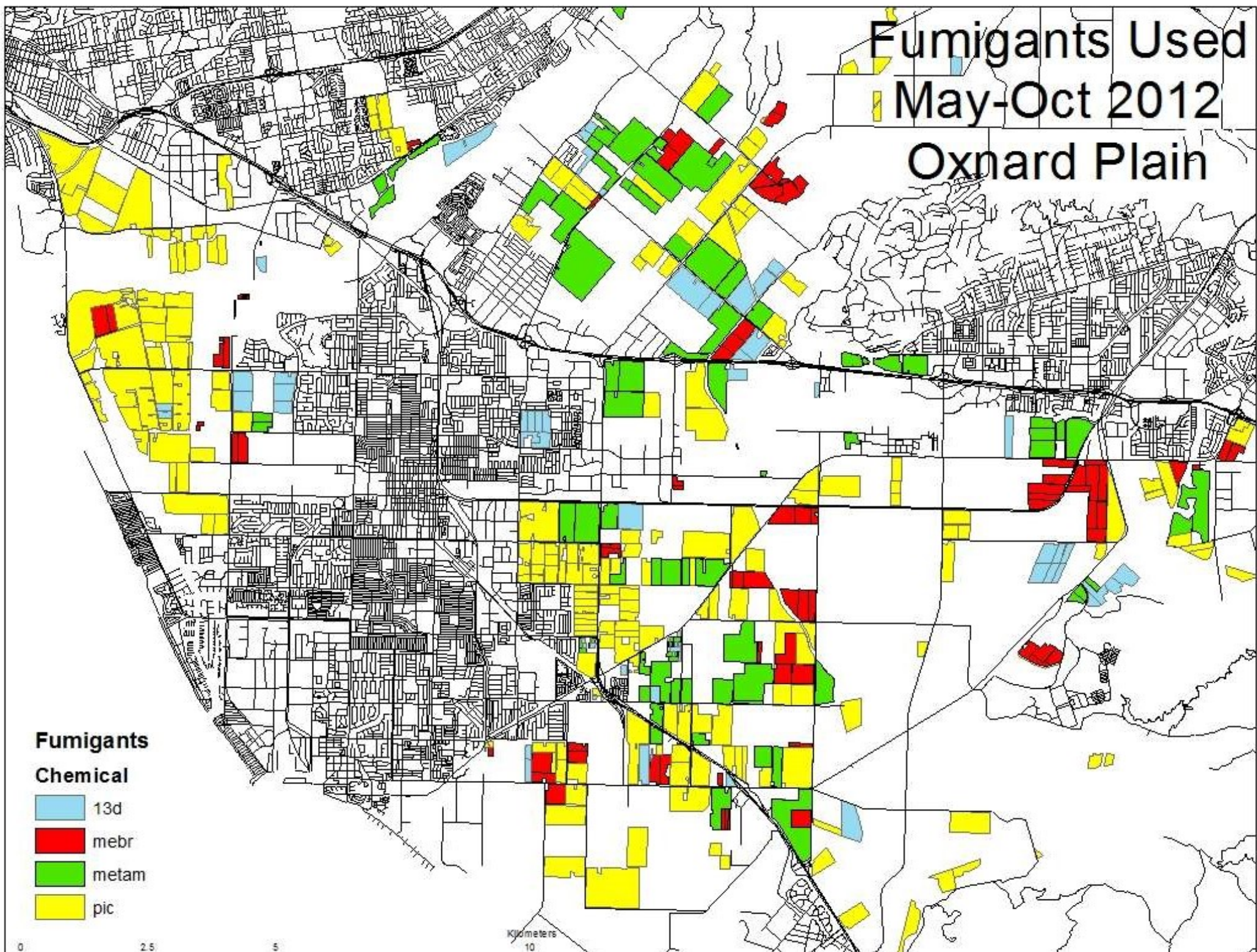




Andy Calderwood –Ventura Co Agricultural Commissioner's Office

VENTURA COUNTY FUMIGATION OVERVIEW & PHASE II LABELS

Fumigants Used May-Oct 2012 Oxnard Plain



Fumigants

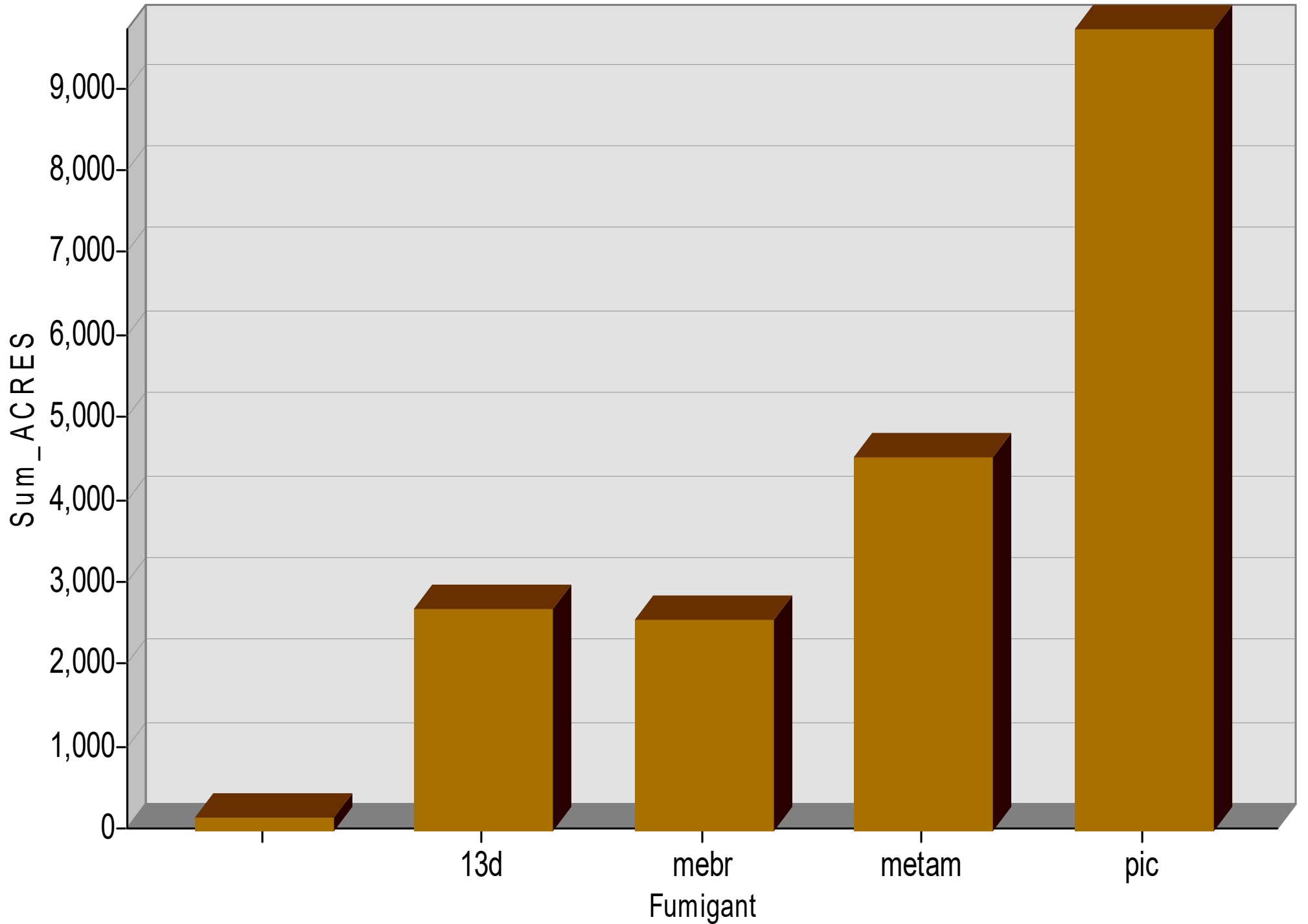
Chemical

- 13d
- mebr
- metam
- pic

Kilometers

0 2.5 5 10


Acres Fumigated by Al, Vta Co, May-Oct 2012





US EPA

Amended RED's 2009

- Chloropicrin
 - Methyl Bromide
 - MITC
 - Metam Sodium
 - Metam Potassium
 - Dazomet
- 

