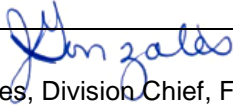


<b>CITY AND COUNTY OF DENVER</b>	<b>POLICY</b>	<b>DENVER FIRE DEPARTMENT</b>
Subject: <b>PLANT EXTRACTION SYSTEMS</b>		
Reference: <b>IFC, Denver Amendments, NFPA</b>		
Approved:  Joseph L. Gonzales, Division Chief, Fire Prevention Division		
Number: <b>IFC- 2009</b>	Effective Date: <b>March 1, 2014</b>	Page 1 of 5

**This policy is meant to provide basic information based on currently available information regarding Marijuana/other plant extraction processes for most common conditions and situations. In any given occupancy, many other Fire Code requirements may be enforced. These will be addressed by the Fire Inspector during a premises inspection. Questions can be addressed to the Fire Prevention Division Office between 6:30 a.m. and 4:30 p.m. Monday thru Friday at (720) 913-3474 or at [DFDFPB@DENVERGOV.ORG](mailto:DFDFPB@DENVERGOV.ORG). Permits may ONLY be obtained Monday thru Friday, between 6:30 a.m. and 9:00 a.m. from the 1<sup>st</sup> floor at 745 West Colfax Avenue.**

## **I. SCOPE**

This policy covers the safety requirements as they pertain to the use of plant extraction systems within the City and County of Denver. These include: Systems designed to extract plant material using flammable gases, flammable liquids, carbon dioxide, alcohol and/or any other method of plant oil extraction.

Exemption: Extraction processes using cold water only.

## **II. OTHER REQUIREMENTS**

Any Denver Building Department construction permits that are required for the extraction process (i.e. exhaust hoods, electrical upgrades, etc) must be obtained, the associated work completed and inspected prior to the issuance of the Marijuana Extraction Operational Permit. See Denver Fire Department *Guideline for Construction Permitting for Marijuana Establishments or Businesses* for specific requirements related to Denver Fire Department review of extraction process(s) and equipment.

All marijuana occupancies in the City and County of Denver are required to obtain a Marijuana Establishment or Business operational permit from the Denver Fire Department. Where hazardous material storage amounts exceed Denver Fire Code permissible amounts, a hazardous material operational permit is required.

## **III. PERMITS**

An annual operational permit shall be obtained from the Denver Fire Department, Fire Prevention Division for any extraction process not exempted in the scope. All annual operational permits shall be kept on site for inspection. To obtain a permit, the following information must be provided:

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- Property/business owner name, phone number, fax number, and address
- Site address
- Contact name and phone number
- Installation/Maintenance contractor's business name and address, phone number, fax number
- List the type of process proposed
- List the type of machine used in the process
- Technical specification on any machine or safety equipment proposed for use (extraction devices and/ hood systems)
- List total cubic feet or equivalent pounds or gallons of gas or liquid on site; include inside and outside use and/or storage.
- **Diagram of site location indicating gas or liquid use/storage area**
- Specify any local hydrocarbon, CO2, or other hazardous material detector provided

To obtain the required permit(s), the business owner or company representative must complete and sign the Extraction System Permit application form and provide the other documentation required. Separate permits will be required for use and storage of flammable gases, LPG, or flammable liquids. A compressed gas permit will be required for CO2 use and storage in amounts over 100 pounds. All extraction process except as exempted in paragraph 1 will need to be plan reviewed by the Denver Fire Department Fire Protection Engineers. Their offices are on the second floor of the Webb Building located at 201 West Colfax Avenue.

Make check payable to: **Denver Manager of Finance**

**Mail-in** to: Denver Fire Department  
Fire Prevention Division - Permits  
745 W. Colfax Avenue  
Denver, CO 80204

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

**PERMIT FEES**

See Permit Fee Table at [denvergov.org/Fire](http://denvergov.org/Fire) Department for current permit fee schedule.

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#### IV. SITE INSPECTION

Upon approval of the extraction system and associated equipment a permit will be issued, and a Denver Fire Department Fire Prevention Inspector will conduct a field inspection of the site. Compliance with **all** Fire Code requirements shall be maintained at all times. Permit shall be posted on site. Permit is valid for business/property owner, time frame, and site address indicated on the permit. Permit will be revoked if:

1. Any of the conditions or limitations set forth in the permit has been violated.
2. Compliance with written order has not been achieved.
3. False statements or misrepresentations of information provided in the permit application are found.
4. The permit is issued in error, in violation of City ordinance or the Fire Code.

