Branch 1 Fumigations: Inspection Report 107

Structural Regulatory Training

Ahmed Elhawary
DPR Enforcement
Southern Regional Office
Structural fumigation have three distinct phases:

1. Application
2. Aeration
3. Certification
## I- Application Phase: Criteria Covered

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<td>25</td>
<td>1971(a)(1)</td>
<td>(41)</td>
<td>6600</td>
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County Notified 24 Hours Prior
FAC 15204.5(d) & BPC 8505.5
Written Notice to Occupant 8538

B1 Notice must be given to the tenant & owner of a property 48 hours before a fume, unless inspection was < 48 hours prior.

Notice must be given in at least 1 of these ways:

- First class OR electronic mail, IF an electronic mailing address has been provided.**
- Posting in a conspicuous place
- Personal delivery

**Added as part of AB 1685, effective 1/1/2015.
Written Notice to Occupant 8538

B1 Notice for 8538 compliance must include:

- Name of pest to be controlled
- Pesticide name; Active ingredient(s)
- Health Precautionary Statement
- Phone #s for: County Health, County Ag & Pest Control
- Business doing the application
- Phone # & address of the SPCB
Occupants Fumigation Notice (OFN)

- Must be signed by the occupants or designated agent of a structure prior to the fumigation. B3 “prime” usually handles this.
- B1 must have onsite when SF is released
- This notice requires all info listed in 8538(a), plus statements specific to B1 about the company using a lethal gas in the structure & that it’s unsafe to return until cleared
New in 2016:  
1970.4(a) Regulation Change

Effective July 1, 2016:

16 CCR 1970.4(a) related to the Branch 1 OFN signed disclosure notice will add the option of it being in ELECTRONIC form…

“…The properly signed form or a copy, written or electronic, thereof shall be in the possession of the licensed fumigator when the fumigant is released…”
Registered Labeling at Use Site 6602

California Code of Regulations 6602:
“A copy of the registered labeling that allows the manner in which the pesticide is being used shall be available at each site.”
As of 2010, all Branch 1 SF labels now include their product-specific Structural Fumigation (Applicator’s) Manual as their registered labeling.

So to be in compliance with 6602 they must have onsite either:

- Product Manual + Cylinder label
- OR
- Product Manual + Specimen label
A Few Words About Tape & Seal...

Labeling describes what types of structures need this method rather than tarpaulin fumigation.

Plastic similar to that used to bag food & medicinals may cover windows/doors etc. if the tape seal alone is insufficient.
Labeling – Site / Rate / Concentration / Other  12973
Labeling – Site / Rate / Concentration / Other  12973
Chloropicrin* must be released w/in structure at least 5-10 minutes prior to introduction of fumigant.

No more than 3 fluid ounces per “pic pan”

*@app SF Calculator amount or @ 1oz / 10-15k cubic ft
Chloropicrin & SF rates are usually calculated by that registrant’s product-specific calculator.
Thermometer in the sub-area of a home

The Vikane Fumiguide* calculator is to be used for the coordination of fumigant rates with soil or slab temperature....
• Open cabinets, drawers, attics, appliances.
  Turn off pilot lights etc.
• Electric fans used for rapid dispersion of gas & to facilitate in the aeration process.
Labeling – Food/Medicine
Removal or Bagging  12973

Must bag or remove from the structure all food, beverages & medicinals as required in SF Manual
Labeling – Plants & Pets Removed, 12973

Remove from the structure all persons, domestic animals, pets, & desirable growing plants
Labeling: Personal Protective Equipt 12973

SF labeling states applicators must follow specific PPE listed for pic use which is different than for SF PPE.

SF Manuals say each person placing > 2 pic pans in a structure means that person also must wear SCBA.
SF labels prohibit some PPE normally required for other pesticides, due to potential for trapping fumigant close to skin if cylinder valve malfunctions.
Handler(s) Trained 3CCR 6724

- Certified applicators are considered trained
- Employees who are licensed by the SPCB as operators or field representatives are considered trained for the purpose of regulation
Emergency Medical Care, Posting 3CCR 6726

All employees handling any pesticides

- Planned in advance
  - Inform employees
  - Post name of facility, address, telephone number
  - When facility is not reasonably accessible to have procedures to be followed to obtain medical care

- Displaying 911 is inadequate
Decontamination Facility / Site
“Warning / Danger” 6734

Mix & Load site: Water, soap, single use towels, and coveralls must be within 100 feet
SCBA Worn/Cont. Monitoring / **TRAP** Used CAP

6780(b): Whenever an employee *may* be exposed above an exposure standard to …sulfuryl fluoride, or any other fumigant for which only air-supplied respirator equipment is approved the employer shall either:

1. Require the use of a SCBA
2. Use a continuous monitoring device, or
3. Operate under a fumigation safety plan approved by the Director (like CAP)
6780(d): “The employer shall have an accident response plan at the worksite.

