

Soil Fumigation Risk Mitigation Update

By Matt Sunseri, Pesticide Specialist, Wisconsin Department of Agriculture, Trade and Consumer Protection

In July 2008, the U.S. Environmental Protection Agency (EPA) started the process to set new use requirements for soil fumigants to minimize inhalation risks and other risks posed to persons using the products and to persons near to the application sites. Some of the new safety measures will begin appearing on marketplace product labels in December 2010; the remaining measures will follow late in 2011.

The five soil fumigants of concern are chloropicrin, dazomet, metam sodium/potassium (including methyl isothiocyanate or MITC) and methyl bromide. Based on a review of the pesticide product registration database, Wisconsin has 25 soil fumigant products that contain one or more of these targeted active ingredients.

The department has put together an internal soil fumigant workgroup that is led by Matt Sunseri, pesticide specialist. The group participates in monthly conference calls that include other states, the EPA and product manufacturers and labelers. We will keep

WGCSA up to date with any critical information that comes from these conference calls.

The first group of safety measures will be found on product labels set to appear in the marketplace later this year. EPA is requiring that all products sold and distributed by pesticide manufacturers or labelers (registrants) after December 1, 2010 must include the following safety measures on the product label:

- Restricted use pesticide classification.
- Good agricultural practices.
- Rate reductions and use site limitations.
- Handler and worker protections (including specific respirator requirements).
- Training information for workers.
- Site specific fumigant management plans.

The registrants are still in the process of updating product labels to include the new '2010' requirements and submitting the new labels to the pesticide regulatory agency in each state where the products are regis-



tered. DATCP has received 13 updated labels as of late October. While it is possible that soil fumigants with the new labels may appear in the marketplace before Dec. 1, the registrants have indicated this is not likely.

With new product labels likely entering the marketplace after Dec. 1, the soil fumigation applications to be done this fall will be with product under the 'old' labeling. Any applicator using product with the new label affixed to the container must follow the new requirements.

The second group of safety measures will be found on product labels set to appear in the marketplace late in 2011:

- Site specific fumigant management plans (expanded requirements).
- First responder and community outreach.

- Applicator training.
- Restrictions on applications near sensitive areas.
- Buffer zones and credits for best practices.
- Buffer zone posting requirements.
- Buffer overlap prohibitions.
- Emergency preparedness and response requirements.

The issue of greatest concern for users appears to be the buffer zone requirements. EPA is still working on those details and they will not be part of the product labels until late 2011.

Be aware that some of the soil fumigants will become restricted use pesticides so pesticide applicator certification and pesticide dealer licensing may become an issue with the new product labels. The following table provides a quick list of the initial impacts of the labeling changes on the five active ingredients.

Licensing and Certification Impacts with New Soil Fumigant Labeling

Soil Fumigant	Applicator Impact	Dealer Impact	
Chloropicrin	None – all soil fumigant products with this ingredient are currently classified as restricted use.	None – all soil fumigant products withis ingredient are currently classific as restricted use.	
Dazomet	Yes - many soil fumigant products with this ingredient are not currently restricted use and ATCP 30 does not address this ingredient. New product labeling will require users to be certified applicators in a main category and the soil fumigant subcategory.	Yes - many soil fumigant products with this ingredient are not currently restricted use but will be under new labeling. Dealers can only sell to certified applicators. Dealers must have a restricted use pesticide dealer license and meet recordkeeping and reporting requirements.	
Metam sodium	No impact for commercial applicators as ATCP 30 already requires users to be certified pesticide applicators even though current products are not restricted use.	Yes - many soil fumigant products with this ingredient are not currently restricted use but will be with new labeling. Dealers can only sell to certified applicators. Dealers must also have a restricted use pesticide dealer license and meet recordkeeping and reporting requirements.	
Metam potassium	Yes - many soil fumigant products with this ingredient are not currently restricted use and ATCP 30 does not address this ingredient. New product labeling will require users to be certified applicators in a main category and the soil fumigant subcategory.	Many soil fumigant products with this ingredient are not currently restricted use but will be with new labeling. Dealers can only sell to certified applicators. Dealers must also have a restricted use pesticide dealer license and meet recordkeeping and reporting requirements. None –all soil fumigant products with this ingredient are currently classified as restricted use.	
Methyl bromide	None - all soil fumigant products with this ingredient are currently classified as restricted use.		

