**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER. EXTREMELY HAZARDOUS LIQUID AND VAPOR UNDER PRESSURE. FATAL IF SWALLOWED OR INHALED. CORROSIVE. CAUSES SKIN BURNS AND VISIBLE irreversible eye damage, which may have a delayed onset. DO NOT BREATHE VAPOR OR GAS. INHALATION MAY CAUSE SERIOUS ACUTE ILLNESS OR DELAYED LUNG, NERVE, OR BRAIN INJURY. DO NOT GET IN EYES. ON SKIN OR ON CLOTHING.

NOTE: CHLOROPICRIN MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT, AND EVEN AT LOW LEVELS CAN CAUSE PAINFUL IRRITATION TO THE EYES. PRODUCING TEARING. IF THESE SYMPTOMS OCCUR, LEAVE THE FUMIGATION AREA IMMEDIATELY.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. For more options, follow the instructions for Category H on the chemical-resistance category selection chart. PPE constructed of Saranex, neoprene, and chlorinated polyethylene provide short-term contact or splash protection against liquid in this product. Longer-term protection is provided by PPE constructed of Viton, Teflon, and EVA barrier laminates (for example, responder suits manufactured by Life-Guard or SilverShield gloves manufactured by North). Where chemical-resistant materials are required, leather, canvas, or cotton materials offer no protection from this product and must not be worn as the sole article of protection when contact with this product is possible.

When performing tasks with NO potential for contact with liquid fumigant, all handlers (including applicators) must:

- Wear long-sleeved shirt, long pants, shoes and socks.
- Not wear jewelry, goggles, tight clothing, chemical-resistant gloves, rubber protective clothing, or rubber belts when handling. Methyl bromide can be trapped inside clothing and cause skin injury.

Handlers with no potential for contact with liquid fumigant (e.g., shovelers) may wear cotton, leather, or other porous, non-chemical-resistant gloves. If such gloves are exposed to liquid fumigant, they must immediately be replaced.

When performing tasks with potential for contact with liquid fumigant, all handlers (including applicators) must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves.
- Chemical-resistant apron.
- Protective eyewear (Do NOT wear goggles), and
- Chemical-resistant footwear with socks.

In addition, when an air-purifying respirator is required under this label’s Directions for Use, Protection for Handlers, Respiratory Protection and Stop Work Triggers section, handlers (including applicators) must wear:

- A NIOSH-certified full-facepiece air-purifying respirator with cartridges certified by the manufacturer for protection from exposure to methyl bromide at concentrations up to 5 ppm (e.g., a 3M air-purifying respirator equipped with 3M Model 60528 Organic Acid Gas/P100 cartridges).

IMPORTANT: A self-contained breathing apparatus (SCBA) is not permitted for routine handler tasks. If responding to an emergency when corrective action is needed to reduce air concentrations to acceptable levels, wear a SCBA. Escape-only SCBAs are not required by handlers for responding to emergencies. In addition wear PPE required for potential contact with liquid fumigant.

See label booklet for additional Precautionary Statements.

**NOTICE:** Contains methyl bromide, a substance which harms public health and the environment by destroying ozone in the upper atmosphere.

**RESTRICTED USE PESTICIDE**

Due to Acute Toxicity

For retail sale to and use by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator’s certification.

**Tri-Con 57/43**

**Pre-Plant Soil Fumigant**

**ACTIVE INGREDIENTS:**

- Methyl Bromide ..............................................   57.0%
- Chloropicrin .................................................. 42.7%
- Other INGREDIENTS: ........................................ 0.3%

**TOTAL:** .................................................. 100.0%

This product weighs 13.94 lbs./gal. at 68 ºF (20 ºC).

**KEEP OUT OF REACH OF CHILDREN**

**FIRST AID**

**IF INHALED:**

- Move person to fresh air.
- If not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

**IF IN EYES:**

- Hold eyes open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes.
- Call a poison control center or doctor for treatment advice.

**POISON**

**IN ALL CASES OF OVEREXPOSURE, GET MEDICAL ATTENTION IMMEDIATELY. TAKE PERSON TO A DOCTOR OR TO AN EMERGENCY TREATMENT FACILITY.**

**NOTES:**

- If you do not understand the label, find someone to explain it to you in detail.
- If you are not sure if this product is hazardous to you, call a poison control center or doctor for advice.
- Before using this product, observe all safety precautions and warnings stated on the label.

**NOTICE:**

Contains methyl bromide, a substance which harms public health and the environment by destroying ozone in the upper atmosphere.

**DIRECTIONS FOR USE**

Restricted Use Pesticide

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only handlers may be in the application block from the start of the application until the entry restricted period ends, and in the buffer zone during the buffer zone period. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Storage and Disposal**

- **DO NOT CONTAMINATE WASTE FOOD, OR FEED**
- **BY STORAGE OR DISPOSAL.**

**Pesticide Storage:** Store in a dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinseate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. If a cylinder is partially full, and there is no further requirement for the product, return the cylinder to the registrant or distributor. Replace safety cap and valve protection bonnet before shipping container.

**Container Handling:** Store cylinders upright, secured to a rack or well to prevent tipping. Do not subject cylinders to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not use rope slings, hooks, tongs or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured. Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use.

**Return of Containers:** Cylinders are the property of the registrant or distributor and must be returned promptly after use. Do not ship cylinders without safety caps or valve protection bonnets.

