# Branch 1 Fumigations: Inspection Report 107

Structural Regulatory Training

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**DPR** Enforcement

Southern Regional Office

### Structural fumigation have three distinct phases:

- 1- Application
- 2- Aeration
- 3- Certification

STATE OF CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION		□ COMPLET	<sub>=</sub> 1	07_00	1-16	6-WD0	n_nr
STRUCTURAL FUMIGATION	USE	☐ PARTIAL		0, 00	, ,,	J VVDC	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
MONITORING INSPECTION I		T FOLLOW-L	JP INSPECTION				
			L INSP. #		UNKNOWN COUNTY		
		011-32-32-30-00-0	V 100 (00 (00 (00 (00 (00 (00 (00 (00 (00		IN	ISPECTING	COUNT
FIRM INSPECTED			BUSINESS REGISTRATION NU	MBER			
FIRM MAILING ADDRESS			INDIVIDUAL LICENSE NUMBER				
PERSON INSPECTED			VEHICLE LICENSE NUMBER TELEPHONE NUMBER				
APPLICATION SITE ADDRESS		REQUIRED DISTANCE MAINTA		WIND			
			PEST		TREATMENT SITE		
HANDLER'S NAME / # INTERVIEWED: 0		ACTIVITY		PROTECTIV		MENT WORN	
PESTICIDE NAME / MANUFACTURER	LABEL	REGISTRATION NUMBER	SIGNAL WORD	FORMUL	ATION		RATE
Application/Aeration/Certification							
REQUIREMEN	ите		SECTION		COMPLIANCE		
Taxva and			-900-0110000	YES	3	NO	N/A
Registered in County			15204.5(a)		_		
2. County Notified 24 Hours Prior			15204.5(d)				
Written Notice to Occupant			8538				
4. Pesticide Desclosure Signed / Available			1970.4				
<ol><li>Registered Label Available at Use Site</li></ol>			6602				
6. Labeling - Site / Rate / Concentration / Oth	er		12973				
7. Labeling - Aeration / Certification			12973				
8. Labeling - Bagging, Pets Removed, Etc.			12973				
9. Labeling - PPE			12973				_
10. Regulations - PPE			6738				
11. Respiratory Protection			6739				
12. Handler(s) Trained			6724				
13. Emergency Medical Care, Posting			6726				
14. Decont. Facility, Site "Warning/Danger"			6734				
15. SCBA Worn / Cont. Monitoring / CAP Use	ed		6780(b)				
16. Accident Response Plan at Worksite			6780(d)				
17. 2 Trained Employees - Application & Aera	ation		6782(a)		_		
18. Fume of Enclosed Spaces/Proper Entry	ation		6782(d)				
19. Proper Management of Treated Area			6782(f)	_	-		
20. Connection Structures			1970.6				
21. Accurate Measurement			6604	_	-		
<ol> <li>Accurate Measurement</li> <li>Protection of Persons / Animals / Property</li> </ol>			6614	_	-		-
<ol> <li>Protection of Persons / Animals / Property</li> <li>Structure Vacated / Secured Against Ree</li> </ol>	_		8505.7	_	-		
<ol> <li>Structure vacated / Secured Against Ree</li> <li>Equipment in Good Repair and Safe</li> </ol>	anuy		6742	_	-		
24. Equipment in Good Repair and Sate 25. 2 SCBA / CPR Chart / Mfg. Instructions			1971(a)(1)	_	-		-
25. 2 SCBA / CPR Chart / Mfg. Instructions 26. Test Equipment			1971(a)(1) 1971(a)(2)	_	-		
			19/1(a)(2)	_	-		
27. Re-entry Requirements					-		
28. Direct Supervision			8505.2	+	-		
29. Warning Signs on All Sides of Structure			1974	_	-		
30. Required Information on Warning Signs			8505.1	_	-		
31. Signs - Attic / Under-area			8505.11		_		
32. Warning Agent Used			8505.12	_	_		
33. Equipment Properly Identified			6630		_		
34. Containers Labeled / Closures			6676		_		
35. Proper Pesticide Transport			6682				
36. Pesticide Handling / Use / Storage			1983				
37. Methyl Bromide Requirements			6454(a)				
38 MR - Tame Accent / Condition / Ret Met	had		GAEA/h o)				

#### I- Application Phase: Criteria Covered

#	Code	#	Code	#	Code
1&2	15204.5 (a&d)	13	6726	28	8505.2
3	8538	14	6734	29	1974
4	1970.4	15&16	6780 (b&d)	30	8505.10
5	6602	20	1970.6	32	8505.12
6	12973	21	6604	33	6630
8	12973	22	6614	34	6676
9	12973	23	8505.7	35	6682
10	6738	24	6742	36	1983
12	6724	25	1971(a)(1)	(41)	6600

