

## Soil Fumigant Mitigation Factsheet:

# Worker Protection Measures

EPA is requiring important new safety measures for soil fumigant pesticides to increase protections for agricultural workers and bystanders -- people who live, work, or otherwise spend time near fields that are fumigated. These measures are for the soil fumigants chloropicrin, dazomet, metam sodium/potassium, and methyl bromide.

This fact sheet summarizes new requirements to protect fumigant handlers and other workers from fumigant exposures.

### ***Handler activities on labels***

#### **To address risks to fumigant handlers and workers, EPA is requiring:**

##### **A clear description of handler activities on labels**

All persons performing the following handler activities at any time must be trained and equipped as handlers in accordance with the requirements in the WPS (40 CFR Part 170):

- Monitoring fumigant air concentrations;
- Cleaning up fumigant spills (this does not include emergency personnel not associated with the application);
- Handling or disposing of fumigant containers; and
- Cleaning, handling, adjusting, or repairing the parts of application equipment that may contain fumigant residues.

All persons performing the following handler activities in the application block during the application until the entry restricted period ends and in the buffer zone during the buffer zone period must be trained and equipped as handlers in accordance with the requirements in the WPS (40 CFR Part 170):

- Participating in the application as supervisors, loaders, drivers, tractor co-pilots, shovelers, cross ditchers, or as other direct application participants;
- Installing, repairing, operating, or removing irrigation equipment;
- Performing scouting, crop advising, or monitoring tasks;
- Installing, perforating (cutting, punching, slicing, poking), or removing tarps; and
- Repairing or monitoring tarps until 14 days after application is complete if tarps are not perforated and removed during those 14 days.

### ***On-site supervision and training***

##### **On-site supervision and training**

- Direct, on-site supervision by certified applicators during most fumigant applications
- New training for certified applicators who supervise fumigant applications
- New training information for other handlers.

## ***Respiratory protection requirements***

## ***Tarp perforation and removal requirements***

## ***Entry-restricted period requirements***

### **Respiratory protection requirements**

- Handlers must either stop work and leave the area or use air-purifying respirators if they experience sensory irritation (this does not apply to methyl bromide formulations with less than 20% chloropicrin)
- For methyl bromide formulations with less than 20% chloropicrin, handlers must wear air-purifying respirators during handling activities
- Air monitoring while handlers use respirators to ensure concentrations do not exceed the upper working limit of respirators
- All handlers who will wear a respirator must be fit-tested, trained, and medically examined to ensure they do not have health problems such as a heart condition that could make use of a respirator dangerous
- An air purifying respirator with the appropriate cartridges must be available for each handler who will wear a respirator.

### **Tarp perforation and removal requirements**

- If tarps are used, they may not be perforated until at least 5 days (120 hours) have elapsed after the application is complete unless a weather condition exists that necessitates early removal
- Tarp removal may not begin until at least 2 hours after tarp perforation is complete and tarp removers must follow respiratory protection requirements
  - For methyl bromide, air monitoring with direct-read instruments is required before tarp removal can begin
- If tarps are not removed, planting may not begin until at least 48 hours after tarp perforation is complete
- If tarps are left on the soil for at least 14 days after the application is complete, planting may begin when the tarps are being perforated
- Tarps must be perforated using mechanical methods (e.g., all-terrain vehicles with cutting implements) except for small areas (less than 1 acre), at the start of a row, and during flood prevention activities.

### **Entry-restricted period requirements**

- Entry into treated fields (including early entry that would otherwise be permitted under the WPS) by any person other than a trained and equipped handler is prohibited from the start of the application until
  - 5 days (120 hours) after application is complete for untarped applications, or
  - After tarps are perforated and removed if tarp removal is completed less than 14 days after application, or
  - 48 hours after tarp perforation is complete if they will not be removed at least 14 days after the application, or
  - 5 days (120 hours) after application is complete if tarps are not perforated and removed 14 days after the application is complete.

## Entry Restricted Period by Scenario

	If the application is [ ____ ]	and Tarp is [ ____ ]	[ ____ ] days after application is completed	workers may enter [ ____ ]
1.	Untarped	-----	-----	5 days after application is complete
2.	Tarped	Perforated <b>and</b> Removed	Within 14 days	After tarp is removed
3.	Tarped	Perforated <b>BUT NOT</b> Removed	Within 14 days	48 hours after tarp perforation is complete
4.	Tarped	Perforated <b>and/or</b> Removed	More than 14 days	5 days after application is complete

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For additional information, please see EPA's Soil Fumigant Toolbox, [www.epa.gov/oppsrrd1/reregistration/soil\\_fumigants/](http://www.epa.gov/oppsrrd1/reregistration/soil_fumigants/).