**Refillable Container:** Only the registrant or distributor is allowed to refill this container. This container can be refilled with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

**Container Disposal:** To clean the container before final disposal, remove any remaining liquid from the container, using dry air pressure if necessary. Allow container to aerate for at least 5 days. After aeration, wash container using hot water; then offer container to qualify reconditioner or dispose of as directed by State or local regulation.

Date of Labeling: December 15, 2014

**NET CONTENTS_________LBS.**

**EPA Reg. No. 11220-4**

**EPA Est. 11220-CA-4**

**Tri-Con, Inc.**

P. O. Box 1327
Hollister, CA • 95024-1327

**NOTEPHYSICIAN**

Early symptoms of overexposure to methyl bromide are dizziness, headache, nausea and vomiting, weakness, and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities; these effects are the usual cause of death. Repeated overexposures can result in blurred vision, staggering gait, and mental imbalance, with probable recovery after a period of no exposure. Blood bromide levels suggest the occurrence, but not the degree, of exposure. Treatment is symptomatic.

See label booklet for complete Directions for Use.
Storage and Disposal
Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. When a cylinder is partially full, and there is no further requirement for the product, return the cylinder to the registrant or the Hazardous Waste representative to label instructions, contact your State cannot be disposed of by use according to violation of Federal Law. If these wastes pesticidal wastes.

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CHEMICAL HAZARDS

Do not use containers or application equipment made of magnesium, aluminum, or their alloys, as under certain conditions this fungicide may be severely corrosive to such metals. [See the Calibration, Set-up, Repair and Maintenance for Application Rigs section of this labeling for further requirements for application equipment.] Do not permit water to be used to clean the fungicidal pressure system, as corrosion will result. Diesel oil is satisfactory for this purpose.

DIRECTIONS FOR USE

Restricted Use Pesticide

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only handlers may be in the application block from the start of the application until the entry restricted period ends. During the restricted period enter the buffer zone during the buffer zone period. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses; handlers of and applicators of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. The requirements in this section do not apply to uses of this product that are covered by the Worker Protection Standard (WPS).

No instructions elsewhere on this labeling relieve you from complying with the requirements of the WPS.

For the entry restricted period and notification requirements, see the Entry Restricted Period and Notification sections of this labeling. PPE for entry is required. Entry during the Entry Restricted Period is prohibited. PPE for entry that is permitted by this labeling is listed in the Personal Protective Equipment (PPE) section of this labeling.

Environmental Hazard

This pesticide is toxic to mammals and birds. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or when washing gloves.

Methyl bromide and chloropicrin have properties and characteristics in common with chemicals that have been detected in groundwater (methyl bromide and chloropicrin can be highly soluble in water and have low adsorption to soil).

For unapplied applications of methyl bromide and chloropicrin, leaching and runoff may occur if there is heavy rainfall after soil fumigation.

Physical or Chemical Hazards

Do not use containers or application equipment made of magnesium, aluminum, or their alloys, as under certain conditions this fungicide may be severely corrosive to such metals. [See the Calibration, Set-up, Repair and Maintenance for Application Rigs section of this labeling for further requirements for application equipment.] Do not permit water to be used to clean the fungicidal pressure system, as corrosion will result. Diesel oil is satisfactory for this purpose.

Terms Used in This Labeling

Soil Fumigant Training Program: Certified applicator training that provides information on (1) how to apply fumigants in a manner consistent with its labeling and any new label requirements; (2) how to protect handlers and bystanders; (3) how to determine buffer zone distances; (4) how to complete an FMP and the required training; and (5) how to comply with required GAPS and how to document compliance with GAPS in the FMP. (6) how to develop and implement emergency response plans.

Fumigant Safe Handling Information: Information that must be provided annually to handlers must include the following: (1) what fumigants are and how they work, (2) safe application and handling of soil fumigants, (3) air monitoring and respiratory protection requirements for handlers, (4) early signs and symptoms of exposure, (5) appropriate steps to take to mitigate exposures, (6) what to do in case of an emergency, and (7) how to report incidents.

Application Block: Area within the perimeter of the “broadcast equivalent application rate” or the “treated area application rate.” The “treated area application rate” relates to the rate of fumigant applied to the portion of the field that is fumigated (e.g., rate within the bed or strips). The “broadcast equivalent application rate” relates to the rate of fumigant applied to the entire perimeter of the application block. For bedded and strip applications, the “broadcast equivalent application rate” must be calculated to determine the buffer zone distance required by this labeling.

Start of the Application: The time at which the fumigant is first delivered/dispensed into the soil in the application block.

Application is Complete: The time at which the fumigant has stopped being delivered/dispensed into the soil and the soil has been sealed.

Entry Restricted Period: Begins at the start of the application and expires depending on the application method and if tarps are used when the tarps are perforated and removed. Entry into the restricted period is only allowed for appropriately PPE-equipped handlers performing handling tasks. See the Entry Restricted Period and Notification section for additional information.

Buffer Zone: An area established around the perimeter of each application block. The buffer zone must extend outward from the edge of the application block perimeter equally in all directions.

Buffer Zone Period: Begins at the start of the application and lasts for a minimum of 48-hours after the application is complete. Non-handlers must be excluded from the buffer zone during the buffer zone period.

Difficult to Evacuate Sites: Pre-K to Grade 12 includes childcare centers, nursing homes, assisted living facilities, hospitals, in-patient clinics, and prisons.

Owner: Any person who has a present possessory interest (fee, leasehold, rental, or other) in an agricultural establishment. A person who has both leased such agricultural establishment to another person and owns the agricultural establishment, and full authority to manage and govern the use of such agricultural establishment is not an owner. See definition of “owner” in WPS (40 CFR §170.3).

