Laws, regulations, and labels: Getting through the fume season

Santa Barbara County Agricultural Commissioner’s Office
Fumigants

- Methyl Bromide
- Chloropicrin
- 1,3, D when mixed w/Chloropicrin
- Metam Sodium/Metam Potassium
Permit conditions

- Santa Barbara County’s fumigation permit conditions are a combination of regulations, DPR suggested permit conditions, and responses, over the years to local conditions and events.
  - Incident Investigation
    - Need to determine the cause
    - Favorable outcomes
    - Unfavorable outcomes
The Grower and the Pest Control Company

- Important to remember
  - The permit conditions apply to the field. Labels apply to chemical. Everyone must follow both.
  - Growers and pest control businesses must rely on each other for a successful and compliant fumigation.
  - Excellent communication among all parties involved is key.
  - Growers and PCBs must have copies of the label, entire permit, and FMP BEFORE the fumigation begins!
Which fumigant to use?

- What is nearby?
- What tarps do you have?
- What size BZ can you afford?
- 1,3-D cap, especially near sensitive sites!
- Don’t bed up too soon!
Which fumigant to use?

Example: 1,3-D has a 100’ application restriction to structures regardless of whether the structure is in the buffer zone or which tarp you use.
How it Went...

- Growers that worked with their PCB/PCA prior to their appointment were well prepared and knew their field layout and chemical
- We turned away some growers when they cam to their appointments without the necessary information
Which tarp to use?

- Chemical
- What is nearby?
- Do you need credits?
- Availability?
- Identification?
- Bed or broadcast?
Tarp info

- Credits found on US EPA website
  http://www.epa.gov/pesticides/reregistration/soil_fumigants
- Standard, 10-40% tarps, 30-60% tarps
- Proof of tarp type may be required
- 100% Chloropicrin requires a 60% credit tarp in both Santa Barbara and SLO Counties
- DPR allows credits for tarp type and water seals only
How it Went...

- We had to verify info with several tarp companies
- Some growers purchased tarps they did get the tarp credit they needed or thought the purchased
- A few growers were caught without the 60% tarps when 1,3 D capped
- Plan well in advance, work with your PCA/PCB and us to make sure you are getting the tarps you need
FMP maps

- SBCAC requires a complete FMP map before issuing a RM Permit
  - ID all the blocks to be fumigated
  - Location of buffer zones
  - Roadways
  - Other right-of-ways
  - Sidewalks/walking paths
  - Bus stops
  - Nearby blocks (overlapping BZ)
  - Structures
  - Difficult to Evacuate Sites

FUMIGATION MAP LEGENDS

- **H** = House
- **S** = School
- **O** = Office
- **OB** = Business
- **B** = designates a barn, shed or pump house
- **C** = Church
- **DC** = Daycare
- **BA** = designates a bystander area such as a parking lot
- **BS** = Bus Stop
- **AW** = Agricultural Well
- **PW** = Potable Well
- **PL** = Property Line
- **X** = chemigation injection point
- = designates an area that will not be fumigated
  = designates that a buffer extends into an area
How it Went…

- Maps were better than expected
- Growers that worked with their PCA/PCB usually had acceptable maps that did not require many edits
Other paperwork

- Permission slips: Adjacent grower must state how he will keep people out of the BZ, including contractors
- Vacating Agreements: No option for returning. Date and time stated on agreement. If amended must give new date and time.
- Notification for methyl bromide
- Monitoring required for metam
Other paperwork

- Difficult to Evacuate sites emergency response: notify or monitor, details of plan
  - Responsibilities during and after the application
  - Who is the responsible person applicator/grower?
  - Are the employees trained?
  - SCBA’s
  - Air measuring devices
  - Water seals
Other paperwork

- Notices of Intent
  - Documentation of map, notification, vacating agreement, and buffer zone permission
  - At least 48 hours prior to the application
  - NOIs for Saturday, Sunday and Monday applications must be submitted by 2pm on Thursday.
  - Change in the initial start date. It is the responsibility of the applicator to insure the change does not result in applications with overlapping buffer zones within 12 hours of each other.
  - For chemigations indicate which device is used to prevent backflow into groundwater.