Fumigant Label Changes

- Phase I (2011)
 - Fumigant Management Plan
 - Respiratory Protection & Stop Work Triggers
 - License Category
 - Supervision
 - Responsibility
- Phase II (Dec 2012)
 - Buffer Zones
 - Emergency Preparedness & Response Measures
 - Difficult to Evacuate Sites




Fumigant Use Rules

- Federal Rules (Label)
- CA Laws & Regulations
- DPR's Suggested Permit Conditions
- CAC Permit Conditions




Phase II Changes

- Buffer Zones
 - Emergency Preparedness & Response Measures
 - Difficult to Evacuate Sites
- 



Buffer Zones

- 48-hour Minimum
 - Excludes Everyone but:
 - Handlers
 - Vehicular Transit
 - Bicycle Transit
 - Posting
 - Permission
 - Depends on Product, Rate, Method, & Acres
- 

Buffer Zone Tables

Table 10. Drip Application Buffer Zone Distances in Feet

Gal/A	Application Block Size (acres)																
	1	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80
4	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
7	25	25	25	25	25	25	25	25	25	25	38	38	50	50	63	76	88
9	25	25	25	25	25	25	25	25	25	25	50	50	75	75	100	125	150
12	25	25	25	25	25	26	28	29	31	32	57	57	82	82	113	140	163
14	25	25	25	25	25	28	30	33	35	38	63	63	88	88	125	150	175
16	25	25	25	25	25	29	33	36	40	44	69	69	94	94	138	163	188
19	25	25	25	25	25	30	35	40	45	50	75	75	100	100	150	175	200
21	25	27	29	30	32	37	42	47	52	57	82	94	113	125	175	207	238
23	25	28	32	35	38	43	48	53	58	63	88	113	125	150	200	250	275
26	25	30	35	39	44	49	54	59	64	69	94	132	138	175	225	269	313
28	25	31	38	44	50	55	60	65	70	75	100	150	150	200	250	300	350
31	32	37	41	46	50	56	63	69	76	82	125	188	200	250	300	350	400
33	38	41	44	47	50	58	65	73	80	88	150	225	250	300	350	400	450
35	44	46	47	49	50	59	68	76	85	94	175	263	300	350	400	450	500
38	50	50	50	50	50	60	70	80	90	100	200	300	350	400	450	500	550
40	51	52	53	54	55	64	74	85	96	106	213	319	372	425	478	531	584
42	52	54	56	58	60	68	79	90	101	113	225	338	394	450	506	563	634
45	53	56	59	62	65	71	83	95	107	119	238	356	416	475	534	594	684
47	54	58	62	66	70	75	88	100	113	125	250	375	438	500	563	625	734
49	55	60	65	70	75	79	92	105	118	131	263	394	459	525	591	656	784
52	56	62	68	74	80	83	96	110	124	138	275	413	481	550	619	688	834
54	57	64	71	78	85	86	101	115	129	144	288	431	503	575	647	719	884
56	58	66	75	82	90	90	105	120	135	150	300	450	525	600	675	750	934

Broadcast Equivalent Application Rate (Gallons product/A)

Buffer Zones and Roads

- Buffer zones *must not include* roadways and rights of way **UNLESS**:
 1. The area is *not occupied* during the buffer zone period, *and*
 2. *Entry by non-handlers is prohibited* during the buffer zone period.

Buffer Zones and Roads

- Buffer Zone Exemption for Transit on Roadways: *Vehicular and bicycle traffic* on public and private roadways through the buffer zone is *permitted*. (NOTE: Buffer zones are not permitted to include bus stops or other locations where persons wait for public transit.)



Buffer Zones and Roads

- ***For all other publicly owned and/or operated areas*** such as parks, ***sidewalks, permanent walking paths***, playgrounds, and athletic fields, buffer zones ***must not include these areas UNLESS:***
 1. The area is ***not occupied*** during the buffer zone period,
 2. ***Entry by non-handlers is prohibited*** during the buffer zone period, ***and***
 3. ***Written permission*** to include the public area in the buffer zone is granted by the appropriate state and/or local authorities responsible for management and operation of the area.