Roadway: Portion of a street or highway improved, designed or ordinarily used for vehicular travel, exclusive of the sidewalk or shoulder even if such sidewalk or shoulder is owned by persons riding bicycles. Exclusive of the bicycle lane.

Private roadway refers to any such roadway separately.
Representative Handling Task: For air monitoring, the locations and handler activities sampled must represent each handler’s exposure occurring within the application block. For example, for an application consisting of a seven-handler crew (1 tractor driver, 1 tractor co-pilot, 4 shovellers, and 1 certified applicator supervising) two breathing zone samples could be collected: one sample for the tractor co-pilot and one sample for a downwind shoveller. Results of previous sampling may indicate which tasks and locations are worst case and therefore representative of all handlers.

Application Restrictions
- The use of this product is restricted to the tasks described in this label.
- This product may only be used for the following:
  - Crops/uses at locations that at the time of the application qualify for exemptions under the Montreal Protocol as identified in Table 1 [Maximum Application Rates for Crops with Critical Use Exemptions (CUEs)] of this labeling, or
  - Crops/uses identified in Table 2 [Maximum Application Rates for Quarantine Uses] of this labeling.
- Tarps must be used for all applications, except for deep shank orchard replant [California only] applications.
- The maximum application block sizes allowed are
  - 100 acres for tarped bedded and broadcast applications
  - 40 acres for untarped deep applications (i.e., California orchard replant)

Product Information
Soil-borne pests controlled include wireworms and nematodes, weed and grass seeds, Granville Wilt, Black Shank, and other diseases caused by certain species of Rhizoctonia, Pythium, Fusarium, and Phytophthora.

Use Precautions
- Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Authorities as required.
- Users should handle this fumigant in the open, with the operator ‘upwind’ from the container where there is good ventilation.
- When fumigant is sold to a farmer, 5 gallons of water must be carried on the tractor and placed where it is readily accessible. In addition to water available on the tractor, at least 5 gallons of additional water must be available from the service truck. This water must be potable and in containers marked “Decontamination water not to be used for drinking.”
- Keep pets, livestock, and other domestic animals out of the treated area during application and during tarp perforation and/or removal, if a tarp is used. Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury and/or nitrate starvation to crops, avoid using fertilizers containing ammonia salts and use only fertilizers containing nitrates until after the crop is well established and the soil temperature is about 65 °F. Liming highly acidic soil after fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

Certified Applicator Training
Any certified applicator supervising a soil fumigant application must have successfully completed one of the soil fumigant training programs listed on the following page. The training must be for the active ingredient(s) in this product. The training must be completed in the time frames listed on the website. The FMP must document the date and location where the soil fumigant training program was completed.

Handlers
The following activities are prohibited from being performed by anyone other than those who have been appropriately trained and equipped as handlers in accordance with the requirements in 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;
- Cleaning, handling, adjusting, or repairing the parts of application equipment that may contain fumigant residues; and
- Performing any handling tasks as defined by the WPS (40 CFR Part 170).

Protection for Handlers
Supervision of Handlers:
For all applications, from the start of the application until the application is complete, a certified applicator must be at the application block in the line of sight of the application and must actively supervise all persons performing handling activities.

For handling activities that take place after the application is complete until the entry restricted period expires, the certified applicator is not required to be on-site. During monitoring or communication, it must be in a manner that can be understood by the site owner and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures described in the FMP (e.g., emergency response plans and procedures).

IMPORTANT: This requirement does not override the requirements in the Worker Protection Standard for Agricultural Pesticides for information exchange between operators of agricultural establishments and commercial pesticide applicators.

The certified applicator must provide Fumigant Safe Handling Information to each handler or confirm that within the past 12 months, each handler has received Fumigant Safe Handling Information in a manner that he/she can understand. Fumigant Safe Handling Information will be provided where this product is purchased or at www.epa.gov/fumiganttraining.

For all handling tasks at least two handlers must be present.

Exception: After the application is complete, only one trained handler is required to perform fumigant site monitoring tasks outside of the buffer zone.

Exclusion of Non-Handlers from the Application Block and Buffer Zone:
The certified applicator supervising the application and the owner of the establishment where the application is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are:
- excluded from the application block during the entry restricted period, and
- excluded from the buffer zone during the buffer zone period (see buffer zone exemption for transit on roadways in Buffer Zone Requirements section).

Local, state, or federal officials performing inspection, sampling, or other similar official duties are not excluded from the application block or the buffer zone by this labeling. The certified applicator supervising the application and the owner of the establishment where the application is taking place are not authorized to, or responsible for, excluding those officials from the application block or the buffer zone.

Providing, Cleaning, and Maintaining PPE:
The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the Worker Protection Standard or Agricultural Pesticides.

Air Purifying Respirator Availability:
The employer of any handler must confirm that an air-purifying respirator and appropriate cartridges of the type specified in the PPE section of this labeling is immediately available for each handler who will wear one. At a minimum two handlers must have the appropriate air-purifying respirator and cartridges available (see Respirator Fit Testing, Medical Qualification, and Training section for additional requirements).

Exception: Air-purifying respirators do not need to be made available for handlers performing fumigant site monitoring tasks outside of the buffer zone.

Respirator Fit Testing, Medical Qualification, and Training:
Using a program that conforms to OSHA’s requirements (see 29 CFR Part 1910.134), employers must verify that any handler who uses a respirator is:
- Fit-tested and fit-checked,
- Trained, and
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire (such as medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.

Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation detailing how they have complied with these requirements.
Respiratory Protection and Stop Work Triggers: The following procedures must be followed to determine whether a full-facepiece air-purifying respirator is required or if operations must cease for any person performing a handling task (except for fumigant site monitoring outside of the buffer zone) as stated in this label.

If at any time any handler experiences sensory irritation (tearing, burning of the eyes or nose), then either:
   • A full-facepiece air-purifying respirator must be worn by any handler who may be required to enter the application block or surrounding buffer zone, or
   • Operations must cease and handlers not wearing an air-purifying respirator must cease any handler activities.

- Handlers can remove full-facepiece air-purifying respirators or resume work if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show that levels of methyl bromide have decreased to less than 1 ppm and levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation.
- During the collection of air samples, a full-facepiece air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken at the location where the irritation was first experienced.
- When using monitoring devices to monitor air concentration levels, a direct read detection device, such as an electronic device or a colorimetric device (e.g., Matheson-Kitagawa, Draeger, or Sensidyne) must be used. The devices must have sensitivity of at least 1 ppm for methyl bromide and 0.15 ppm for chloropicrin. Persons using direct read detection devices must follow the manufacturer’s directions.
- When breathing zone samples are required, they must be taken outside respiratory protection equipment and within a 10 inch radius of the handler’s nose and mouth.
- When full-facepiece air-purifying respirators are worn, air monitoring samples must be collected at least every 2 hours in the breathing zone of a handler performing a representative handling task.
- If at any time: (1) a handler experiences sensory irritation when wearing a full-facepiece air-purifying respirator, or (2) a methyl bromide air sample is greater than 5 ppm or a chloropicrin air sample is greater than or equal to 1.5 ppm, then all handler activities must cease and handlers must be removed from the application block and surrounding buffer zone.
- Handlers can resume work activities without full-facepiece air-purifying respirators if two consecutive breathing zone samples taken at the handling site at least 15 minutes apart show levels of methyl bromide have decreased to less than 1 ppm and levels of chloropicrin have decreased to less than 0.15 ppm, provided that handlers do not experience sensory irritation. During the collection of air samples a full-facepiece air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken at the location where: (1) the irritation was first experienced, or (2) where the sample(s) were greater than 5 ppm for methyl bromide or, (3) where sample(s) were greater than or equal to 1.5 ppm for chloropicrin.
- Handlers can resume work activities if all of the following conditions exist provided a full-facepiece air-purifying respirator is worn:
  o two consecutive breathing zone samples for methyl bromide taken at the handling site at least 15 minutes apart each must be less than or equal to 5 ppm.
  o two consecutive breathing zone samples for chloropicrin taken at the handling site at least 15 minutes apart must be less than 1.5 ppm.
  o handlers do not experience sensory irritation while wearing the full-facepiece air-purifying respirator, and
  o filter cartridges/canisters have been changed.
- During the collection of air samples a full-facepiece air-purifying respirator must be worn by the handler taking the air samples. Samples must be taken at the location where the irritation was first experienced.
- Operations must cease and handlers not wearing an air-purifying respirator must not perform any handler activities.

Tarp Perforation and/or Removal

IMPORTANT: Persons perforating, removing, and/or monitoring tarps are defined, within certain time limitations, as handlers (see Handlers section), and they must be provided with the PPE and other protections for handlers as required on this labeling and in the Worker Protection Standard for Agricultural Pesticides.

- Tarps must not be perforated until a minimum of 5 days (120 hours) have elapsed after the application is complete, unless a weather condition exists which necessitates early tarp perforation or removal (see Early Tarp Removal for Broadcast Applications Only and Early Tarp Perforation during Flood Prevention Activities for Bedded Applications Only sections for additional requirements).
- If tarps are perforated within 14 days after the application is complete, tarp removal must not begin until at least 2 hours after tarp perforation is complete and 2 consecutive methyl bromide air monitoring samples taken at least 15 minutes apart are less than 5 ppm. Air samples must be taken in the breathing zone of the handler. If the 2 consecutive air monitoring samples indicate that methyl bromide levels are:
  - Less than 1 ppm and no sensory irritation is experienced, no respiratory protection is required to begin tarp removal.
  - Between 1 ppm and 5 ppm, then an air-purifying respirator is required to begin tarp removal.
  - Between 1 ppm and 5 ppm, then an air-purifying respirator is required to begin tarp removal.
- For the Respiratory Protection and Stop Work Triggers and Personal Protective Equipment (PPE) sections for additional requirements.

- If tarps are not perforated or removed within 14 days after the application is complete, planting or transplanting may take place while the tarps are being perforated.
- Each tarp panel used for broadcast application must be perforated before the 5 days (120 hours) if adverse weather conditions have compromised the integrity of the tarp, provided that the compromised tarp poses a safety hazard. Adverse weather includes high winds, hail, or storms that blow tarps off the field and create a hazard, e.g., tarps blowing into power lines and onto roads. A compromised tarp is a tarp that due to an adverse weather condition is no longer performing its intended function and is creating a hazard.
- Early Tarp Perforation during Flood Prevention Activities for Bedded Applications Only:
  - Tarp perforation is allowed before the 5 days (120 hours) have elapsed.
Entry Restricted Period and Notification

Entry Restricted Period

Entry into the application block (including early entry that would otherwise be permitted under the WPS) by any person — other than a correctly trained and PPE equipped handler who is performing a handling task listed on this labeling — is PROHIBITED from the start of the application until:
- 5 days (120 hours) after the application is complete or tarps are removed;
- 5 days (120 hours) after the application is complete if tarps are not removed and is complete for at least 14 days after the application.