- fumigation@agcommissioner.com
How it Went…

Many permission slips were not accurately filled out and had to be returned.
Go over the information with the person signing the slip, make sure it is accurate before leaving and turning in.
Work with your PCA/PCB on scheduling so that you give accurate dates on your permission slips and notifications.
Buffer zones

- Buffer Zones – defined by the label
  - Who can go in?
    - Handlers & non-handlers
    - Transit
    - Owners vs employees
  - Labels define
    - Size – Variable
    - Credits – tarp type, water
    - Duration – 48 hrs
    - Overlapping 12 hrs to 36 hrs
How it Went…

- Growers did not respect their own buffer zones
- People who signed buffer zone permission slips did not respect the buffer zones
- Trespassers did not respect the buffer zones
- Call and alert us if there is a problem
- Note problems on the PAS of the FMP
Overlapping buffer zones

- No overlapping buffer zones in first 12 hours.
- For overlapping BZ within first 36 hrs, add acreage together and apply to label tables (except 60% tarps)
How it Went…

- PCA/PCBs worked well together on scheduling and avoiding overlapping BZs
- A few job schedules had to be changed
- Can avoid this problem by using 60% tarps
Difficult to evacuate

- Buffer Zones and Difficult to Evacuate Sites (DTES)
- < 300’: 1/8 mile
- >300’: ¼ mile

Hospitals, nursing homes, schools, day care, prisons
How it Went...

- Growers, PCA/PCBs worked well with the schools to get scheduling
- Must follow special permit conditions—people are watching!
- We have a few places that can not be fumigated with the new labels, if you are not sure, check with us before leasing
Signs

- Field Posting Signs
  - Prior to application
  - Corners, entrances to field
  - Responsibility

- Buffer Zone Signs
  - Prior to application
  - Every 200’
  - Responsibility
BZ signs – Scenario 1

Orange field to be fumigated. Surrounding fields operated by adjacent property operators except red field, which has NOT been fumigated.
Signs – Scenario 2

Orange field previously fumigated and under ERP. Currently fumigating red field.
How it Went…

- Signs were often missing after the application—need to assign someone to check at least daily, more during bad weather or where there is potential for people removing signs
- Signs were not placed for maximum visibility—think, what is the purpose of this sign?
- Signs were not removed in a timely manner—causes others to give less importance to the signs and ignore
ERP (entry restricted period)

- Do not disturb the tarp for min 5 days (7 days for 1,3-D products)
- Handling tasks are defined by when they occur. When can unrestricted entry into a field occur?
- Early removal for broadcast and bedded applications

<table>
<thead>
<tr>
<th>If application is</th>
<th>and tarp will be</th>
<th>then ERP will end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untarped</td>
<td>N/A</td>
<td>5 days after application is complete</td>
</tr>
<tr>
<td>Tared</td>
<td>Perforated and removed 5-14 days after application is complete (note: remove no sooner than 2 hours after perforation)</td>
<td>once tarp removal is completed</td>
</tr>
<tr>
<td>Tared</td>
<td>Perforated 5-14 days after application is complete, but not removed</td>
<td>48 hours after perforating tarps</td>
</tr>
<tr>
<td>Tared</td>
<td>Perforated and/or removed more than 14 days after application is completed</td>
<td>5 days after application is complete (because tarps are still intact)</td>
</tr>
</tbody>
</table>
How it Went…

- Growers need to know the information on the label and in the FMP-ERPs are very complicated.
- Tarp activities are handling activities and employees must have proper pesticide handler training and EPA safe fumigant handling information.
- Plan activities ahead—you or your neighbor can’t prep for a fumigation inside the BZ or application area.