# County Notified 24 Hours Prior FAC 15204.5(d) & BPC 8505.5

	STRUCTURAL - NOTICE OF INTENT				
GRICULTURAL COMMISSIONER PESTICIDE AND PEST MANAGEMENT DIVISION					
FROM		DATE: 11/17/12			
ADDRESS:					
CITY: FONTANA	A CA 92335				
SUBMITTED BY	7:				
PHONE NUMBE	FAX NUMBER:				
TOTAL PAGES	(INCLUDING THIS SHEET):				
Date of	Street Address				
Application	include ST, AVE, PL, BLVD, UNIT, ETC. city	zip code			
11/19/12					

#### 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 <u>OR electronic mail</u>, <u>IF an electronic mailing</u>
   <u>address has been provided.\*\*</u>
- 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

#### Pesticide Disclosure Signed/ Available 1970.4

#### Occupants Fumigation Notice (OFN)

- Must be signed by the occupants or designated agent of a structure <u>prior to the fumigation</u>. B3 "prime" usually handles this.
- B1 must have onsite when SF is released
- This notice requires all info listed in 8538(a), <u>plus</u> 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 <u>signed</u> disclosure notice will add the option of it being in ELECTRONIC form...

"...The properly signed form or a copy, <u>written or electronic</u>, thereof shall be in the possession of the licensed fumigator when the fumigant is released..."

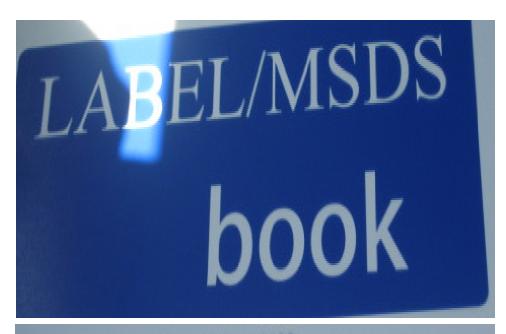
#### Registered Labeling at Use Site 6602











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."

#### Registered Labeling at Use Site 6602

As of 2010, all Branch 1 SF labels now include their product-specific Structural Fumigation (Applicator's) Manual as their registered <u>labeling</u>

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

- Product Manual + Cylinder label
   OR
- Product Manual + Specimen label

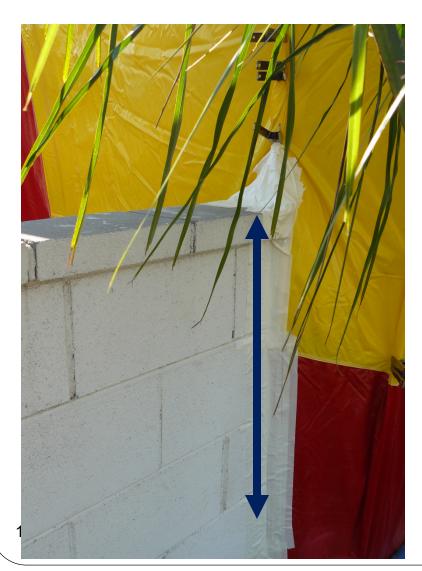


#### A Few Words About Tape & Seal...



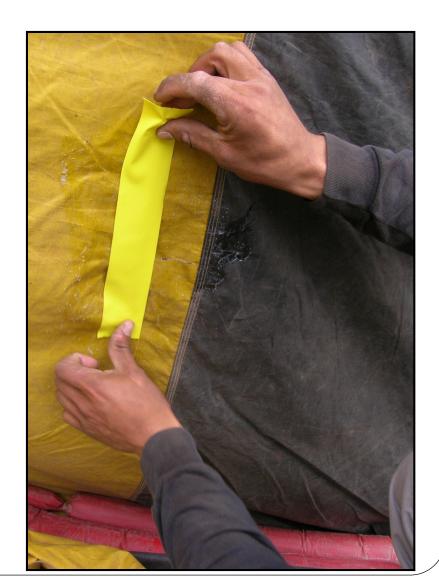
Labeling describes what types of structures need this method rather than tarpaulin fumigation.

Plastic similar to that used to bag food & medicinals may cover windows/doors etc. if the tape seal alone is insufficient.