NOTES:
- See Tarp Perforation and/or Removal section on this labeling for requirements about when tarps are allowed to be perforated.
- If early tarp removal occurs for a broadcast application, the entry restricted period is a minimum of 5 days after the application is complete.
- When listing application information for soil fumigant that is treated in an exempt area, 170.122 of the WPS, list the entry restricted period time frame in place of the REI.

Notification

Notify workers of the application by warning them orally and by posting Fumigant Treated Area signs. The signs must bear the skull and crossesbones symbol and state:
- “DANGER/PELIGRO,”
- “Area under fumigation, DO NOT ENTER / NO ENTRE,”
- “Methyl Bromide and Chloropicrin Fumigant treated in an exempt area”;
- “the date and time of fumigation;”
- “the date and time entry restricted period is over;”
- “TRI-CON 57/43;” and
- Name, address, and telephone number of the certified applicator in charge of the fumigation.

Post the Fumigant Treated Area sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, text size, and sign size (40 CFR §170.120).

Post Fumigant Treated Area signs at all entrances to the application block no sooner than 24 hours prior to application.

Fumigant Treated Area signs must remain posted no longer than the duration of the entry restricted period.

Fumigant Treated Area signs must be removed within 3 days after the end of the entry restricted period.

Mandatory Good Agricultural Practices (GAPs)

The following GAPs must be followed during all fumigant applications.

Tarps (required for all applications, except for deep Shank orchard replant [California only] applications)
- Tarps must be installed immediately after the fumigant is applied to the soil for broadcast or tarp applications.
- A written tarp plan must be developed and included in the FMP.

If a tarp is perforated, the application is no longer considered tarped.

Weather Conditions

To determine if unfavorable weather conditions exist or are predicted (see Identifying Unfavorable Weather Conditions section) and whether an application should proceed, the National Weather Service weather forecast must be checked by the certified applicator supervising the application:
- on the day of, but prior to the start of the application, and
- on a daily basis during the application if the time period from the start of the application until the application is complete is greater than 24 hours.

Do not apply if an air stagnation advisory issued by the National Weather Service is in effect for the area in which the application is planned, during the application, or the 48 hours after the application is complete.

Do not apply if light wind conditions (< 2 mph) are forecast to persist for more than 18 consecutive hours from the time the application starts until 48 hours after the application is complete.

Detailed National Weather Service forecasts for local weather conditions, wind speed, and air stagnation advisories may be obtained on-line at: http://www.nws.noaa.gov, on NOAA weather radio, or by contacting your local National Weather Service Forecasting Office.

Identifying Unfavorable Weather Conditions

Unfavorable weather conditions block upward movement of air, which results in trapping fumigant vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist within an hour prior to sunset and continue past sunrise and may persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog or smog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud.

Soil Temperature

- The maximum soil temperature at the depth of injection must not exceed 90 °F at the beginning of the application.

- If air temperatures have been above 100 °F in any of the three days prior to the start of the application, then soil temperature must be measured and recorded in the FMP. Record temperatures at the application depth or 12 inches, whichever is shallower.

Soil Moisture

- The soil must be moist 9 inches below the surface.

The amount of moisture needed in this zone will vary with soil type. Surface soil generally dries rapidly and must not be considered in this determination.

- Soil moisture must be determined using one of the following methods:
  - the USDA Feel and Appearance Method for testing (see below), or
  - a written tari plan with a moisture meter.

- Available water capacity must be equal to or greater than 50% for shank applications. If there is less than 50% available water capacity 9 inches below the surface, soil moisture must be adjusted. If irrigation is not available and there is adequate soil moisture below 9 inches, soil moisture can be adjusted by discing or plowing before the start of the application. To conserve existing soil moisture, pretreatment irrigation or pretreatment tillage should be done as close to the start of the application as possible.

- Measurements must be taken at a depth of 9 inches at either end of the field, no more than 48 hours prior to the start of the application.

The USDA Feel and Appearance Method for estimating soil moisture as appropriate for the soil texture:

For coarse textured soils (fine sand and loamy fine sand), the soil is moist enough (50 to 75% available water capacity) to form a weak ball with loose and cohesive particles that can be compacted with a capillar, ring roller, and roller in combination with tillage equipment.

For Broadcast Untarped Applications (CA orchard replant only): Use a disc or similar equipment to uniformly mix the soil to at least a depth of 3 to 4 inches to eliminate the chisel or plow traces. Following elimination of the chisel traces, the soil surface must be compacted with a cultivator, ring roller, and roller in combination with tillage equipment.

For Bedded Applications:

For Broadcast Untarped Applications: Preformed beds must be sealed by disruption of the chisel trace using press sealers, bed shapers, cultipackers, or by re-shaping (e.g., relisting, lifting, replacing) the beds immediately following injection. Beds formed at the time of application must be sealed by disrupting the chisel trace using press sealers, or bed shapers.

For Broadcast Tapped-Bed Applications: The use of a tarp does not eliminate the need to minimize chisel traces prior to application of the tarp, such as by using a Noble press sealer to disrupt the injection shank that disrupts the chisel traces.
Beded and Broadcast Shank Applications: Additional Mandatory GAPs
In addition to the GAPs required for all soil fumigation applications, the following GAPs apply for injection applications:

- **Soil Preparation**
  - Trash pulled by the shanks to the ends of the field must be covered with tarp, or soil, depending on the application method before making the turn for the next pass.

