

Chapter 6: Field Fumigation Use Monitoring Inspection Report (PR-ENF-106)

Purpose

Evaluation of a field fumigation activity provides information to better protect the public, pesticide handlers, and fieldworkers. Due to the high toxicity of fumigants and the nature of these substances, there are specific requirements designed to protect the public and employees. This inspection is designed to evaluate whether the applicator and the property operator are following these conditions to mitigate any possible hazard to persons, non-target animals, crops, and property.

In a Field Fumigation Use Monitoring Inspection there are forty-one requirements listed to measure the compliance level. To perform an adequate evaluation of a fumigation activity it is essential to understand the permit conditions and the parameters of each requirement.

When to use this form

A Field Fumigation Use Monitoring Inspection is an evaluation of fumigation activity at sites such as:

- Field
- Greenhouse
- Tree site
- Raised tarp at a nursery
- Golf course

Examples of fumigants used in field fumigations include methyl bromide, metam sodium, metam potassium, chloropicrin, Dazomet and sodium tetrathiocarbonate.

Fumigant use in greenhouses or similar structures, golf courses, replant of individual vine or tree sites less than one contiguous acre, raised-tarp at nursery of less than one acre, potting soil and golf course settings are considered field fumigations. However, fumigations in these settings are exempt from requirement numbers 23 – 32 [3CCR § 6447 – § 6451.1 and § 6784(b)].

If the fumigation use is on a post-harvest commodity, equipment, or other industrial use, then the Commodity Fumigation Use Monitoring Inspection Form (PR-ENF-105) should be used.

Continued on next page

Field Fumigation Use Monitoring Inspection Report, Continued

Special header information

The following information boxes appear on the Field Fumigation Use Monitoring Inspection form. Review the “General Procedures” chapter of this manual for more information regarding header information.

Fumigation Method

List the four-digit code designated for the fumigation method employed (see Appendix 7). When a non-coded method is used outside a non-attainment area or in a non-attainment area from September through April, print “Other”, list the active ingredient and describe the non-coded method in the “Remarks” section.

Buffer Zones –Inner/Outer - Buffer Zone Distance Required:

- For methyl bromide
 - Measure the buffer zones (inner and outer) in feet and document the measured distances.
 - Refer to the permit conditions to verify correct distances.
 - For other fumigants – if there is only one applicable buffer zone, record the measured distance in the outer buffer zone block. Print “N/A” in the inner buffer zone block.
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Requirements

1. **Pest Control Business Licensed FAC § 11701**

Scope: Any business performing pest control for another person for any compensation. This includes soliciting and advertising for pest control work. Pest control is defined in FAC § 11403.

Verify that the business is licensed. Is the license valid for the current year? Beginning January 1, 2009 PCBs must be licensed in subcategory “O”. See 3CCR § 6536. If grower applied, mark N/A

Exemptions:

- None

2. **PCB Registered FAC § 11732**

Scope: Any business performing pest control for another person for any compensation. This includes soliciting and advertising for pest control work. Pest control is defined in FAC § 11403. If grower applied, mark N/A.

Check your office records for PCB registration with your county. Is it valid for the current year?

Exemptions:

- None

3. Licensed in Proper Category 3CCR § 6536

Scope: Any person that performs or supervises field fumigations for a licensed pest control business.

Verify that the supervisor is licensed in the proper category. Is the license valid for the current year? Beginning January 1, 2009 PCBs must be licensed in subcategory “O” to perform field fumigations. See also 3CCR § 6445.5.

Exemptions: None.

4. NAA Emission Allowance (May-October) 3CCR § 6452.3

Scope: Any person applying a field fumigant from May 1 through October 31 in an ozone non- attainment area.

Verify that the fumigation has been permitted and that the amount of fumigant used is in compliance with the allowance stipulated in the permit. Mark N/A if the county is not in a non-attainment area

Exemptions:

- Potting soil, enclosed spaces, and other similar structures (3CCR § 6447)
- Raised tarp nursery fumigations of less than one acre. (3CCR § 6447, 6449)
- Replant of individual vines or tree site (tree hole) in less than 1 contiguous acre. (3CCR § 6447, and 6449)
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

5. Labeling Available at Use Site 3CCR § 6602

Scope: All registered pesticide uses.

Registered labeling covering the specific use must be available at the use site. Registered labeling includes relevant supplemental, Special Local Need [24(c)] labeling and Section 18 directions. Review the pesticide labeling to see what additional documents are required to be at the use sites. These documents may include supplemental labeling such as the metam sodium manual or a handbook on the use of aluminum phosphide. Commercial advertising does not comply with the requirements of this regulation, even if it includes use directions.

Labeling at the use site must not differ in any material manner with the labeling registered by DPR. Differences in the directions, restrictions or precautions are not acceptable. Differences in

labeling format (e.g. specimen labeling, photocopies, CDs, electronic, or photographs) are not normally considered material unless the difference(s) could cause the pesticide to be used in a manner conflicting with the registered labeling or they create a false or misleading perception. If you suspect the labeling is inaccurate, refer the case to your DPR EBL for product compliance investigation.

Exemptions: None

6. Notice of Intent (NOI) Submitted 3CCR § 6434

Scope: Required prior to the application of a permitted California restricted material for agricultural use.

The NOI may be submitted by the operator of the property, or their authorized representative, or by a pest control business. Regardless of who submits the NOI for agricultural use, the operator of the property is ultimately responsible for submission.

- Has an NOI been properly completed and submitted?
- Are any environmental changes noted?
- You will need to check this requirement at the office either before or after the inspection.