Buffer Zone Credits

- Tarps

Soil Fumigant Tarps | Pest x
www.tarpcredits.epa.gov
CDFA I & C Califor... Imported From IE Rain twc Weather New Tab DPR Reg Offices CalAgP Google Tarps Phase II Labels PUE Com CrossFit Cleaning Rigs
U.S. ENVIRONMENTAL PROTECTION AGENCY
Pesticides: Reregistration
Recent Additions | Contact Us Search: All EPA This Area Go
You are here: EPA Home » Pesticides » Regulating Pesticides » Reregistration » Pesticide Reregistration Status » Soil Fumigants » Tarps

Tarps

Current as of March 2013

Soil fumigant applications can qualify for buffer zone reduction credits if applicators use tarps that are highly impermeable to soil fumigants. See the [Buffer Zones](#) fact sheet for further information.

The tarps listed on this website qualify for buffer zone credits for soil fumigant products that contain the following active ingredient(s):

- [Methyl Bromide and Chloropicrin](#)
- [Chloropicrin](#)
- [Chloropicrin and 1,3-dichloropropene](#)
- [Metam sodium or metam potassium](#)

Products containing the active ingredient dimethyl disulfide (DMDS) require the use of certain specific tarps. These tarps are listed on <http://www.epa.gov/pesticides/dmids-tarps>. No credits are provided for the use of those tarps because buffer zones on DMDS labels are based on the use of one of the required tarps.

List of Tarps that Qualify for Buffer Reduction Credits

Only the tarps listed below have been tested for permeability and determined by EPA to qualify for buffer zone reduction credits.

DISCLAIMER: This list of tarp products is provided solely for determining soil fumigant buffer zone credits in accordance with soil fumigant product labels. The identification of these commercial products or services, their source, or their use is not to be construed as either an actual or implied endorsement of any such product or service.

Methyl Bromide and Chloropicrin

For products that contain both methyl bromide and chloropicrin, the listed tarps qualify for buffer zone credits as specified below.

20% reduction in buffer zone distance for the use of any of the following tarps:

- Berry Plastics, black/silver, metalized, 1.25 mil
- Canslit Shine N'Ripe, black/silver, metalized, 1.25 mil
- Canslit Shine N'Ripe, white/silver, metalized, 1.25 mil
- Olefinas VIF, embossed, 1.2 mil
- IPM VIF, clear, 1.38 mil
- Guardian AgroPlastics VIF, embossed black, 1.2 mil

40% reduction in buffer zone distance for the use of any of the following tarps:

- Cadillac VIF, black, 1.25 mil
- Berry Plastics Blockade, white, 1.25 mil
- Berry Plastics Blockade, black, 1.25 mil
- XL Blockade, black, 1.25 mil
- SARAN™ Ag Film, black on black, 1.25 mil
- Ginegar VIF, embossed black, 1.25 mil
- Bromostop, 1.38 mil
- Hytblock 7, black, 1.25 mil
- Hytbar, 1.5 mil
- Filmtech Grozone, black, 1.25 mil
- Filmtech Grozone, black/white, 1.25 mil
- Filmtech Grozone, white, 1.25 mil
- Filmtech Grozone, white/black/white, 1.25 mil
- Filmtech Grozone, black/silver, 1.25 mil
- Filmtech Grozone, silver, 1.25 mil
- Filmtech Grozone, clear, 1.25 mil
- Filmtech Grozone, black/clear/black, 1.25 mil

[Top of page](#)

Chloropicrin

For products that contain chloropicrin as the sole active ingredient, the listed tarps qualify for buffer zone credits as specified below.

20% reduction in buffer zone distance for the use of any of the following tarps:

- Berry Plastics, black/silver, metalized, 1.25 mil
- Canslit Shine N'Ripe, black/silver, metalized, 1.25 mil
- Canslit Shine N'Ripe, white/silver, metalized, 1.25 mil

40% reduction in buffer zone distance for the use of any of the following tarps:

- Guardian AgroPlastics VIF, embossed black, 1.2 mil
- Cadillac VIF, black, 1.25 mil
- Berry Plastics Blockade, black, 1.25 mil
- XL Blockade, black, 1.25 mil
- SARAN™ Ag Film, black on black, 1.25 mil
- Ginegar VIF, embossed black, 1.25 mil
- Bromostop, 1.38 mil
- IPM VIF, clear, 1.38 mil
- Olefinas VIF, embossed, 1.2 mil

