet the flame propagation performance criteria of NFPA 701 shall not be used to wrap or cover a building in excess of that required for the sealing of cracks, casements and similar openings.

**1703.6 Venting and cleanup.** At the end of the exposure period, fumigators shall safely and properly ventilate the premises and contents; properly dispose of fumigant containers,

2007 OREGON FIRE CODE 185

### **FUMIGATION AND THERMAL INSECTICIDAL FOGGING**

residues, debris and other materials used for such fumigation; and clear obstructions from gas-fired appliance vents.

**1703.7 Flammable fumigants restricted.** The use of carbon disulfide and hydrogen cyanide shall be restricted to agricultural fumigation.

186 2007 OREGON FIRE CODE