For methyl bromide, 3CCR § 6447.1(a)(1) requires that the NOI be submitted at least 48 hours prior to the fumigation. If the application does not start within 12 hours of the intended start time on the NOI, a new NOI must be submitted.

Exemptions: When all the information normally submitted on an NOI is already on the permit and an NOI is not required by the CAC, the NOI is not required. **For methyl bromide fumigations (agricultural and non-agricultural), there is no exemption.**

7. Certified Applicator Supervision 3CCR § 6406

Scope: California or federally restricted material(s) being handled by a non-certified applicator.

A certified applicator must be available to direct and control an application by a non-certified applicator. The availability of the certified applicator shall be directly related to the hazards of the handling activity.

- Is the certified applicator aware of conditions at the application site?
- Can the certified applicator stop the application when conditions (ex: weather, odor) warrant?
- Does the non-certified applicator have a way to contact the certified applicator if there is a problem?

Whenever activities requiring physical/visual presence are being conducted, the certified applicator must be physically located on the premises.

If the pesticide(s) being handled are not federal or California restricted materials, check this requirement as “N/A”.

Exemptions: None.

8. Complies with Permit Conditions FAC § 12973

Scope: All applications of permit materials.

- Is the handler using the pesticide in compliance with all permit conditions issued by the commissioner?
- Review the restricted materials permit to see that its conditions are met.
- Observe and record details of the application and compare to the permit conditions on record.
- Review the most recent CAC permit conditions and check to make sure that buffer zone(s), application rate, method, posting, and all other specific permit conditions are observed.
- Verify that labeling and permit buffer zones are in compliance.
- Make sure no one is working within the buffer zone area.

Some counties require that Telone and Metam Sodium applicators must receive specific training before handling these fumigants (review your county’s permit conditions).

Exemptions: None.

9. Labeling – Aeration/Reentry FAC § 12973

Scope: All registered fumigant uses.

Review the labeling to determine compliance with aeration and reentry requirements. Workers are not allowed to enter the treated area or buffer zones during aeration except as permitted in 3CCR § 6770(b), 6771, 6450.1 and 6450.2. Review the labeling for early entry requirements.

Mark N/A when performing an application inspection.

Exemptions: None.

10. Labeling – Site/Rate/Buffers/Other FAC § 12973

Scope: All registered pesticide uses.

Review the labeling, including the Fumigant Management Plan (FMP), to determine if the site is listed on the labeling, the rate is appropriate for the site, information relating to equipment or any other requirements. Review the labeling for other restrictions such as those pertaining to soil moisture condition and temperature.

Exemptions: See 3CCR § 6000 definition of conflict with labeling for exceptions.

11. Labeling – Personal Protective Equipment (PPE) FAC § 12973

Scope: All persons handling registered pesticides.

Review the labeling and determine what PPE is required. Both employees and employers are required to comply with PPE requirements specified on the labeling. Observe the employee handlers to see if they are wearing the labeling-required PPE. If the employee handlers are not wearing required PPE, determine and document if it was provided by the employer and was the PPE available at the site. Is the PPE in good condition and well fitted? Address each piece of safety equipment separately.

Review the labeling and determine what PPE is prohibited. Verify that handlers are not wearing PPE, or other items prohibited by the labeling. **Methyl bromide labeling prohibits the use of gloves or chemical resistant footwear, tight-fitting clothing, rings and other jewelry.**

Failure of employers or property operators to wear safety equipment required by the labeling is a use in conflict and a violation of FAC § 12973. Failure of an employee to wear safety equipment required by the labeling is a violation of FAC § 12973 and 3CCR § 6738 and/or § 6739.

For methyl bromide fumigation, two (2) self-contained breathing apparatus (SCBA) units are required for emergency entry by the labeling. If two units are not available at the site, it is a violation.

PPE need not be routinely worn during tree site fumigation if the labeling only requires PPE to be used in case of a spill or leak. An SCBA must be available at the worksite. A second SCBA is not necessary unless specifically required by labeling. (See Tree site Fumigation note under Requirement 20 – Accident Response Plan at Worksite).

Labeling required PPE used by non-employees (owners, property operators and others) must meet the maintenance and storage standards listed in 3CCR § 6738(a). Although 3CCR § 6700 – 6795 applies only to employees, standards provided in these sections are applicable to interpreting labeling requirements for non-employees as required in 3CCR § 6601 General Application of Standards (see page 6).

Exemptions: All substitutions and exemptions listed in 3CCR § 6738.4 including substitutions listed for closed systems (6738.4(c) and (d), and/or enclosed cabs in 3CCR § 6738.4(e) See Appendix 1.

12. Regulations - Personal Protective Equipment (PPE) 3CCR § 6738

Scope: All employees handling any pesticide when:

- Required by labeling, regulation, or conditions of any permit issued by the director or commissioner.
- Mixing or loading.
- Cleaning, adjusting or repairing equipment.
- Applying using hand held, vehicle mounted or towed equipment.

- Flagging.

Document the exact nature and circumstances of the violation, and if PPE was provided by the employer and was available at the site.

Respiratory PPE requirements are found in 3CCR § 6739

For methyl bromide field fumigations, the following individuals are considered handlers:

- Assisting with covering the tarpaulin at the end of the rows (shoveling).
- Observing the overall operation (supervising).
- Checking the tarpaulin placement.
- Changing cylinders (copiloting).
- Operating application equipment (driving).
- Tarpaulin cutting and removal.

[Ref. 3CCR § 6784(b)]

Check the labeling for clothing and PPE prohibitions. If employee handlers are not wearing required PPE, determine and document if it was provided by the employer and is available on site.