60% reduction in buffer zone distance for the use of any of the following tarps:

- Guardian TIF ≥ 1.1 mil, embossed
- Raven TIF VaporSafe™ ≥ 1 mil
- AEP-one, clear, EVOH barrier, 1.0 mil
- Berry EVOH-Supreme Barrier, black, 1.25 mil
- SARAN™ Ag Film, black on black, 1.5 mil
- Ginegar Ozgard, black, 1.25 mil
- Berry Plastics Blockade, white, 1.25 mil
- Filmtech Grozone, black, 1.25 mil
- Filmtech Grozone, black/white, 1.25 mil
- Filmtech Grozone, white, 1.25 mil
- Filmtech Grozone, white/black/white, 1.25 mil
- Filmtech Grozone, black/silver, 1.25 mil
- Filmtech Grozone, silver, 1.25 mil
- Filmtech Grozone, clear, 1.25 mil
- Filmtech Grozone, black/clear/black, 1.25 mil
- Filmtech Grozone, thermic brown, 1.25 mil
- Filmtech Grozone, brown, 1.25 mil
- Filmtech Grozone, thermic green, 1.25 mil
- Filmtech Grozone, green, 1.25 mil
- Filmtech Grozone, red, 1.25 mil
- Filmtech Grozone, blue, 1.25 mil
- Berry EVOH-High Barrier, black, 1.25 mil
- Berry High Barrier with Improved Toughness, black, 1.25 mil
- Klerk Hytibar VIF, clear, 1.38 mil
- Klerks VIF, 1.30 mil
- Hytblock 7, black, 1.25 mil
- Hytibar, 1.5 mil
- Mid South VIF, embossed black, 1.25 mil
- Canslit Can-Block HD black, 0.8 mil
- Canslit Can-Block HD white, 0.8 mil
- Canslit Can-Block HD black/white, 0.9 mil
- Canslit Can-Block LD black, 1.0 mil
- Canslit Can-Block LD white, 1.2 mil
- Canslit Can-Block LD black/white, 1.1 mil

[Top of page](#)

Chloropicrin and 1,3-dichloropropene

For products that contain both chloropicrin and 1,3-dichloropropene, the listed tarps qualify for buffer zone credits as specified below.

- Canslit Can-Block LD black/white, 1.1 mil

↑Top of page

Metam Sodium or Metam Potassium

For products that contain metam sodium or metam potassium, the listed tarps qualify for buffer zone credits as specified below.

10 % reduction in buffer zone distance for the use of any of the following tarps:

- Canslit Shine N'Ripe, black/silver, metalized, 1.25 mil
- Canslit Shine N'Ripe, white/silver, metalized, 1.25 mil
- Berry Plastics, black/silver, metalized, 1.25 mil
- Olefinas VIF, embossed, 1.2 mil
- Guardian AgroPlastics VIF, embossed black, 1.2 mil
- Cadillac VIF, black, 1.25 mil
- Ginegar VIF, embossed black, 1.25 mil
- XL Blockade, black, 1.25 mil
- Berry Plastics Blockade, white, 1.25 mil
- Berry Plastics Blockade, black, 1.25 mil
- Filmtech Grozone, black, 1.25 mil
- Filmtech Grozone, black/white, 1.25 mil
- Filmtech Grozone, white, 1.25 mil
- Filmtech Grozone, white/black/white, 1.25 mil
- Filmtech Grozone, black/silver, 1.25 mil
- Filmtech Grozone, silver, 1.25 mil
- Filmtech Grozone, clear, 1.25 mil
- Filmtech Grozone, black/clear/black, 1.25 mil
- Filmtech Grozone, thermic brown, 1.25 mil
- Filmtech Grozone, brown, 1.25 mil
- Filmtech Grozone, thermic green, 1.25 mil
- Filmtech Grozone, green, 1.25 mil
- Filmtech Grozone, red, 1.25 mil
- Filmtech Grozone, blue, 1.25 mil

20 % reduction in buffer zone distance for the use of any of the following tarps:

- Mid South VIF, embossed black, 1.25 mil
- SARAN™ Ag Film, black on black, 1.25 mil
- SARAN™ Ag Film, black on black, 1.5 mil
- Ginegar Ozgard, black, 1.25 mil
- Hytblock 7, black, 1.25 mil
- Hytbar, 1.5 mil
- Klerks VIF, 1.30 mil
- Klerk Hytbar VIF, clear, 1.38 mil
- Canslit Can-Block HD black, 0.8 mil
- Canslit Can-Block HD white, 0.8 mil
- Canslit Can-Block HD black/white, 0.9 mil
- Canslit Can-Block LD black, 1.0 mil
- Canslit Can-Block LD white, 1.2 mil
- Canslit Can-Block LD black/white, 1.1 mil

30% reduction in buffer zone distance for the use of any of the following tarps:


- Berry EVOH-Supreme Barrier, black, 1.25 mil
- AEP-one, clear, EVOH barrier, 1.0 mil
- Berry EVOH-High Barrier, black, 1.25 mil
- Berry High Barrier with Improved Toughness, black, 1.25 mil
- Raven TIF VaporSafe™ ≥ 1 mil

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Buffer Zone Credits

- Tarps
- Water Seals
- Thiosulfate
- Clay Content
- Organic Content
- Soil Temperature
- “Symmetry Application System”



Emergency Preparedness & Response Measures


- Triggered when occupied structures are within certain distance of Buffer Zones
 - Two Options:
 - Notification
 - Monitoring
- 

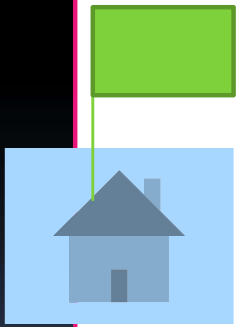
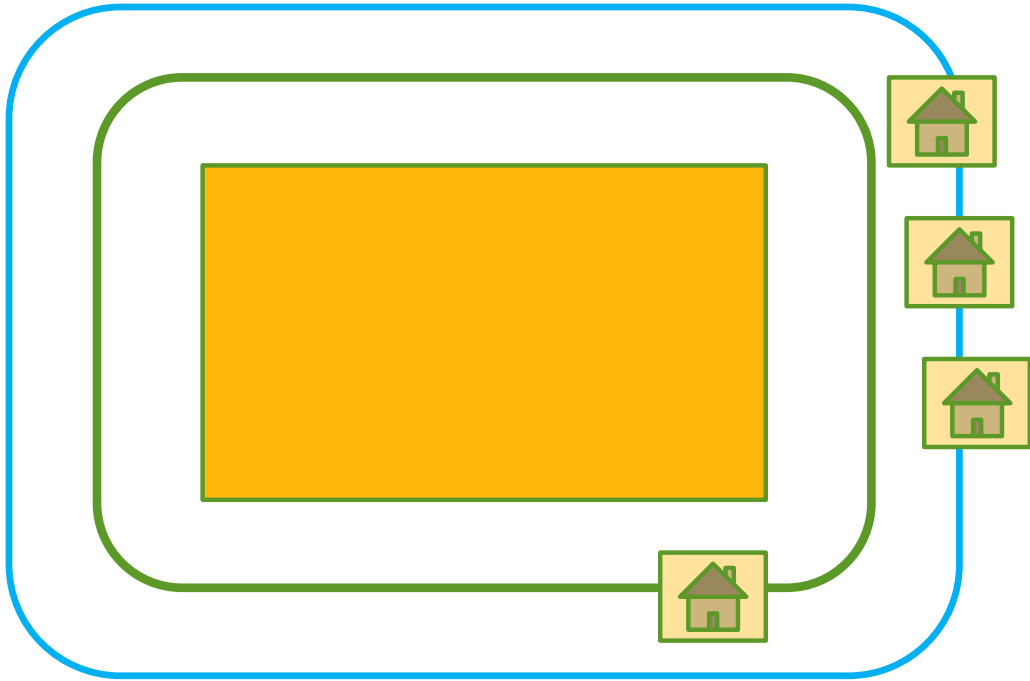