Application Depth and Spacing
- For Untarped-Broadcast Applications (CA orchard replant only): The injection point must be a minimum of 18 inches from the nearest final soil/air interface. For tarped-broadcast applications, the injection depth must not be deeper than the lowest point of the tarp (i.e., the lowest point of the tuck).

- For Untarped-Broadcast Applications (CA orchard replant only): The injection point must be a minimum of 18 inches from the nearest final soil/air interface.
- For Tarped-Broadcast and Tarped-Bedded Applications: The injection point must be a minimum of 8 inches from the nearest final soil/air interface. For tarped-broadcast applications, the injection depth must not be deeper than the lowest point of the tarp (i.e., the lowest point of the tuck).

- **Prevention of End Row Spillage**
  - Do not apply or allow fumigant to spill onto the soil surface. For each injection line either have a check valve located as close as possible to the final injection point, or drain/purge the line of any remaining fumigant prior to lifting injection shanks from the ground.
  - Do not lift injection shanks from the soil until the shut-off valve has been closed and the fumigant has been depressurized (passively drained) or purged (actively forced out via air compressor) from the system.

Calibration, Set-up, Repair, and Maintenance for Application Rigs
- Brass, carbon steel, or stainless steel fittings must be used throughout. Polyethylene tubing, polypropylene tubing, Teflon® tubing or Teflon®-lined steel braided tubing must be used for all low pressure lines, drain lines, and compressed gas or air pressure lines. All other tubing must be Teflon®-lined steel braided.
- Galvanized, PVC, nylon, or aluminum pipe fittings must not be used.
- All rigs must include a filter to remove any particulates from the fumigant and for pressurized systems a check valve to prevent backflow of the fumigant into the pressurizing cylinder or the compressed air system.
- Rigs must include a flow meter or a constant pressure system with orifice plates to ensure the proper amount of fumigant is applied.
- To prevent the backflow of fumigant into the compressed gas cylinder (e.g., nitrogen, other inert gas, compressed air), if used, applicators must:
  - Ensure that positive pressure is maintained in the compressed gas cylinder at not less than 200 psi during the entire time it is connected to the application rig, if a compressed gas cylinder is used. (This is not required for a compressed air system that is part of the application rig, because if the compressor system fails, the application rig will not be operable.)
  - Ensure that application rigs are equipped with a check valve for each injection point, where applicable. If the check valve is not integral to the fumigant cylinder, it must be located as close to the cylinder as possible. The check valve must be used to control the flow of fumigant from the cylinder.
  - Always install a complete fumigation rig for the first time, or when preparing it for use after storage, the operator must check the following items carefully:
    - Check all tubes and chisels to make sure they are free of debris and obstructions.
    - Check the filter, and clean or replace the filter element as required.
    - Pressurize the system with compressed gas or compressed air, and check all fittings, valves, and connections for leaks using soap solution.

Pre-Plant Soil Fumigation in Greenhouses:
- Mandatory GAPs
  - During the application keep all doors, vents, and windows to the outside open, and keep all fans or mechanical ventilation systems running within the greenhouse.
  - Seal gaps through which gases could leak into adjacent enclosed areas.

Maximum Application Rates

<table>
<thead>
<tr>
<th>Crop/Use</th>
<th>Maximum Application Rate(^1) (lbs Product/Treated Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggplant</td>
<td>614</td>
</tr>
<tr>
<td>Cucurbits (including muskmelons, cantaloupe, watermelon, cucumber, squash, pumpkin, and gourds)</td>
<td>438</td>
</tr>
<tr>
<td>Forest Nursery Seedlings</td>
<td>526 sandy soils</td>
</tr>
<tr>
<td>Orchard Nursery Seedlings (raspberry, deciduous trees, roses)</td>
<td>700 clay loam soils with less than 30% clay</td>
</tr>
<tr>
<td>Strawberry Nurseries</td>
<td>526</td>
</tr>
<tr>
<td>Strawberry Replant (walnuts, almonds, stone fruit, table and raisin grapes, wine grapes)</td>
<td>350</td>
</tr>
<tr>
<td>Ornaments</td>
<td>350</td>
</tr>
<tr>
<td>Peppers</td>
<td>420 Eastern US</td>
</tr>
<tr>
<td>Sweet Potato Slips</td>
<td>614</td>
</tr>
<tr>
<td>Tomato (grown for fresh market)</td>
<td>420</td>
</tr>
</tbody>
</table>

\(^1\) Do not exceed specified maximum application rates in Table 1. Row, bed or strip applications may be made at the treated acre application rates, but their broadcast equivalent rates will be proportionately less per acre depending on the spacing and width of treatment in the row, bed or strip.

\(^2\) The maximum rate to control infestation of Oak Root Fungus (Armillaria mellea) and endoparasitic nematodes such as root-knot (Meloidogyne spp.), dagger (Xiphinema spp.), ring (Criconemoides spp.), lesion (Pratylenchus spp.), and pin (Paratylenchus spp.) nematodes is 400 lbs methyl bromide/acre (cannot exceed 700 lbs Tri-Con 57/43 per acre). Documentation of the pest(s) must be included in the site-specific fumigation management plan.

\(^3\) The maximum rate to control infestation of Fusarium, Macrophomina, and/or Verticillium is 412 lbs Tri-Con 57/43 per treated acre. Documentation of these pest(s) must be included in the site-specific fumigation management plan.
Calculating the Broadcast Equivalent Application Rate

To calculate the broadcast equivalent rate for bedded or strip applications the following information is needed:

- Pounds of product per treated acre
- Strip or bed bottom width (inches)
- Center-to-center row spacing (inches)
- Application block size (acres)

Pounds of product per treated acre is the ratio of total amount of product applied to the size of the total area treated (e.g., the rate of product applied in the bed). For bedded or strip applications, the total area treated is the summation of the area (i.e., length x width) of each treated bed bottom or strip that is located within the application block as shown by the black areas in Figure 1 (e.g., black areas are 0.6A or 60% of the area within the application block). The area of the space between the beds/strips is not factored in the total area treated.