Based on a review of the pesticide product database, Wisconsin currently has 25 soil fumigants that contain one or more of the targeted active ingredients. Four of the products will be discontinued and will not be relabeled, however, products with the old labels could still be in the marketplace.

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	CHLOROPICRIN ONLY		
Manufacturer/labeler	Product Name	EPA Reg. No.	Status
Great Lakes Chemical	Chlor-o-pic Fumigant Soil Fumigant	5785-17	Active
Reddick Fumigants	Pic-c100 - Soil Fumigant	85607-1	Active
Hendrix & Dail	Pic-plus Fumigant	8853-6	Active
	METHYL BROMIDE + CHLOROL		1 = 2 2 2 32
Hendrix & Dail	Tri-con 50/50 Preplant Soil Fumigant	11220-10-8853	Discontinued
Hendrix & Dail	Tri-con 57/43 Preplant Soil Fumigant	11220-4-8853	Discontinued
Great Lakes Chemical	Terr-o-gas 98 Preplant Soil Fumigant	5785-22	Active
Reddick Fumigants	Bro-mean C-33 Preplant Soil Fumigant	5785-24-37733	Discontinued
Hendrix & Dail	Mbc-33 Soil Fumigant	8853-3	Active
Hendrix & Dail	Mbc Concentrate Soil Fumigant	8853-2	Active
	CHLOROPICRIN + 1,3-DICHLOROI	PROPENE	
Dow Agrosciences	Telone C-17 Soil Fungicide And Nematicide	62719-12	Active
Dow Agrosciences	Telone C-35 Soil Fungicide And Nematicide	62719-302	Active
Reddick Fumigants	Pic-c60 - Soil Fumigant	8536-8-85607	Active
Hendrix & Dail	Pic-clor 60 - A Multi-purpose Liquid Fumigant	8536-8-8853	Discontinued
	CHLOROPICRIN + IODOMETH	HANE	
Arysta LifeScience	Midas 25:75 - Soil Fumigant	66330-42	Active
Arysta LifeScience	Midas 50:50 - Soil Fumigant	66330-57	Active
Arysta LifeScience	Midas Ec Bronze - Soil Fumigant	66330-58	Active
Arysta LifeScience	Midas 33:67 - Soil Fumigant	66330-59	Active
Arysta LifeScience	Midas Ec Gold - Soil Fumigant	66330-60	Active
	METAM-SODIUM		
Manufacturer/labeler	Product Name	EPA Reg. No.	Status
Taminco	Metam Clr 42% - Soil Fumigant	45728-16	Active
Amvac Chemical	Vapam HI - Soil Fumigant	5481-468	Active
Tessenderlo Kerley	Sectagon 42 - Soil Fumigant	61842-6	Active
	METAM-POTASSIUM		
Manufacturer/labeler	Product Name	EPA Reg. No.	Status
Taminco	Metam Klr 54% Soil Fumigant	45728-27	Active
Amvac Chemical	K- Pam Hl A Soil Fumigant	5481-483	Active
Tessenderlo Kerley	Sectagon-k54 - Fumigant Solution For All Crops	61842-7	Active
1915 - 221 - W-21-121	DAZOMET		
Manufacturer/labeler	Product Name	EPA Reg. No.	Status
Certis USA	Basamid G Microbial Fungicide - Soil Fumigant	70051-101	Active

If you have questions on the new safety measures or product labels, contact Matt Sunseri, 608-224-4547 or email matthew.sunseri@wisconsin.gov. You can also find more information on the EPA website at www.epa.gov/oppsrrd1/reregistration/soil_fumigants.