

US EPA ARCHIVE DOCUMENT



Soil Fumigant Mitigation Factsheet:

Emergency Preparedness and Response Requirements

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. When new fumigant labels appear in the market place in 2010, fumigant users will need to comply with new requirements. Requirements for Emergency Preparedness and Response, however, will not appear on fumigant labels until late 2011.

New Requirements for Emergency Preparedness and Response

Fumigant Site Monitoring

New Requirements for Emergency Preparedness and Response

To reduce risks to people who may be near a buffer zone (e.g., at their home or working in a nearby field), EPA is requiring applicators to either provide on-site monitoring of the buffer zone perimeter in areas where residences and other occupied structures are within a specific distance, or, as an alternative to on-site monitoring, provide emergency response information directly to neighbors. Whether measures are required depends on the size of the buffer zone and how close people may be to the buffer zone. An example of each element is discussed in more detail below.

Fumigation Site Monitoring

If emergency response measures are required based on the criteria described below, and the fumigator chooses to monitor the buffer perimeter rather than to provide information directly to the neighbors, here is what the fumigator must do:

- Monitoring must begin on the day the application begins and continue until the buffer zone period expires.
- Monitoring must take place approximately 1 hour before sunset on the day the application begins and continue once during the night, once at 1 hour after sunrise, and once during the day until the end of the buffer zone period.
- Monitor for sensory irritation for metam sodium/potassium, dazomet, chloropicrin, and methyl bromide products that include at least 20% chloropicrin.
- Air concentrations of methyl bromide must be measured using a direct-read instrument if the methyl bromide product applied contains less than 20% chloropicrin.
- Monitoring must be conducted by a certified applicator or someone under his/her supervision.
- Monitoring must take place in areas between the buffer zone perimeter and residences or other occupied areas that trigger this requirement.

**Fumigant Site
Monitoring, continued**

- If at any time the person monitoring the air concentrations experiences sensory irritation consistent with fumigant exposure, then the emergency response plan stated in the FMP must be immediately implemented.
- If other problems occur, such as a tarp coming loose, then the appropriate control plan must be activated.
- For formulations with less than 20% chloropicrin, the location and results of the air monitoring must be recorded in the post-application summary.
- For formulations with 20% or greater chloropicrin, the location where any sensory irritation occurred must be recorded in the post-application summary.

**Response Information
for Neighbors**

EPA believes this will help ensure that if a problem occurs during or after the fumigation, the appropriate steps can be taken to reduce the risk of exposure. While protective, site monitoring may be burdensome for users fumigating in areas with few people. Therefore, users have the option of providing emergency response information directly to neighbors rather than monitoring.

Response Information for Neighbors

As an alternative to on-site monitoring, the certified applicator supervising the fumigation (or someone under his/her direct supervision) would need to ensure that residences and businesses that meet the criteria outlined below have been provided the information below at least one week before fumigant application in a specified field. The dates that fumigation is planned to take place may be stated as a range of dates, up to four weeks long. If an application is not made during the four-week window indicated, the information must be delivered again.

Information that must be provided includes:

- The general location of the application block,
- Fumigant(s) applied including the active ingredient, name of the fumigant products(s), and the EPA Registration number,
- Contact information for the applicator and property owner/operator,
- Time period in which the fumigation is planned to take place (must not range more than 4 weeks),
- Early signs and symptoms of exposure to the fumigant(s) applied, what to do, and emergency responder phone number to call (911 in most cases), and
- How to find additional information about fumigants.

The method for distributing informations to neighbors must be described in the FMP and may be accomplished through mail, telephone, door hangers, or through other methods that can be reasonably expected to effectively inform residences and businesses within the required distance from the edge of the buffer zone.

When are Emergency Preparedness and Response Measures Needed?

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Site-Specific Proximity Triggers for Buffer Zones Greater than 25 Feet

If the buffer zone is:	AND there are residences and businesses:
> 25 feet and ≤ 100 feet	50 feet from the edge of the buffer zone
> 100 feet and ≤ 200 feet	100 feet from the edge of the buffer zone
> 200 feet and ≤ 300 feet	200 feet from the edge of the buffer zone
> 300 feet	300 feet from the edge of the buffer zone
Applicator must either : Monitor the air (Option 1) or Provide information to neighbors (Option 2)	

Exception: If the buffer zone is 25 feet, the minimum buffer zone size, then Emergency Preparedness and Response measures are not required. Also, if all of the land within 300 feet of the edge of the buffer zone is under the control of the owner/operator of the fumigated field, then Emergency Preparedness and Response measures are not required regardless of the size of the buffer zone.

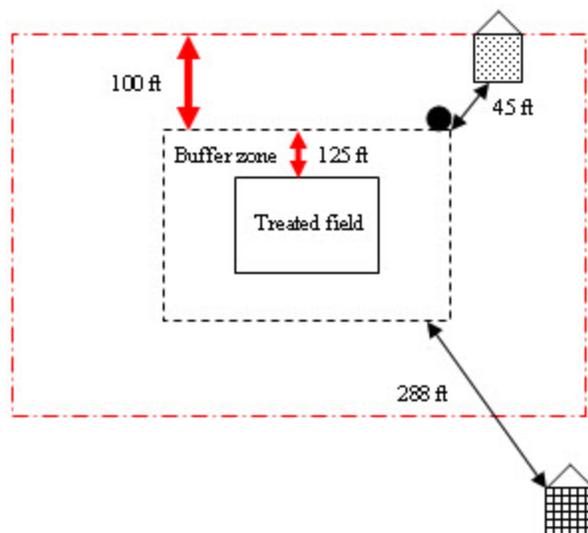
Because site monitoring may be burdensome for users fumigating in areas with few residences or businesses, EPA is allowing fumigant users the option of providing emergency response information directly to neighbors instead of monitoring.

Example Site Map for Informing Neighbors

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Below is an example to clarify this requirement:

- IF the buffer zone is **125 feet**, then these requirements apply to residences within 100 feet of the buffer zone. Either the applicator must monitor the area between the dotted house and the buffer zone or residents of the dotted house must be provided emergency response information.
- The location of the cross-hatched house would not prompt any action since it is outside the specified distance.



For additional information, see EPA's Web page on risk mitigation measures for the soil fumigants, www.epa.gov/oppsrrd1/reregistration/soil_fumigants/.