All PPE must be cleaned and inspected daily. Worn, damaged or heavily contaminated PPE must be replaced immediately. Check the condition of PPE and ask handlers what procedures they follow for cleaning and replacement.

See Appendix 1 for specific requirements and exemptions.

13. Respiratory Protection 3CCR § 6739

Scope:

- Employees when required by labeling, permit or regulation or employer policy.
- When employees wear respiratory equipment.

Verify that employees have been provided and are using the appropriate type of respirator as identified on the labeling, permit or regulation.

Verify that the equipment is being used properly and has been properly maintained. See more information on respiratory protection in Appendix 1.

Exemptions:

- See 3CCR § 6738.4 on substitutions allowed when using closed systems or enclosed cabs.
- When respirator use is allowed by the employer even though not required by labeling, permit or regulation, only certain parts of 3CCR § 6739 apply. (See Voluntary respirator provisions in Appendix 1).

14. Handlers Trained 3CCR § 6724

Scope: All employees who handle any pesticide. For the commercial or research production of an agricultural plant commodity, pesticide safety training must be conducted by a person who meets the qualifications included in 3CCR § 6724(f).

Certified applicators are considered trained. Check “YES” for this requirement if all handlers are certified applicators.

Employers must train employees before they handle pesticides, update the training to cover new pesticides, and repeat training at least annually (12 month period) thereafter. Initial training may be waived if an employee submits a record showing that training meeting the requirements of this regulation and covering the pesticides and use situations applicable to the new employment situation was received within the last year. Handler training performed in another state is not recognized due to the many unique aspects of California’s pesticide safety program.

- Observe how the handler is performing their task.
- Does the applicator appear to have received adequate training?
- Does the applicator follow the pesticide labeling directions?
- Does the applicator utilize required PPE appropriately?
- Were all precautions taken before the commencement of the application?
- During the application, does the applicator monitor the weather conditions and the application equipment?
- Interview the employee to determine who provided the training.
- Where was the training conducted?
- When was the training provided?

If the responses you receive and/or the behavior observed causes concern, perform a Headquarter and Employee Safety Inspection to verify the training status of the employee.

Consider issuing a cease and desist order for the use activity if unsafe conditions are observed. See the Compliance Action section on page 27 for more information.

Exemptions:

- Licensed PCAs and professional foresters are considered trained for the purposes of this requirement 3CCR § 6720(d)(1).

15. Emergency Medical Care Posting 3CCR § 6726

Scope: All employees handling any pesticides.

Employers are required to post in a prominent place at the work site or on the work vehicle, the name, address, and telephone number of a facility able to provide emergency medical care whenever employees will be handling pesticides. If the facility identified is not reasonably accessible from that work location, procedures to be followed to obtain emergency medical care. The poison control center's number or a supervisor's name with no additional information is inadequate as is the displaying of "9-1-1". Medical care information in an employee's wallet or in the glove compartment of the work vehicle does not meet the requirements of this regulation.

Exemptions: None

16. Employees Working Alone, "Danger" 3CCR § 6730

Scope: Employees working alone and handling any "DANGER" pesticide for production of an agricultural commodity.

Minimum contact required:

- During daylight – every two hours.
- At night – every hour

When working in the same field, ground applicators are deemed to be working together if they can see each other or each other's application vehicle. This supervision can be in person, radio, or telephone contact. You should mark Yes if two or more employees are working together while handling "DANGER" pesticides or mark N/A if no "Danger" pesticides are being handled.

Exemptions: None.

17. Decontamination Facility / Eyewash Available 3CCR § 6734

Scope: For all pesticides.

- Commercial or research production of an agricultural plant commodity - employees handling any pesticide.
- Non-production agriculture and non-agriculture settings - employees handling pesticides with the signal word "DANGER" or "WARNING"

Contents:

- Sufficient water; and for commercial or research production of an agricultural plant commodity, at least three gallons at the beginning of each work day per handler
- Sufficient soap
- Sufficient single use towels
- One clean change of coveralls at each decontamination site

At the mixing / loading site (only for commercial or research production of an agricultural plant commodity):

- Immediate access to a system delivering gently running water at a rate of least 0.4 gallons per minute for at least 15 minutes, or at least six gallons of water in containers suitable for providing a gentle eye-flush for about 15 minutes for emergency eye-flushing, if the product labeling requires protective eyewear or a closed mixing system is used.

Location:

- At the mixing and loading site,
- Within 1/4 mile of each handler unless prohibited by lack of vehicular access.

Decontamination materials must be together. The water must be of a quality and temperature that will not cause illness or injury and be suitable for eye flushing. Water that contains debris or algae is not acceptable. The regulation states there must be sufficient water available at the site. Sufficient and at least 3 gallons of water be provided for each handler at the beginning of each handler's work day. The soap, towels, and extra change of coveralls are in an enclosed container; and the water is running tap water or enclosed in a container. The employer should check decontamination supplies periodically and replenish as necessary.

Waterless hand cleaners may be substituted for soap but water must still be provided and used for decontamination. Hand sanitizing gels and liquids or wet towelettes are not acceptable.

Eyewash Immediately Available 3CCR § 6734(c)

Scope: Employees handling any pesticide for the commercial or research production of an agricultural plant commodity if the labeling requires protective eyewear.

Handlers must have one pint of water on their person or on the vehicle for emergency eye flushing. Assess the situation by applying the following scenario: The handler gets the pesticide in his eyes and is either completely or partially blinded. Can he reasonably be expected to find the water where it is located?