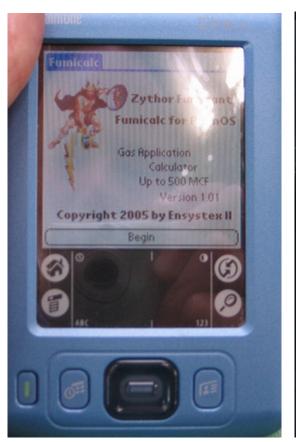




Chloropicrin\* must be released w/in structure at least 5-10 minutes prior to introduction of fumigant.

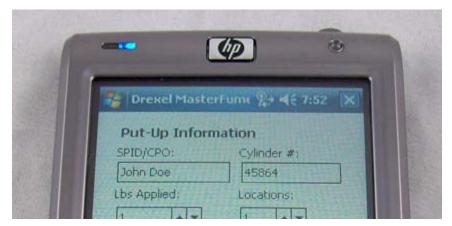
No more than <u>3</u> fluid ounces <u>per</u> "pic pan"

\*@ SF Calculator amount or @ 10z /10-15k cubic ft





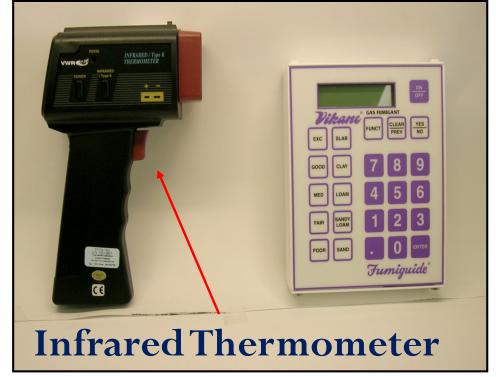
Chloropicrin & SF rates are usually calculated by that registrant's product-specific calculator.



Thermometer in the subarea 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.

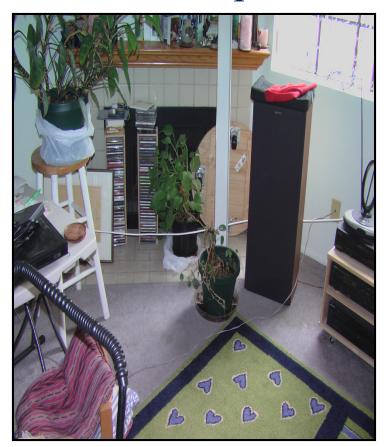
#### Labeling – Food/Medicine Removal or Bagging 12973

Must bag or remove from the structure all food, beverages & medicinals as required in SF <u>Manual</u>



### Labeling – Plants & Pets Removed, 12973

Remove from the structure all persons, domestic animals, pets, & desirable growing plants





#### Labeling: Personal Protective Equipt 12973

SF <u>labeling</u> 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 <u>also</u> must wear SCBA.

Chloropicrin is a volatile liquid that is the active ingredien powerful lachrymator. Early symptoms of overexposure spiratory distress, and vomiting. Pulmonary edema m is symptomatic.

#### PERSONAL PROTECTIVE EQU

be following person protective equipment must be worm

- Chemical-resistant gloves (such as neopiene)
- Full-face shield or chemical goggles
- Respiratory protection: When air entraions exceed NIOSH-approved positive pressure applied-air respirate



### Labeling: PPE-12973 / Regs: PPE 6738



#### **Protective Clothing**

Wear goggles or full face shield for eye protection during introduction of the fumigant. Do not wear gloves or rubber boots. Do not reuse clothing or shoes that have become contaminated with liquid Vikane until thoroughly aerated and cleaned.

SF labels <u>prohibit</u> 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 <u>may</u> 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 <u>either</u>:

- (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)

# Accident Response Plan At Work Site 6780(d)

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 <u>spills</u>, <u>fire</u>, <u>and leaks</u>.

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 <u>intro</u> of fumigant, the licensee in charge of the fumigation shall:
  - (1) conduct a <u>thorough search</u> for...
    construction elements, conduits,
    drains or vacuum systems that <u>could</u>
    allow passage of the fumigant from the structure to

any adjacent or adjoining structure...