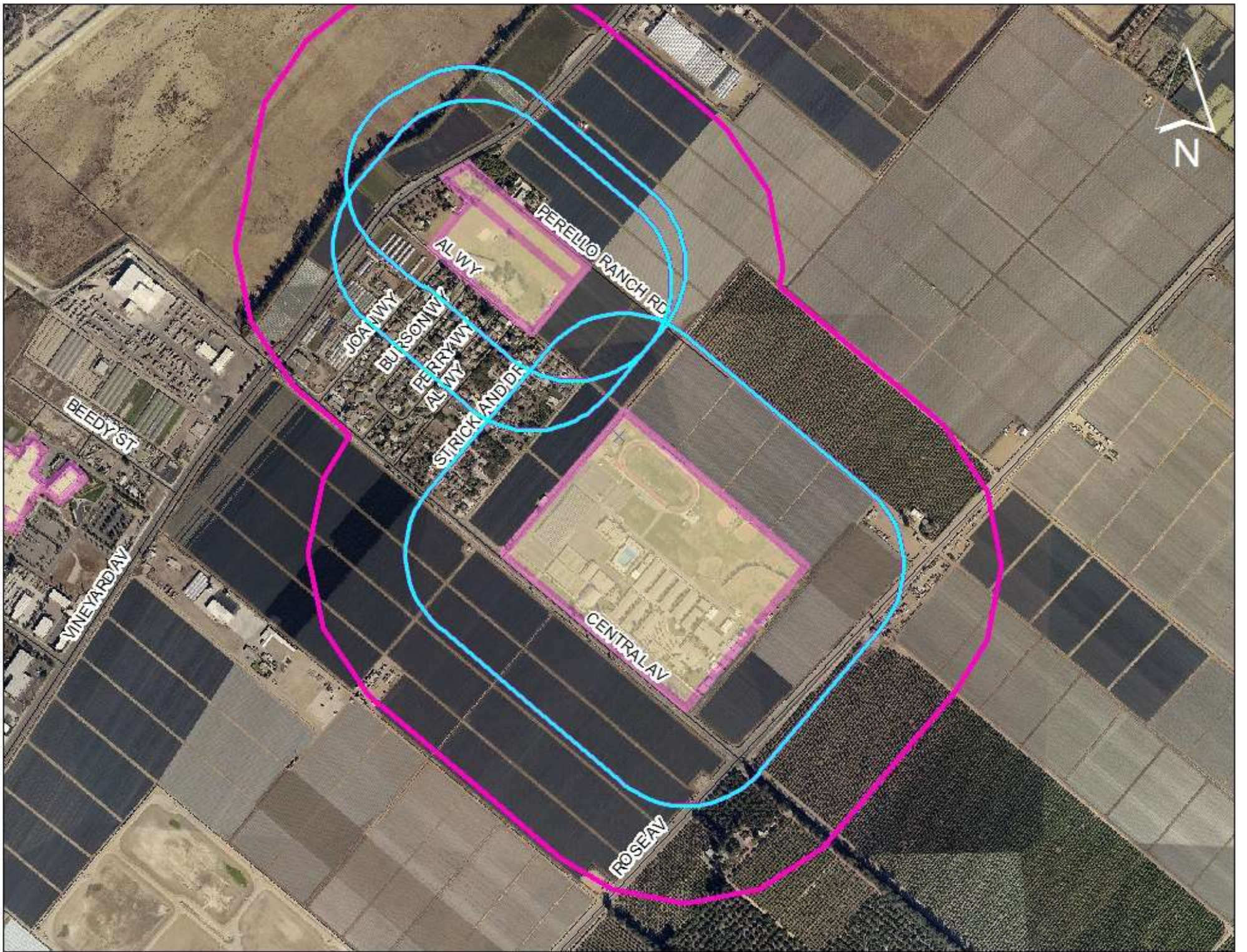
Difficult to Evacuate Sites

- Schools
 - Hospitals
 - Day Care Centers
 - Assisted Living
 - Jails
- 



Difficult to Evacuate Sites

- If 300+ ft Buffer Zone
 - No Application within $\frac{1}{4}$ mile
- If Buffer Zone 300 ft or less
 - No Application within $\frac{1}{8}$ mile



BEEDY ST

VINEYARD AV

ROSE AV

CENTRAL AV

PERELLO RANCH RD

AL WY

PERRY WY

STRICK AND DR

BURSON WY

JOA WY



The NOI

- FMP Map
- Emergency Preparedness & Response Measure Chosen
- Notification Log (if applicable)



Office of
Agricultural Commissioner
PO Box 3937, Ventura, CA 93003
669 County Square Dr, Ventura, CA
Camarillo (805) 388-4222
Santa Paula (805) 933-2926
Ventura (805) 477-1620

Notification Log

VCAC-2013-2

Permittee _____ Permit # _____

Site ID _____

Use this form to record all residences or businesses given written notice per fumigant label requirements for *Response Information for Neighbors* or the requirements of 3CCR 6447.1 (b).