In situations where engineering controls are substituted for labeling required eye protection, eyewash requirements still apply.

At the mix/load site, immediately available to employee(s) a system capable of delivering at least 0.4 gallons of gently running water per minute for at least 15 minutes or at least 6 gallons of water that will gently flush the eyes for 15 minutes for emergency eye-flushing.

Exemptions: None

18. Field Posting 3CCR § 6776

Scope: Treated fields during the REI when:

- Required by the pesticide labeling or regulation.
- Applications in an entirely enclosed space (including greenhouses)
- Applications made in an enclosed space with an REI of greater than four hours
- The application results in a regulatory or labeling REI greater than 48 hours.
- Danger or minimal exposure pesticides are applied through an irrigation system.
- A fumigant is applied to a field.

Signs must be readable from a distance of 25 feet. They must be posted **before** the application, but no sooner than 24 hours prior to the application. See 3CCR § 6776(b) for the letter size requirements contents of the signs. See 3CCR § 6776(f) and the fumigant labeling for the required language on fumigation signs. The signs must be removed within 3 days after the end of the restricted entry interval, and before workers enter the field, unless the workers are early entry workers. The signs must be visible at all usual points of entry to the field. If there are no usual points of entry, signs must be posted at the corners of the field. At each border with any worker housing area within 100 feet of the treated field.

The operator of the property is responsible to post treated fields. If inspecting a PCB, mark “N/A” in this box. If the field is not posted when required, cite the operator of the property for not posting the field. The pest control business may also be cited as violating 3CCR § 6600(b) [requirement 14] when their action creates a hazard. In this situation the inspection report should document the factors that demonstrate that a hazard was created. Determine and document the likelihood that workers or other persons are likely to enter the un-posted field, the level of control the PCB maintains over the field until signs are posted, the toxicity of the pesticide(s) used and the amount of contact an unsuspecting person entering the field would have with pesticide residues (i.e., growth stage of the plants treated and amount of foliage).

Exemptions: None

19. Posting – Aeration Complete 3CCR § 6784(a)

Scope: All field fumigations.

This regulation requires signs be posted in accordance with 3CCR § 6776(d) and (f), and remain in place until aeration is complete. For methyl bromide applications, aeration is complete at the end of the REI.

The employer shall post signs to warn employees and others against entry during the specified time-period. The property operator must post the field(s) prior to the application, but not more than 24 hours before the application begins.

For fumigants other than methyl bromide, if a posting violation occurs prior to the end of the REI, cite 3CCR § 6776 and 3CCR § 6784(a). If it occurs between the labeling REI expiration and

the completion of aeration, then cite only 3CCR § 6784(a), which specifies that signs shall remain in place until aeration is complete. (Methyl bromide REIs expire at the end of the aeration).

Exemptions: None. The restricted access exemptions to general posting requirements found in 3CCR § 6776(a)(1) and (2) do not apply to field fumigations. See 3CCR § 6776(f).

20. Accident Response Plan at Worksite 3CCR § 6780(d)

Scope: Employees at a fumigant use site.

In the event of an accident or emergency (such as spills, fire, or leaks), the employer shall have an accident response plan at the worksite to protect employees. At least two basic pieces of information should be included in the Accident Response Plan. The first should be information regarding the security of the area where the problem occurred. The second is information on whom to contact in the event of a problem. Contacts may include the operator of the property, fire department, health department, or hazardous materials response team.

Emergency information must be in writing, available at the work site, and include emergency phone numbers. This information should also be covered during the routine training required by regulation. General information on spills and leaks is available on the labeling, and should be referenced in the plan.

Ask the handlers what actions they would take if an accident, leak, etc. occurred. If handlers refer to the appropriate parts of the labeling and produce phone numbers of persons to contact in an emergency, they are probably informed of an Accident Response Plan.

Tree site fumigations where only one SCBA is available: The emergency response plan should specify that only the SCBA-equipped person is responsible for correcting leaks or spills and the second worker evacuates the area and does not reenter until the SCBA-equipped person determines it is safe.

Exemptions: None

21. Safe Equipment 3CCR § 6742

Safe Equipment 3CCR § 6742(a)

Proper Tank Cover 3CCR § 6742(b)(1)

Scope: All equipment used by employees to apply or mix, load, transfer, or apply any pesticides.

This regulation covers the general safety and maintenance of equipment. It also covers proper tank covers, shutoff valves and sight gauges. If any of these items applies to the activity you are inspecting, check “Yes” or “No” based on compliance with all applicable items. Explain all violations in the “Remarks” section.

Check to see if the spray tank valves, couplings and transfer hoses are in good condition and are

not leaking. All equipment used to apply any pesticide must be inspected daily and any safety defect must be repaired prior to use. When carrying “DANGER” or “WARNING” pesticides under pressure, unshielded, flexible hoses must not pass through the cockpit of an airplane or helicopter.

Determine that all openings on tanks used for mixing or applying pesticides are equipped with covers that prevent spills.

Exemptions: None

Shut-Off Valve “Danger/Warning” 3CCR § 6742(b)(3)

Scope: All mix/load hoses used by employees, that carry liquid mixture derived from any pesticide with the signal word “DANGER” or “WARNING”.

Mix tanks must have a shut-off device on the exit end of all hoses that carry solutions of “DANGER” or “WARNING” pesticides.

Exemptions:

- Operations that employ a reverse action pump that empties the hose and eliminates dripping prior to uncoupling hose connections or removing the hose end from the tank being filled.