The application block size is the acreage within the perimeter of the fumigated portion of a field (including furrows, irrigation ditches, roadways). The perimeter of the application block is the border that connects the outermost edges of total area treated with the fumigant product.

The "broadcast equivalent rate" must be calculated with the following formula:

\[
\text{broadcast equivalent rate (pounds product/acre)} = \frac{\text{strip or bed bottom width (inches)}}{\text{center-to-center row spacing (inches)}} \times \frac{\text{pounds of product / treated acre applied in the strip or bed}}{\text{application block size (acres)}}
\]

- The bed width must be measured from the bottom of the bed.
- The center-to-center row spacing must be calculated as shown in Figure 2.
- If there are any ditches, waterways, drive rows and other areas that are not fumigated that are in the application block, multiply the above broadcast equivalent equation by (total area of strips or beds + row spacing)/(application block size). A sample calculation is provided below.
Sample broadcast equivalent rate calculation

Assumptions:
- Application method is shank bedded.
- Bed width is 30 inches (measured at the bottom of bed).
- Center-to-center row spacing is 60 inches.
- 200 pounds of product per treated acre is applied in the beds.
- Total application block size is 10 acres.
- Ditch in the middle of application block is 0.25 acres.
- Area of beds + row spacing = 9.75 acres.

Broadcast equivalent rate (pounds product/acre) = strip or bed bottom width (inches) x area of strips or beds + row spacing x pounds product/treated acre applied in the bed

area of strips or beds + row spacing = 30-inch width beds x application block size

30-inch width beds x 9.75 acres x 200 pounds per treated acre = 97.5 pounds product/acre

Buffer Zone Requirements
A buffer zone must be established for every fumigant application. The following describes the buffer zone requirements:
- The buffer zone must extend outward from the edge of the application block perimeter equally in all directions.
- All non-handlers, including field workers, residents, pedestrians, and other bystanders, must be excluded from the buffer zone during the buffer zone period except for transit (see Buffer Zone Exemption for Transit on Roadways section).

Local, state, or federal officials performing inspection, sampling, or other similar official duties are not excluded from the application block or the buffer zone by this labeling. The certified applicator supervising the application and the owner of the establishment where the application is taking place are not authorized to, or responsible for, excluding those officials from the application block or the buffer zone.

Buffer zone proximity
- Before the start of application, the certified applicator must determine whether their buffer zone will overlap any methyl bromide buffer zone(s).
- To reduce potential for off-site movement from multiple fumigated fields, buffer zones from multiple methyl bromide application blocks must not overlap.
- UNLESS:
  1. A minimum of 12 hours have elapsed from the start of the previous application(s) and the buffer zones do not overlap.
  2. The buffer zones do not overlap with any other buffer zones.

Structures under the control of the owner of the application block
- Buffer zones must not include buildings used for storage, (e.g., sheds, barns, garages) UNLESS:
  1. The storage buildings are not occupied during the buffer zone period, and
  2. The storage buildings do not share a common wall with an occupied structure.

Areas not under the control of the owner of the application block
- Buffer zones must not include residential areas (e.g., employee housing, private property), buildings (e.g., commercial, industrial), outdoor residential areas (e.g., lawns, gardens, play areas) UNLESS:
  1. The occupants provide written agreement, prior to the start of the application, that they will voluntarily vacate the buffer zone during the entire buffer zone period, and
  2. Reentry by occupants and other non-handlers must not occur until:
     - The buffer zone period has ended, and
     - Sensory irritation is not experienced upon re-entry.

Buffer zones must not include agricultural areas owned and/or operated by persons other than the owner of the application block. UNLESS:
- The owner of the application block can ensure that the buffer zone will not overlap with a methyl bromide buffer zone from any other property owner, except as provided in the Buffer Zone Proximity section.
- The owner of the other property provides written agreement to the applicator that they, their employees, and other persons will stay out of the buffer zone during the entire buffer zone period.
- Buffer zones must not include roads 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 Zone Distances
Buffer zone distances must be calculated using the application rate and the size of the application block.

Applications in California:
Where a Restricted Materials Permit is required for soil fumigation [pursuant to citation for California law], use the buffer zone distance for the application block that is specified in the Restricted Materials Permit issued by the County Agricultural Commissioner, provided that the buffer zone distance is equal to or greater than the buffer zone distance specified in the December 8, 2004 California Department of Pesticide Regulation Methyl Bromide Field Fumigation Guidance Manual (see http://www.cdpr.ca.gov/docs/countytraining/methylbrom/methylbrom.pdf) in accordance with Title 3, Division 6, Subchapter 4 of the California Code of Regulations in effect on January 1, 2011.

In all other cases, determine the buffer zone distance for your application using the directions under Applications outside California.

Applications outside California:
Buffer zone distances must be based on look-up tables in this labeling (25 feet is the minimum distance regardless of site-specific application parameters).
If applying all applicable buffer zone credits the buffer zone is greater than ½ mile (2,640 ft), then the application is prohibited.
For all other applications, Tables 3, 4, or 5, as appropriate for the method of application must be used to determine the minimum buffer distances. Round up to the nearest rate and block size, where applicable. Applications are prohibited for rates or block sizes that exceed what is presented in the buffer zone tables.