#### V. SPECIFICS AND CONDITIONS:

**1) Inspection and testing of equipment.** All sensors, alarms and storage containers must be inspected and tested annually or as prescribed by the manufacturer. A written record of all required inspection and testing shall be maintained on the premises for a period of three years. Testing of emergency devices or systems required by this policy shall be conducted by persons trained and qualified in these systems.

**2) LPG (Butane/Propane) related extractions:**

- a. A butane extraction process, where gas is released directly to the atmosphere, is strictly prohibited.
- b. Butane extraction processes are prohibited in basements unless an approved hazardous exhaust system is provided.
- c. Hazardous exhaust systems shall be in operation at all times during the extraction process. Where interlocks are not provided for fan operation to ensure operation, signage must be posted at the switch "EXHAUST MUST BE IN OPERATION DURING EXTRACTION PROCESS."
- d. Local hydrocarbon detector/alarm shall be in operation at all times during the extraction process.
- e. Extraction equipment shall not be operated near open flame or spark producing appliances.

**3) Flammable liquid related extractions (distillation/boil off)**

- a. Flammable liquid extraction processes are prohibited in basements unless an approved hazardous exhaust system and the basement is sprinklered.

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- b. Hazardous exhaust systems shall be in operation at all times during the extraction process unless the extraction equipment is UL listed as a Solvent Recovery Unit. Where interlocks are not provided for fan operation to ensure operation, signage must be posted at the switch "EXHAUST MUST BE IN OPERATION DURING EXTRACTION PROCESS."
- c. Extraction equipment shall not be operated near open flame or spark producing appliances.
- d. Open boil off extractions shall only utilize equipment rated for explosive atmospheres (i.e. hot plates).
- e. Equipment shall be operated and installed strictly in accordance with manufacturer instructions.

**4) Supercritical carbon dioxide extractions**

- a. Local carbon dioxide detector/alarm shall be in operation at all times during the extraction process
- b. CO<sub>2</sub> extraction equipment must not vent indoors. Any process relief piping must be piped to the outdoors.

**5) Training.** All employees shall receive annual training in hazard identification, physical properties and emergency procedures. Training records shall be available to inspectors upon request.

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## EXTRACTION PROCESS PERMIT APPLICATION

**THIS FORM SHALL BE COMPLETED AND SIGNED BY A REPRESENTATIVE OF THE PROPERTY (SITE) APPLYING FOR THE PERMIT(S). IT SHALL BE RETURNED TO THE FIRE PREVENTION DIVISION OFFICE AT 745 W. COLFAX AVENUE.**

**MAKE CHECK PAYABLE TO DENVER MANAGER OF FINANCE.**

NAME OF BUSINESS: \_\_\_\_\_

BUSINESS ADDRESS: \_\_\_\_\_ CITY, STATE, ZIP \_\_\_\_\_

PERMIT SITE ADDRESS: \_\_\_\_\_ DENVER, CO. ZIP \_\_\_\_\_

CONTACT'S NAME: \_\_\_\_\_

CONTACT'S PHONE NUMBER: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

TYPE OF EXTRACTION PROCESS: (LPG) (FLAMMABLE LIQUID) (CO2) circle all applicable :

HAZARDOUS MATERIAL(S) USED IN EXTRACTION: \_\_\_\_\_

NUMBER OF EXTRACTION UNITS IN OPERATION: \_\_\_\_\_

MANUFACTURER & MODEL # OF EXTRACTION EQUIPMENT: \_\_\_\_\_

TOTAL AMOUNT OF HAZARDOUS MATERIALS STORED ON SITE: \_\_\_\_\_

I UNDERSTAND THAT DENVER FIRE PREVENTION DIVISION PERSONNEL WILL CONDUCT A SITE INSPECTION, AND IF THE INSTALLATION DOES NOT COMPLY WITH THE DENVER FIRE CODE (2009 INTERNATIONAL FIRE CODE WITH CITY AMENDMENTS), THE PERMIT MAY BE REVOKED WITHOUT A REFUND.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**END OF DOCUMENT**