### Accurate Measurement 6604





Measuring device must be calibrated to smallest unit of use

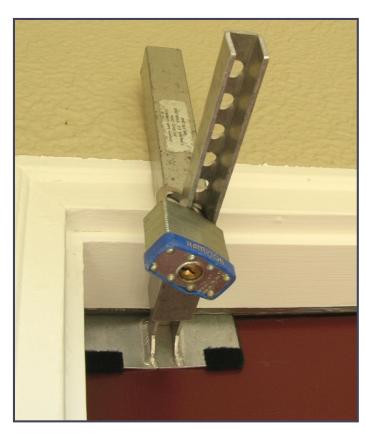
### Protection of Persons/Animals/Property 3 CCR 6614

• 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



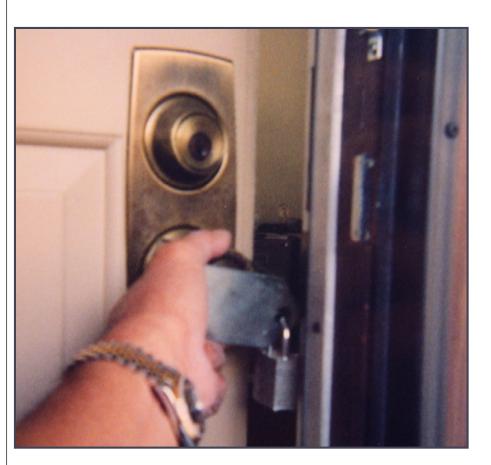
## Effective Secondary Locks 8505.7







# Make sure <u>primary</u> lock has been engaged!



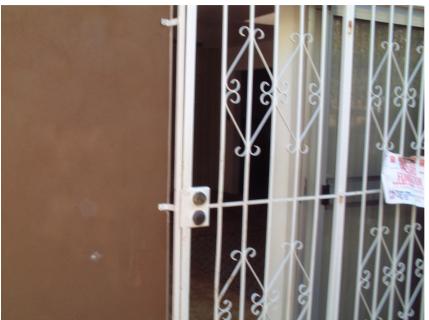


Not engaging the <u>primary</u> lock on a door is a <u>label</u> (12973) violation

Re: sliding glass doors...check the label; some not as clear about requiring secondary locks

IF there's no "exterior" lock access





### Equipment in Good Repair & Safe 6742

(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 <u>direct and</u> 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 <u>commencement</u> of aeration
     (CAP Steps, <u>or</u> 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

#### <u>Identification must include either:</u>

- The business name <u>or</u>
- PCO license number statement, such as "License pest control operator", "Fumigation Division", "Licensed Fumigator", or similar wording
- And readable at a distance of <u>25 feet</u>.

(N/A for certification trucks that are <u>not</u> used for applications)

### Containers Labeled/Closures 6676



Any container that <u>holds</u>

<u>or has held</u> any pesticide

shall carry the

registrant's label

# Proper Pesticide Transport Pesticide Handling/Use/Storage





# 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

# SF Label "Aeration Procedures" 1 or 2

# California Aeration Plan (CAP)

#### "Non - CAP"

- SCBA <u>required</u> to enter
- Continuous Monitoring <u>or</u>
   SCBA when entering to clear/certify
- "Tape & Seal" jobs
- ≤ 9 additional criteria

SCBA: Not required
(Unless entering before aeration period ends for emergencies, etc.)

Aeration "period" is much longer

# II- Aeration Phase: "SF Label" Aeration Procedure 1/2

#### **Criteria Covered:**

#	Code	#	Code
9	12973		
11	6739		
18	6782(e)		
19	6782(g)		
28	8505.2/(1970.5)		

# 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 <u>and</u> 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 <u>active</u> aeration <u>OR</u>
- Failure to complete
   6 hours <u>passive</u>
   aeration



Labeling – Personal Protective Equipment (PPE)
Fume of Enclosed Spaces/Proper Entry
Proper Management of Treated Area
Respiratory Protection

12973 6782(e) 6782(g) 6739

#### **Aeration and Reentry**

- No one should be in treated area if level of SF > 1 ppm unless provided with NIOSH or MSHA approved SCBA
- If employee wears proper respiratory protection he/she is allowed to enter



### <u>Labeling</u> – Aeration / Reentry 12973 Common Violations - Aeration Step (1)

• Employees entering the structure during the 1 hour aeration without wearing an SCBA





#### <u>Labeling</u> – Aeration / Reentry 12973 New Issue re: Violations – Aeration Method

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.

### <u>Labeling</u> – Aeration / Reentry 12973 re: Violations - Aeration Method Used

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.

### <u>Labeling</u> – Aeration / Reentry 12973 re: Violations - Aeration Method Used

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.

# Direct Supervision 8505.2

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.