Sight Gauge > 49 gallons 3CCR § 6742(b)(4)

Scope: Each tank, with a capacity of more than 49 gallons, that is used by employees to mix or apply a liquid mixture derived from any pesticide with the signal word “DANGER” or “WARNING”.

- Must have the means, such as a sight gauge or transparent tank, to indicate the internal liquid level.
- Or a delivery device that automatically shuts-off before the pesticide mixture overflows

Exemptions: None

22. Closed System Used/Meets Criteria 3CCR § 6746(a), § 6544, § 6793, § 6738.4

Scope: For liquid pesticide products, including adjuvants which have the statement “Fatal if absorbed through skin” or other comparable language (Tier 1 closed mixing system) or, liquid pesticide products, excluding adjuvants, which have the statement "May be fatal if absorbed through skin" or "Corrosive, causes skin damage" or other comparable language.

- Employees who mix liquid pesticide products, bearing the statement "Fatal if absorbed through skin" or other comparable language ("Tier 1" closed mixing system).
- Employees who mix liquid pesticide products, excluding adjuvants, bearing the statement "May be fatal if absorbed through skin" or "Corrosive, causes skin damage" or other comparable language ("Tier 2" closed mixing system)
- Pilots who operate aircraft shall not transfer, mix or load liquid category one or two pesticides

- containing organophosphates or carbamates unless a closed system is used
- Employees who mix, load, or transfer minimal exposure pesticides. 3CCR § 6793
- Employees who mix and load pesticides labeled for use only with a closed mixing system.

The employer shall, for the production of an agricultural commodity, provide and assure employees operating a closed mixing system are trained (3CCR § 6724) in its use and operate the closed system in accordance with its written operating instructions. The employer shall assure that the closed mixing system is cleaned and maintained as specified in the written operating instructions, and as needed to ensure the closed mixing system functions properly.

"Tier 1" closed system is required when liquid pesticide products, and adjuvants, with the statement "Fatal if absorbed through skin" or other comparable language. It must be capable of enclosing the pesticide while removing the contents from its original container, preventing the pesticide from contacting handlers and rinse emptied pesticide container(s) as required by the pesticide product label or section 6684, while connected to the closed system.

Tier 2" closed system is required when liquid pesticide products, excluding adjuvants, have the statement "May be fatal if absorbed through skin" or "Corrosive, causes skin damage" or other comparable language. It must be capable of enclosing the pesticide while removing the contents from its original container, preventing the pesticide from contacting handlers.

Exemptions: None

23. Methyl Bromide, Work Hours 3CCR § 6784(b)

Scope: Employees involved in methyl bromide field fumigations.

3 CCR § 6445 defines fumigation handling activities as: an employee involved in assisting with covering the tarpaulin at the end of the rows (shoveling); observing the overall operation, checking tarpaulin placement, changing cylinders (copiloting), operating application equipment (driving), and tarpaulin cutting and removal. Shovelers must work only at the ends of the application rows.

3CCR § 6784(b)(2)(B) – Employees may not conduct fumigation handling activities for more than the hours specified in 3CCR § 6784(b)(2)(B) Table 1 or Table 2.

Identify in the remarks section if it is a violation of two trained employees or a violation of work hours.

Exemptions:

- Enclosed Space (e.g. greenhouses, screenhouses, hoopouses) and other similar fumigations. 3 CCR § 6000
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre.
- Golf course fumigation.
- Raised tarp fumigations of less than one acre at nurseries. (3CCR § 6450)

24. Methyl Bromide Worksite Plan 3CCR § 6447(a)

Scope: Methyl bromide field fumigations – General Requirements.

Check to see if the application follows the worksite plan regarding all information as to method of application, application rate, acreage, description of notification procedures, tarpaulin repair response plan, tarpaulin removal plan, and identification of each application block. Determine if the tarpaulin listed meets the specifications in 3CCR § 6447(e) the list of approved tarpaulins can be found at <<http://www.cdpr.ca.gov/docs/emon/methbrom/tarps.pdf>>.

Compare your field observations to the information contained in the permit and worksite plan. If any discrepancies exist, determine if the fumigation should be stopped.

Verify that tarp ends are buried under at least 4 inches of packed soil and that shanks are cleared of fumigant prior to being removed from the soil.

If the applicator is a PCB, check “N/A” for this requirement on the inspection form. Note in remarks if the property operator is in violation of this regulation and determine if the fumigation operation needs to be stopped.

Exemptions:

- Enclosed Space (e.g. greenhouses, screenhouses, hoopouses) fumigations.
- Potting soil
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre.
- Golf course fumigation.
- Raised tarp fumigations of less than one acre at nurseries.

25. Methyl Bromide Notification 3CCR § 6447.1

Scope: Methyl bromide field fumigations.

Compare your field observations to the information contained in the permit and worksite plan. If any discrepancies exist, determine if the fumigation should be stopped.

The operator of the property to be treated is responsible to submit a notice of intent (NOI) to your office 48 hours prior to commencement of fumigation. If the fumigation does not commence within 12 hours of the intended fumigation time, a new NOI must be submitted. The fumigation cannot start sooner than indicated on the notification. The operator of the property shall notify neighbors within 300 feet of the perimeter of the outer buffer zone that a permit to use methyl bromide near their property has been issued by the commissioner. Notification to neighbors must be given at least nine days in advance before the application begins; there is no waiver for this requirement. The notification shall include information listed in 3CCR § 6447.1(b)(1).

The operator of the property to be treated shall assure that specific notification of the date and time

of the start of the fumigation and anticipated expiration of buffer zones is provided to those persons notified in 3CCR § 6447.1(b)(1) who request specific fumigation information. Review 3CCR § 6447.1(b)(2) for other notification requirements.

