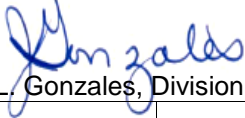


CITY AND COUNTY OF DENVER	POLICY	DENVER FIRE DEPARTMENT
Subject: FUMIGATION AND THERMAL INSECTICIDAL FOGGING		
Reference: IFC 17 with Denver Amendments; NFPA		
Approved:		
 Joseph L. Gonzales, Division Chief, Fire Prevention Division		
Number: IFC-1701-1	Effective Date: February 12, 2014	Page: 1 of 6

This policy is meant to provide basic information for the most common conditions and situations. In any given occupancy, many other Fire Code requirements may be enforced. The Fire Inspector will address these during a premises inspection. Questions can be addressed by contacting the Fire Prevention Division (FPD) Flammables/Hazmat Section between 6:30 a.m. and 4:30 p.m. at 720-913-3474. Walk-in hours 6:30 a.m. to 9:00 a.m. ONLY, Monday-Friday at 745 W. Colfax Ave.

I. SCOPE

- A.** This policy covers the permitting requirements as they pertain to: **FUMIGATION USING CO2, THERMAL INSECTICIDAL FOGGING, or ANY OTHER MEANS** within the City and County of Denver.

II. DEFINITIONS:

- A. 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 others 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.
- B. FUMIGATION.** The utilization of a fumigant within an enclosed space in concentrations that are hazardous or acutely toxic to humans including the use of CO2.
- C. 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
- D. FLAMMABLE LIQUID** is a liquid having a closed cup flash point below 100 degrees Fahrenheit. The category of flammable or combustible liquids does not include compressed gas or cryogenic fluids. Flammable liquids are further categorized into a group known as Class I liquids, subdivided as follows:
 - 1. Class I-A** liquids include those having a flash point below 73 degrees Fahrenheit and having a boiling point below 100 degrees Fahrenheit.
 - 2. Class I-B** liquids include those having a flash point below 73 degrees Fahrenheit and having a boiling point at or above 100 degrees Fahrenheit.
 - 3. Class I-C** liquids include those having a flash point at or above 73 degrees Fahrenheit and below 100 degrees Fahrenheit.

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- E. **Combustible Liquid** is a liquid having a flash point at or above 100 degrees Fahrenheit, subdivided as follows:
 - 1. **Class II liquids** are those having closed cup flash point at or above 100 degrees Fahrenheit and below 140 degrees Fahrenheit.
 - 2. **Class III-A liquids** are those having closed cup flash points at or above 140 degrees Fahrenheit and below 200 degrees Fahrenheit.
 - 3. **Class III-B liquids** are those having a closed cup flash point at or above 200 degrees Fahrenheit.
- F. **Carbon dioxide (CO₂)** is an inert gas that is classified as a simple asphyxiant. The use of carbon dioxide at concentrations above 5000 parts per million (ppm) will constitute a potential or an IDLH (Immediate Danger to Life and Health) environment.

III. ANNUAL PERMITS and FEES

- A. The following annual permit must be obtained from the Denver FPD Flammables/Hazmat Section:
 - 1. **FUMIGATION AND THERMAL INSECTICIDAL FOGGING, IFC Section 105.6.20.** Permits are required each time a fumigation operation is conducted. Permits are issued for one time for one control area. An annual permit can be issued if one or more control areas will be fumigated by a licensed company at various locations within the city. An annual permit may be issued if the same area will be fumigated multiple times in a calendar year. Annual permits will be issued on a case by case basis. Separate permits are required for control areas with separate Occupancy Identifications and or addresses.
 - 2. The owner or responsible party must complete the **FUMIGATION AND THERMAL INSECTICIDAL FOGGING** application form (attached), along with the required fee. Checks should be made payable to the **Denver Manager of Finance**. All required permits shall be current and posted on site.

Mail-in to: Denver Fire Prevention/Permits
 745 W. Colfax Ave.
 Denver, CO. 80204

Walk-in permit: 6:30 a.m. to 9:00 a.m. **ONLY**, Monday – Friday at 745 W. Colfax Ave.

IV. TO OBTAIN PERMITS

- A. A permit shall be obtained from the Denver Fire Department, FPD Flammables/Hazmat Section. To obtain a permit, the following information must be provided:
 - 1. Business name, address, phone number and fax number

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2. Contact name, phone number and fax number
3. Site address
4. **Diagram of site location indicating fumigation area, room, or booth**
5. Presence and/or absence of code complying/functional sprinkler system
6. A letter detailing owner's action plan for fumigation and/or thermal insecticidal fogging
7. **MSDS** (materials safety data sheets) of fumigation and/or thermal insecticidal fogging product(s) used on site.
8. Documentation verifying that you meet the International Fire Code requirements listed below:

SPECIFICS AND CONDITIONS:

1. **IFC 1703.2 Sources of Ignition.** Fires, open flames, and similar sources of ignition shall be eliminated from spaces under fumigation or thermal insecticidal fogging. Heating, where needed, shall be of an approved type.
2. **IFC 1703.2.1 Electricity.** Electricity shall be shut off.