The plan shall provide instructions to protect employees during situations such as spills, fire, and leaks.

Employees shall be trained in accident management procedures based on the plan.”
Connecting Structures
1970.6

(a) Prior to the process of fumigation…

(b) B3 prime shall…inquire/inspect/document

(c) Prior to intro of fumigant, the licensee in charge of the fumigation shall:

(1) conduct a thorough search for…

construction elements, conduits, drains or vacuum systems that could allow passage of the fumigant from the structure to any adjacent or adjoining structure…
Accurate Measurement

Measuring device must be calibrated to the smallest unit of use.
Protection of Persons/Animals/Property
3 CCR 6614

- Verify that all spaces within the tarp have been inspected for pets and the main gas line to the structure has been shut off.
Structure Vacated/Secured Against Reentry 1970.3
Effective Secondary Locks 8505.7
Effective Secondary Locks
8505.7
Make sure **primary** lock has been engaged!

Not engaging the **primary** lock on a door is a **label** (12973) violation
Re: sliding glass doors...check the label; some not as clear about requiring secondary locks. IF there’s no “exterior” lock access.
(a) The employer shall assure that equipment used for mixing, loading, transferring, or applying pesticides is inspected before each day of use and any safety defect is repaired or altered to remove the hazard before further use...
2 SCBA / CPR / Mfg Instructions
1971(a)(1)

- Statement of instructions published by the manufacturer of the fumigant being used (label/labeling)
- A chart of instructions for artificial resuscitation
- 2 or more effective gas masks* or other NIOSH approved safety equipment

(*Reference: B&P Code Section 8505.16)
Two SCBA Available
1971(a)(1)
Direct Supervision
8505.2

• A fumigation shall be performed under the direct and personal supervision of a qualified licensee.

• 8505.3 (Definition of “Direct Supervision”)
  Means the licensee shall be present:
  • During the release of the fumigant
  • During the commencement of aeration
    (CAP Steps, or when using label aeration = 1970.5)
  • When property is released for occupancy
Warning Signs on All Sides of Structure
1974

Prior to sealing, warning signs shall be posted at or near all entrances/sides. Windows are **not** entrances.

Signs shall be visible on all sides of the structure & all seams.
Required Information on Warning Signs
8505.10

SB 1244 changes

“Legible ink of any color”

Other info still must be in red
Warning Agent Used
8505.12

A registered company performing a fumigation shall use* an adequate warning agent with all fumigants which lack such properties

Defined in Section 8505.1(b):

“Warning Agent” shall be any agent used in combination with any fumigant that lacks warning properties

*SB 1244 “pic waiver” exception added
Equipment Properly Identified 6630

**Identification must include either:**

- The business name **or**
- PCO license number statement, such as “License pest control operator”, “Fumigation Division”, “Licensed Fumigator”, or similar wording
- And readable at a distance of **25 feet**.

(N/A for certification trucks that are **not** used for applications)
Containers Labeled/Closures

6676

Any container that holds or has held any pesticide shall carry the registrant’s label.
Proper Pesticide Transport
Pesticide Handling/Use/Storage

6682
1983
Suitable Methods / Manner / Climate 6600*

Non-compliance examples: Take Photos!

- Cracked hose
- Improper placement of snakes, clips
- Not using enough chloropicrin
- Large holes in the tarp, etc.