If the applicator is a PCB, check “N/A” for this requirement on the inspection form. Note in remarks if the property operator is in violation of this regulation and determine if the fumigation operation needs to be stopped.

Exemptions:

- Enclosed Space (including greenhouses) 3CCR § 6447
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6447
- Golf course fumigation. 3CCR § 6447
- Raised tarp fumigations of less than one acre at nurseries. 3CCR § 6447

26. Methyl Bromide Buffer Zone Requirements 3CCR § 6447.2

Scope: Methyl bromide field fumigations.

Compare your field observations to the buffer zone requirements in the permit and worksite plan. If any discrepancies exist, determine if the fumigation should be stopped.

Make sure the operator of the property or the person making the application (for example, the pest control business in charge of the fumigation) complies with the buffer zone requirements listed in the permit conditions. The buffer zone restrictions shall begin at the start of fumigation and remain in effect at least 48 hours after the completion of the injection to the application block.

Observe and document if anyone is entering the inner buffer zone, and what activities they are performing. Only fumigation handlers and persons transiting through the area by vehicle or bicycle are allowed to be in the inner buffer zone. The operator of the property shall assure no other persons are allowed within the inner buffer zone.

When the inner buffer zone extends into adjoining agricultural property, the property operator shall obtain written permission to extend the inner buffer zone into the adjoining property. The inner buffer zone boundaries shall be posted with signs as required by 3CCR § 6447.2(c)(3)(A). The inner buffer zone may extend across sites (with commissioner approval) where only transit activities may occur, such as a public road; posting requirements would not apply in that area (3CCR § 6447.2(c)(3)(B)).

The outer buffer zone shall be at least 60 feet. The operator of the property shall assure no person is allowed to enter the outer buffer zone except to transit by vehicle or bicycle, perform fumigation handling activities, and other activities allowed by permit conditions. The operator of the property shall notify onsite employees (including licensed pest control business and farm labor contractor) of the buffer zones.

When the inner and/or outer buffer zone extends into adjacent agricultural properties, the employees of the other properties must be notified. When outer buffer zones extend to any adjacent

property, the operator of the property shall obtain written permission to extend the outer buffer zone into the adjoining property. See 3CCR § 6447.2 (d) and (e).

No fumigant application with an outer buffer zone greater than 300 feet is permitted within ¼ mile of a school property unless the school is scheduled to be unoccupied during the application period and for 36 hours following the end of the application.

Tarp perforation: Review the product labeling Tarp Perforation and or Removal for specific requirements.

Exemptions:

- Enclosed Space (including greenhouses) fumigations. 3CCR § 6447
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6447
- Golf course fumigation. 3CCR § 6447
- Raised tarp fumigations of less than one acre at nurseries. 3CCR § 6447

27. Methyl Bromide Fumigation Methods 3CCR § 6447.3

Scope: Methyl bromide field fumigations. Some methods prohibited in non-attainment areas from May 1 through October 31.

Make sure the method being used follows all permit requirements and is one of the methods listed in 3CCR § 6447.3. If any method other than one of the methods listed (or is prohibited due to location in a non-attainment area between May and October) is in progress, **stop the application**. Any other application method is not in compliance. Regulations require specific methods of use (such as maximum application rate, tractor equipped with an operating air fan, equipment used, and injection depth and spacing).

The REI requirement varies for each method and cultural practice, refer to 3CCR § 6447.3 for more information.

For drip systems, 3CCR § 6447.3(a)(6) requires all fittings and emitters underneath the tarpaulin shall be buried in the soil. Fumigation lines shall be physically disconnected from the main water supply during the fumigation. All apparent leaks shall be eliminated prior to the fumigation. All emitters not buried must be sealed. The drip system shall be purged prior to disconnecting any line containing the fumigant. All persons working with pressurized lines and manifold during the fumigation must wear eye protection required by the product labeling. For REI requirements, refer to 3CCR § 6447.3(a)(6)(P).

Verify that application rates are in compliance with this regulation, as well as with the permit conditions and the labeling.

During tarp repair, does the person in charge follow the tarpaulin repair plan? If tarps are not repaired as required, or if they are removed too early, it is a violation. See 3CCR § 6784(b)(5) for tarp repair requirements; see 3CCR § 6447.3 for tarp removal restrictions for the application method employed; see 3CCR § 6447.3 and Appendix 7 for approved methods requirements.

Exemptions:

- Enclosed Space (including greenhouses) fumigations. 3CCR § 6447
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6447
- Golf course fumigation. 3CCR § 6447
- Raised tarp fumigations of less than one acre at nurseries. 3CCR § 6447
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

28. 1,3-Dichloropropene – Fumigation Methods 3CCR § 6448.1

Scope: Any person applying 1,3-Dichloropropene within a non-attainment area from May 1 through October 31.

Verify that the fumigation is being performed in compliance with the regulatory requirements for:

- Soil moisture
- Rate (332 lb./acre A.I. max)
- Allowed methods
- Shank length
- Tarp ends buried under 4 inches of soil
- Tillage to erase chisel trace
- Post application water treatments

See 3CCR § 6448.1 and Appendix 7 for approved methods requirements.

Make sure the method is allowed and follows all permit requirements. If any method other than one of the methods allowed in the non-attainment area between May and October is in progress, **stop the application.**

Exemptions:

- Raised tarp nursery fumigations of less than one acre. 3CCR § 6448
- Replant of individual vines in less than 1 contiguous acre. 3CCR § 6448
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre.. 3CCR § 6448
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

29. Chloropicrin - Fumigation Methods 3CCR § 6449.1

Scope: Any person applying chloropicrin within a non-attainment area from May 1 through October 31.