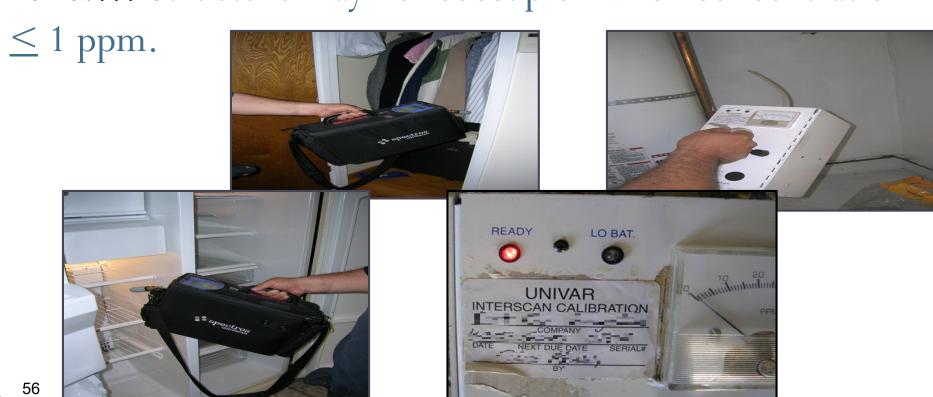
#### **III-Certification Phase**

#### Criteria Covered

#	Code		
7	12973 – SF Label: 6 hr min		
26	1971(a)(2)		
27	1973		
31	8505.11		

## Labeling – Aeration/ Certification 12973

<u>Label Step (3):</u> After the minimum [6] hour waiting period, measure the concentration of sulfuryl fluoride in breathing zones... Structure may be reoccupied when concentration



### Proper Test Equipment Re-entry Requirements

### 1971(a)(2) 1973

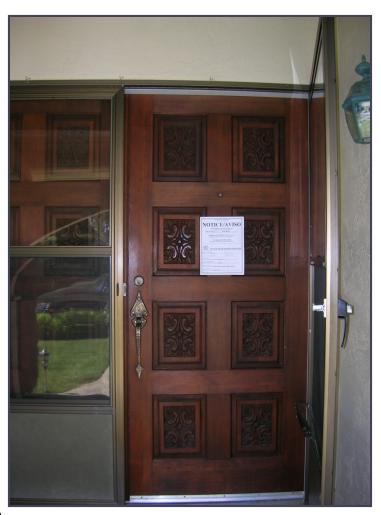
#### Licensee must personally:

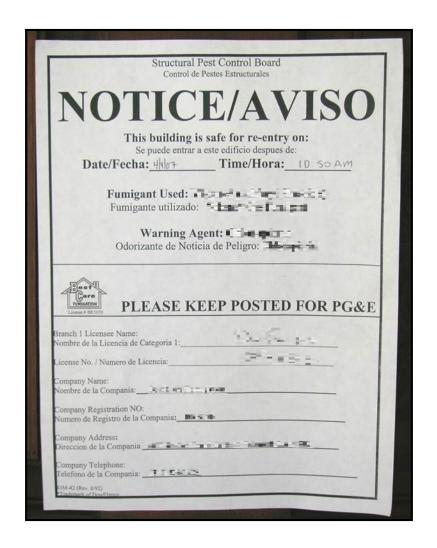
- Clear a structure using proper testing equipment as required by label & regs
- Release the property for occupancy by posting a Notice of Re-Entry form





### Re-entry Requirements





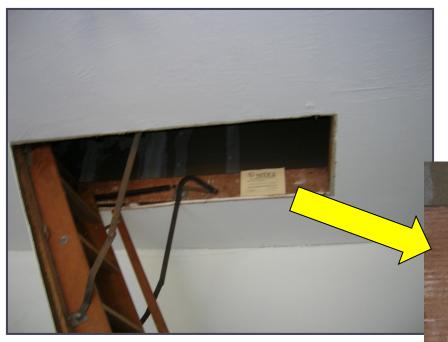
# Signs in Attic/Under-area Upon Completion 8505.11

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):

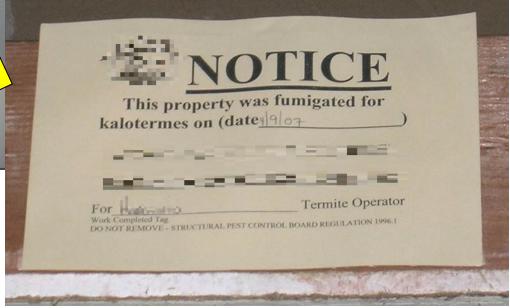
- Company name
- Date of fumigation
- Name of fumigant
   (Brand Name + Active Ingredient)

\*If a house has both an attic <u>and</u> sub-area, <u>Both</u> places need to be posted

# Signs in Attic/Under-area Upon Completion 8505.11



### 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 <u>Completion Signs</u> not posted, or incorrect (or older form used)

### ??? ANY QUESTIONS ???