	Date	Street	House Number	Signature of Notice Server
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
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26				
27				
28				
29				
30				



The NOI

- FMP Map
- Emergency Preparedness & Response Measure Chosen
- Notification Log (if applicable)
- Emergency Response Plan (from FMP)
- Permissions



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Agricultural Commissioner
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 669 County Square Dr, Ventura, CA
 Camarillo (805) 388-4222
 Santa Paula (805) 933-2926
 Ventura (805) 477-1620

**Permission for
 Buffer Zones
 VCAC-2013-3**

Fumigator's Permit _____ Permit # _____

Site ID _____

The above permittee intends to fumigate land near yours. By signing this form, you agree to allow highly restrictive "buffer zones" to extend onto your property. Buffer zones are in effect from the start of fumigation until at least 48 hours after fumigation is complete.

Buffer zones are of two types:

- 1) **Inner buffer zones** (includes phase II label buffer zones)
 - Entry on foot prohibited
 - Transit by vehicle or bicycle only
 - Must be posted at least every 200 feet
- 2) **Outer buffer zones**
 - Cannot extend onto occupied structures
 - Transit permitted
 - Other activities permitted if approved by the agricultural commissioner

I agree to permit the following buffer zones to extend onto property I operate. I will allow buffer zone signs to be posted as needed and will direct my employees to obey all such postings.

Inner (label) buffer zone extending approximately _____ feet into my property

Outer buffer zone (if any) extending approximately _____ feet into my property

I agree to restrict my employees to limit their activities in the outer buffer zone to the following activities: _____.

Name _____ Signature _____

Permit # (if any) _____ Date _____



The NOI

- FMP Map
- Emergency Preparedness & Response Measure Chosen
- Notification Log (if applicable)
- Emergency Response Plan (from FMP)
- Permissions
- Vacating Agreements



Office of
Agricultural Commissioner
 PO Box 3937, Ventura, CA 93003
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 Camarillo (805) 388-4222
 Santa Paula (805) 933-2926
 Ventura (805) 477-1620

**Vacating
 Agreement
 VCAC-2013-4**

Fumigator's Permit _____ Permit # _____

Site ID _____ Block ID (if any) _____

The above permittee intends to fumigate land near yours. By signing this form, you agree to vacate your property to allow highly restrictive "buffer zones" to extend onto your property. You agree to vacate prior to fumigation and not return until the buffer zone has expired. Buffer zones are in effect from the start of fumigation until at least 48 hours after fumigation is complete.

I agree to vacate my property located at _____
Address of dwelling

from _____ until _____
Time Date Time Date

Name _____ Signature _____

Phone Number _____ Date _____

New Restrictions 2013 – Federal (Label)

- *Chloropicrin (incl. w/ 1, 3-D) & Metam*
 - Notifications
 - Monitoring
 - Buffer Zones
 - Interference from Neighboring Appl Blocks
 - Permissions
 - More Uncertainty & Cost re Tarps

- *Methyl Bromide*
 - Inner Buffer Zone more Restrictive
 - More Permissions

New Restrictions 2013 – State & County

- ▣ *Chloropicrin (incl. w/ 1, 3-D) & Metam*
 - *40-Acre Block Limit (*80 Acres-Metam)
 - *Minimum BZ's
 - *Buffer Zone Credit Limitations
 - Tarp Cutting Delayed (TIF, VIF)
 - Earlier NOIs -3 Days Prior
 - More Info w/ NOI
 - More Record-keeping (Notification Log)
 - Required Forms

- ▣ *Methyl Bromide*
 - Inner Buffer Zone more Restrictive
 - More Permissions



New Restrictions 2013 – State & County

- 3-day NOI (Chloropicrin, Metam)
 - More Notifications
 - More Monitoring
 - Acreage Limit
- 