Verify that the fumigation performed in compliance with the regulatory requirements for:

- Soil moisture
- Broadcast equivalent application rate must not exceed 210 pounds of chloropicrin per acre
- Allowed methods
- Shank length

See 3CCR § 6447.1, § 6438.1 or Appendix 7 for approved methods requirements.

Make sure the method being used follows all permit requirements and is one of the allowed methods. If any method other than one of the methods allowed in the non-attainment area between May and October is in progress, **stop the application**.

Exemptions:

- Raised tarp nursery fumigations of less than one acre. 3CCR § 6449
- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6449
- 3CCR § 6449
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

30. Metam- Fumigation Methods 3CCR § 6450.1

Scope: Any person applying metam-sodium or metam-potassium within a non-attainment area from May 1 through October 31.

Fumigations must start no earlier than one hour after sunrise and must be completed no later than one hour before sunset.

Verify that the fumigation is being performed in compliance with the regulatory requirements for:

- Soil moisture
- Confirm the application rate.
- Allowed methods
- Post application water treatments

See 3CCR § 6450.1 and Appendix 7 for approved methods requirements.

Make sure the method being used follows all permit requirements and is one of the allowed methods. If any method other than one of the methods allowed in the non-attainment area between May and October is in progress, **stop the application**.

Exemptions:

- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6450
- Tree applications for prevention of root graft disease transmission. 3CCR § 6450
- Wood decay uses. 3CCR § 6450
- Use on potting soil. 3CCR § 6450
- Greenhouse fumigations. 3CCR § 6450
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

31. Dazomet Fumigation Methods 3CCR § 6450.2

Scope: Any person applying dazomet within a non-attainment area from May 1 to October 31.

Fumigations must start no earlier than one hour after sunrise and must be completed no later than one hour before sunset.

Verify that the fumigation is being performed in compliance with the regulatory requirements for:

- Labeling identified methods.
- Post application water treatments

See Appendix 7 for approved methods requirements.

If any method other than one identified in labeling in a non-attainment area between May and October is in progress, **stop the application.**

Exemptions:

- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6450
- Tree applications for prevention of root graft disease transmission. 3CCR § 6450
- Wood decay uses. 3CCR § 6450
- Use on potting soil. 3CCR § 6450
- Greenhouse fumigations. 3CCR § 6450
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

32. Na Tetrathiocarbonate - Fumigation Methods 3CCR § 6451.1

Scope: Any person applying Na Tetrathiocarbonate within a non-attainment area from May 1 through October 31.

If any method other than one identified in labeling in the non-attainment area between May and October is in progress, **stop the application.**

Exemptions:

- Replant of individual vine or tree-sites (tree holes) less than one contiguous acre. 3CCR § 6450
- Raised tarp nursery fumigations of less than one acre. 3CCR § 6449
- Enclosed spaces (including greenhouse) applications
- Fumigation method approved pursuant to 3CCR § 6452 or pursuant to a valid research authorization.

33. Wellhead Protection 3CCR § 6609

Scope: Any person mixing or loading any pesticides within 100 feet of a well. Any person applying any 3CCR § 6800(a) or (b) pre-emergent herbicide within 100 feet of a well. See ENF 05-24.

Are there unprotected wellheads within 100 feet of the application of any 3CCR § 6800(a) or (b) pre-emergent herbicides, the following activities shall be prohibited within 100 feet of a well (including domestic, municipal, agricultural, dry or drainage, monitoring, or abandoned wells):

- Mixing, loading, and storage of pesticides.
- Rinsing of spray equipment or pesticide containers
- Maintenance of spray equipment that could result in spillage of pesticide residues on the soil.
- Application of pre-emergent herbicides.

If there are, determine if the wellheads are protected from irrigation and rainfall runoff contacting any part of the wellhead by berms or other means.

Exemptions:

- Wells sited so that irrigation or rainfall runoff water does not move from the perimeter of the wellhead toward the wellhead and contact or collect around any part of the wellhead.
- Wells protected by berms that prevent movement of surface runoff water from the perimeter of the wellhead toward the wellhead.

34. Accurate Measurement 3CCR § 6604

Scope: Weighing or measuring any concentrate pesticides.

- Are pesticides being accurately weighed or measured?
- Are the measuring devices calibrated to the smallest unit in which the concentrate is being used?

Examples of inaccurate measurement would include estimating half a bag or part of a container. Examples of improper devices would include an uncalibrated or unmarked container.

Ask the applicator how he/she adjusts the flow meter to achieve the desired rate. Document your observations (equipment and manufacturer's name and how the flow meter is being adjusted).

Exemptions: None

35. Protection of Persons / Animals / Property 3CCR § 6614

Scope: Application of any pesticide.

The applicator shall evaluate, prior to and while making the application, the equipment, weather conditions, and the area (both target and surrounding areas) to determine the likelihood of damage or contamination.

High winds, inversions, proximity to residential areas or other gatherings of people and susceptible

crops are examples of conditions, which may increase the hazard potential of the application. Are there any fieldworkers near the site during the pesticide application?

- Is there a reasonable possibility of the contamination of persons not involved in the application?
- Is there a reasonable possibility of damage or contamination to non-target crops, animals (including bees), or property?

Exemptions: None.

36. Equipment Registered FAC § 11732

Scope: Any business performing pest control for another person for any compensation. This includes soliciting and advertising for pest control work. Pest control is defined in FAC § 11403. Equipment used by PCBs to mix or apply any pesticide. Verify that equipment is registered with the CAC.