Exception: Circulating fans that have been specifically designed for utilization in hazardous atmospheres and installed in accordance with the *ICC Electrical Code*
3. **IFC 1703.3 Notification of Fumigation.** The Fire Code official and Fire Chief shall be notified in writing at least 24 hours before the structure 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. Signage must be posted in a conspicuous location (see signage requirements below). You may either fax notification to (720) 913-3587 Attn: HAZMAT Inspection group or via e-mail (preferred method) to dfdhmis@denvergov.org.
4. **IFC 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 appropriate for the type of fumigation being performed.
5. **IFC 1703.3.3.3 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 are properly ventilated and safe for occupancy. Sufficient watchers shall be provided

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to prevent persons from entering the enclosed space under fumigation without being observed. If special equipment is used the Watch personnel must be trained to recognize hazards and know how to perform emergency shut down operations on the equipment in use. The person on watch must have the ability to call 911.

- 6. IFC 1703.5 Sealing of Buildings.** Paper and other similar materials that are not flame resistant shall not be used to wrap or cover a building in excess of that required for sealing of cracks, casements, and similar openings.

- 7. IFC 1703.3.1 Warning Signs.**

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, rooms, and areas containing chemicals for fumigation and thermal insecticidal fogging.

Usage Warning Signs. Where fumigants and thermal insecticidal fogging products are used, approved warning signs bearing the "skull and crossbones" emblem with the warning **DANGER! POISON GAS! KEEP OUT!** and notices pertaining to the type of chemicals being used shall be posted. The notices pertaining to the type of chemicals for fumigation and thermal insecticidal fogging shall be printed in red ink on 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.

Storage Warning Signs. Where fumigants and thermal insecticidal fogging products are stored, NFPA 704 placard guidelines shall be followed.

- 8. IFC 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, residues, debris, and other materials used for such fumigation; and clear obstructions from gas-fired appliance vents.
- 9. IFC 1703.4 Thermal Insecticidal Fogging Liquids.** Thermal insecticidal fogging liquids with a flash point below 100 degrees Fahrenheit shall not be utilized.
- 10. IFC 1703.7 Carbon Disulfide and Hydrogen Cyanide.** The use of carbon disulfide (CS₂) and hydrogen cyanide (HCN) shall be restricted to agricultural fumigation.

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V. SITE INSPECTION

Upon approval of Fumigation and Thermal Insecticidal Fogging permit, a Denver Fire Department FPD Inspector will conduct a field inspection of the site. If any violations of the above sections exist, the permit may be revoked. Compliance with **all** Fire Code requirements shall be maintained at all times. Permit shall be kept on site at all times. Permit is valid for business/property owner, time frame, site indicated on the permit. The transfer of permits to other sites and/or businesses is prohibited.

VI. A permit will be revoked when:

A permit will be revoked when:

1. The permit is used for a location or establishment other than that for which it was issued.
2. The permit is used for a condition or activity other than that listed in the permit.
3. Conditions and limitations set forth in the permit have been violated.
4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
5. The permit is used by a different person or firm than the name for which it was issued.
6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
7. The permit was issued in error or in violation of an ordinance, regulation or this code.

Visit DenverGov.org/DFD and select “Fire Safety Permits” for the current Fire Permit Fee Calculation Table.

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FUMIGATION AND THERMAL INSECTIDAL FOGGING APPLICATION FORM

THIS FORM SHALL BE COMPLETED AND SIGNED BY A REPRESENTATIVE OF THE SITE APPLYING FOR FUMIGATION AND THERMAL INSECTICIDAL FOGGING PERMIT. A PERMIT WILL NOT BE ISSUED IF THIS FORM IS NOT COMPLETE.

NAME OF BUSINESS: _____

BUSINESS ADDRESS: _____ CITY, STATE, ZIP CODE: _____

CONTACT'S NAME: _____

CONTACT'S PHONE NUMBER: _____ FAX: _____

SITE ADDRESS: _____

DATE(S) OF WORK: FROM: _____ TO: _____

- I HAVE INCLUDED THE MSDS OF FUMIGATION AND THERMAL INSECTICIDAL FOGGING PRODUCTS USED ON SITE (CIRCLE ONE) YES NO

I HAVE READ AND UNDERSTAND THE DENVER FIRE DEPARTMENT'S POLICY ON FUMIGATION AND THERMAL INSECTICIDAL FOGGING. I ALSO UNDERSTAND THAT THE DENVER FPID WILL CONDUCT A SITE INSPECTION, AND IF I DO NOT COMPLY WITH THE UNIFORM FIRE CODE AND NFPA, MY PERMIT(S) MAY BE REVOKED WITHOUT A REFUND.

PRINT NAME: _____

SIGNATURE: _____

DATE: _____

END OF DOCUMENT