*Record violation(s) as #41 on Form 107 & describe details of the violation(s) in the “Remarks” section.
## II- Aeration Phase: 2 Options

<table>
<thead>
<tr>
<th>SF Label</th>
<th>California Aeration Plan (CAP)</th>
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<tbody>
<tr>
<td>“Aeration Procedures” 1 or 2</td>
<td></td>
</tr>
<tr>
<td>“Non – CAP”</td>
<td>SCBA: Not required</td>
</tr>
<tr>
<td>• SCBA required to enter</td>
<td>(Unless entering before aeration period ends for emergencies, etc.)</td>
</tr>
<tr>
<td>• Continuous Monitoring or SCBA when entering to clear/certify</td>
<td>• Aeration “period” is much longer</td>
</tr>
<tr>
<td>• “Tape &amp; Seal” jobs</td>
<td></td>
</tr>
<tr>
<td>• ≤ 9 additional criteria</td>
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II- Aeration Phase:
“SF Label” Aeration Procedure 1/2

### Criteria Covered:

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<td>11</td>
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<td>28</td>
<td>8505.2/(1970.5)</td>
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Aeration Using “Label”
(Non-CAP Fumes)

Some structures requiring fumigation are not able to use the standard “CAP” method.

For these applications consult the sulfuryl fluoride registered label and associated registered applicator’s manual (labeling):

AERATION STEPS 1 and 2 must be followed.

One Example:
Brick, stucco and certain other buildings are more impermeable to SF than wood framed; the Tape & Seal method is sometimes used.
Labeling: Aeration Steps 1 and 2

Other Common Violations

“Short-Timing”:

• Failure to complete 1 hour **active** aeration

• Failure to complete 6 hours **passive** aeration
Aeration and Reentry

- No one should be in treated area if level of $\text{SF} > 1 \text{ ppm}$ unless provided with NIOSH or MSHA approved SCBA

- If employee wears proper respiratory protection he/she is allowed to enter
Labeling – Aeration / Reentry  12973
Common Violations - Aeration Step (1)

- Employees entering the structure during the 1 hour aeration without wearing an SCBA
B1 **Fumigators only have 2 aeration options:**

Follow all applicable labeling steps

**OR** follow CAP Steps 1-6.

Recently a few counties have seen what has been nicknamed a “hybrid” of label and CAP aeration methods, using CAP installed equipment but short-timing total hours.
When CAC staff find this at a fume site, the licensee claims they changed their mind to do a “label” aeration instead.

Be aware the B1 cannot “substitute” 1 hour of CAP method for the label “1 hour active aeration” and meet 3CCR 6780(b-c) or label.

No testing has been done on “hybrid” methods. USEPA & DPR have never approved this practice.
If tarps were dropped*, document this type of mixed method as a **FAC 12973 aeration violation**. The fumigator needs to follow labeling aeration steps discussed in earlier slides. **Document in Remarks section** key details regarding the short timing, etc.

*If tarps still up, they can choose to follow CAP for the remaining time, to equal the total 12 hours.
1970.5 “Commencing Aeration”  
(For Non-CAP Fumigations)  

Period of time beginning when the seal is broken, and ending when all seals/tarps are removed.

A branch 1 licensee is required to be present during this entire period of time.
# III-Certification Phase

## Criteria Covered

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<td>7</td>
<td>12973 – SF Label: 6 hr min</td>
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<td>1973</td>
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Labeling – Aeration/ Certification 12973

Label Step (3): After the minimum [6] hour waiting period, measure the concentration of sulfuryl fluoride in breathing zones… Structure may be reoccupied when concentration ≤ 1 ppm.
Licensee must **personally**:

- Clear a structure using proper testing equipment as required by label & regs
- Release the property for occupancy by posting a Notice of Re-Entry form
Re-entry Requirements
1973
Completion signs have to be posted near the entrances of the attic or sub area* at the completion of the fumigation with the following information per 16 CCR 1996.1(b):

- Company name
- Date of fumigation
- Name of fumigant

(Brand Name + Active Ingredient)

*If a house has both an attic and sub-area, Both places need to be posted
Completion Signs have to be at least 5” x 7”
Violations – Certification Day

If you arrive at the site prior to the company on the day they will certify safe for re-entry, here are some common violations to watch for during your certification inspection:

(1) Secondary locks

(2) Warning signs (missing info, or incorrect info)

(3) Continuous Monitoring Equipment not calibrated, or used incorrectly
Violations – Certification Day

(4) Unbagged food/medicinals (verify by labeling)

(5) Pre-posting the Notice of Re-entry Sign

(6) Notice of Re-entry incomplete or incorrect

(7) Attic/Subarea **Completion Signs** not posted, or incorrect (or older form used)
??? ANY QUESTIONS ???