Exemptions: None

37. Equipment Identified 3CCR § 6630

Scope: Vehicles or equipment (ground rig, service rig, and similar equipment used for mixing or applying pesticides) by an agricultural or structural pest control business.

All pest control businesses must identify equipment with markings readable at a distance of 25 feet. The identification must include either:

- The business' name; or
- The pest control business license number and a statement such as "Licensed Pest Control Operator", "Fumigation Division" or similar wording.

Vehicles used only to transport and apply pesticides are not required to have pesticide storage posting per 3CCR § 6674.

Exemptions: None

38. Backflow Prevention - Air Gap 3CCR § 6610

Scope: All equipment that handles any pesticide and which draws water from an outside source. All equipment must be equipped with a backflow prevention device, with air-gap separation, double check valve when handling pesticides and drawing water directly from any outside source. (Overhead fill systems that maintain an air-gap is acceptable). An outside source is anything other than a separate nurse tank. Outside sources include wells, streams, ditches, lakes, ponds and pipelines. The CAC should consult with the local water purveyor and county health department for additional approval criteria. N/A can be marked if water drawn from an outside source was not observed. The following are examples of devices that prevent backflow or reverse siphoning:

- Air-Gap Separation - A physical break between the supply line and the receiving vessel. (This is the only method that is accepted by all water and health agencies).
- Double Check Valve Assembly

- Reduce Pressure Principle Backflow Prevention Device
- Single check valve, vacuum relief valve and low pressure drain assembly.

See Appendix 3 for detailed information.

Ask handlers to explain backflow systems that are unfamiliar or that appear inadequate.

Exemptions: None

39. Containers Secure/Attended 3CCR § 6670

Scope: All containers or equipment that holds or has held pesticides.

Equipment or containers that hold or have held pesticides must be attended or in a locked enclosure if they present a hazard to persons or property. The CAC has authority to take possession of unattended pesticide or containers that create a hazard.

If pesticides, containers or equipment are not in a locked enclosure you must determine if responsible persons on site are adequately attending them. Factors include;

- The proximity of the containers to public access, the proximity of the attending person to the containers and the level of attention the attending person can provide.
- Are the containers near a road or trail?
- Are they in plain view of the applicator?
- Could someone access the containers without the applicator seeing them?
- Containers larger than 55 gallons that contain liquid pesticide may be secured with a locked closure in lieu of storage in a locked enclosure. Also see 3CCR § 6672(a) and (b) for container control requirements.

3CCR § 6672(b) requires that each person that controls the use of a property must attend all pesticide containers or keep them in a locked enclosure. There is no element of this regulation that requires demonstration that the containers present a hazard.

“Attended” means a responsible person in the vicinity at all times to maintain control over the pesticide to prevent contact by unauthorized persons. Adjacent to roadways or populated areas, the person must have pesticides in sight. Compendium Volume 8, Section 1 Pesticide Storage

“Enclosure” means a structure, a lockable storage compartment, a locked and fenced area or a truck or trailer with side racks. The enclosure must prevent entry from all sides. If the enclosure does not have a roof, the sides must be a minimum height of six feet above the ground. .

Compendium Volume 8, Section 1 Pesticide Storage

Fumigants must be locked at all times when unattended. For methyl bromide tanks, closing the bonnet without otherwise locking or securing it is insufficient to meet this requirement.

This requirement should be checked “N/A” only if no containers are present at the inspection site.

Exemptions: None

40. Containers Labeled/Closures 3CCR § 6676

Scope: Storage and transportation of any container that holds or has held a registered pesticide.

Verify that all pesticide containers carry the registrant's labeling and that all lids or closures are securely tightened.

Exemptions: None

41. Proper Pesticide Transport 3CCR § 6682

Scope: All pesticides transported in vehicles.

Persons should not be riding in the back of a truck used to transport pesticides. Some fumigant labeling requires an upright position and/or chaining during transportation. Violations of this regulation are often found in the storage box of the vehicle. Violations include pesticide containers not secured during transport, spillage of concentrates found in vehicles and storage of pesticides in the same compartment with food, feed or persons. Storage of PPE in the same box with pesticides is a violation of 3CCR § 6738(a).

Exemptions:

- Outer containers that are not contaminated. [guidance – based on 3CCR § 6686(c)]

Responsibility Table

See the table below for information summarizing the responsible entity for specific laws and regulations listed in the Field Fumigation Use Monitoring Inspection.

The following table provides a guide for the inspector in determining the responsible person for the regulations listed.

Field Fumigation Use Monitoring Inspections Guidelines: Property Operator vs. PCB Responsibility*

Section	Requirement	Property Operator	Pest Control Business
12973	RMP conditions	X	X*
11732	Registration		X
6776, 6782 12973	Posting	X	X (FAC § 12973 or 3CCR § 6600 if signs not posted at beginning of application)
6724	Training	X - If P.O. is employer	X - If PCB is employer or if the PCB giving direction (supervision) to the worker
6782	Enclosed spaces	X	X*
6769	Greenhouse ventilation	X	X*
6450	MB worksite plan	X	
6450.1	MB notification	X	
6450.3	MB fume method	X	X*
6784	MB 2 trained employees	X	X*
6784(5)(A)	MB tarp pulled	X**	X*

*For some sections listed above, the PCB is responsible if onsite and performing the activity (ex: removing the tarps too soon), otherwise the property operator is responsible.

**If a third company were hired by the property operator to remove the tarps, any violations would be the responsibility of the property operator.

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