For broadcast shank applications using any tarp that qualifies for a 60% or greater reduction in buffer zone distance:
- The buffer zone period begins at the start of the application and ends after the tarps have been removed from the application block.
- As an alternative to (1) above, two buffer zone periods may be established where the first buffer zone period is as above and the second buffer zone period begins when the tarps are perforated and ends after the tarps have been removed from the application block.

For all other applications, the buffer zone period begins at the start of the application and lasts for a minimum of 48 hours after the application is complete.

See www.tarpcredits.epa.gov for a list of tars that have been tested and determined to qualify for buffer reduction credits.
### Table 3. Tarped Broadcast Buffer Zone Distances (feet)

<table>
<thead>
<tr>
<th>Application Block Size (Acres)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>50</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
</table>

### Table 4. Tarped Broadcast Buffer Zone Distances (feet)

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<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>50</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
</table>

Broadcast zone distances cannot be greater than 1/2 mile (2,640 feet). If after applying applicable credits the broadcast zone distances are still greater than 1/2 mile (1,320 feet) the application is prohibited.
Buffer Zone Credits

The buffer zone distances for TRI-CON 57/43 applications may be reduced by the percentages listed below. Credits may be added, but credits cannot exceed 80%. Also, the minimum buffer zone distance is 25 feet, regardless of buffer zone credits available.

- See [www.tarpcredits.epa.gov](http://www.tarpcredits.epa.gov) for a list of tarps that have been tested and determined to qualify for buffer reduction credits. Only tarps listed on this website qualify for buffer reduction credits.
- 15% reduction in buffer zone distance, IF potassium thiosulfate (KTS) is applied at a minimum rate of 300 pounds per acre.
- 10% reduction in buffer zone distance, IF the organic content of the soil in the application block is > 1% - 2%; a 20% reduction in buffer zone distance, IF the organic content of the soil in the application block is > 2% - 3%; and a 30% reduction in the buffer zone distance, IF the organic content of the soil in the application block is > 3%.
- 10% reduction in the buffer zone distance, IF the clay content of the soil in the application block is greater than 27%.

Examples of Buffer Zone Calculations with Credits Applied

If the buffer zone is 50 feet and the application qualifies for a buffer zone credit since the soil organic content is 1.5%, then the buffer zone can be reduced by 10%, i.e., reduced by 5 feet based on the following calculation: 50 feet – (50 feet x 10%) = 45 feet. If the buffer zone is 50 feet and the application qualifies for two buffer zone credits since the soil organic content is 1.5% and the clay content is greater than 27%, then the buffer zone can be reduced by 20% (10% organic content credit + 10% clay content credit), i.e., reduced by 10 feet based on the following calculation 50 feet - (50 feet x 20%) = 40 feet.

Posting Fumigant Buffer Zones

- Posting of a buffer zone is required unless there is a physical barrier that prevents bystander access to the buffer zone.
- Buffer Zone signs must be placed along or outside the perimeter of the buffer zone, at all usual points of entry and along likely routes of approach from areas where people not under the owner’s control may approach the buffer zone.
- Some examples of points of entry include, but are not limited to, roadways, sidewalks, paths, and bike trails.
- Some examples of likely routes of approach include, but are not limited to, the area between a buffer zone and a roadway, or the area between a buffer zone and a housing development.
- When posting, the certified applicator supervising the application must ensure compliance with all local laws and regulations.
- Buffer Zone signs must meet the following criteria:
  - The printed side of the sign must face away from the application block toward areas from which people could approach.
  - Signs must remain legible during the entire posting period and must meet the general standards outlined in the WPS for sign size, text size, and legibility (see 40 CFR §170.120).
  - Signs must be posted no sooner than 24 hours prior to the start of the application and remain posted until the buffer zone period has expired.
  - Signs must be removed within 3 days after the end of the buffer zone period.
  - Buffer Zone signs which meet the criteria above will be provided at points of sale for applicators to use. Templates may be downloaded from [http://www.epa.gov/pesticides/reregistration/soil_fumigants/index.htm](http://www.epa.gov/pesticides/reregistration/soil_fumigants/index.htm)
  - The Buffer Zone signs must contain the following information:
    - The ‘Do Not Walk’ symbol
    - DO NOT ENTER/NO ENTRE
    - Methyl Bromide Fumigant
    - [TRI-CON 57/43 BUFFER ZONE]
    - Contact information for the certified applicator in charge of the fumigation
  - Exception: If multiple contiguous blocks are fumigated within a 14-day period, the entire periphery of the contiguous blocks’ buffer zones may be posted. Buffer Zone signs must be posted no sooner than 24 hours prior to the start of the first application. The signs must remain posted until the last buffer zone period expires, and the signs must be removed within 3 days after the end of the buffer zone period for the last block has expired.

Table 5. Deep Untarped Buffer Zone Distances (feet)

<table>
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<tr>
<th>Application Block Size (Acres)</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>2406</td>
<td>2638</td>
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</table>
Restrictions for Difficult to Evacuate Sites

Difficult to evacuate sites are pre-K to grade 12 schools, state-licensed daycare centers, nursing homes, assisted living facilities, hospitals, in-patient clinics, and prisons.

- No fumigant application with a buffer zone greater than 300 feet is permitted within 1/4 mile (1,320 feet) of difficult to evacuate sites unless the site is not occupied by children from state-licensed day care centers, students (pre-K to grade 12), patients, or prisoners during the application and the 36-hour period following the end of the application.
- No fumigant application with a buffer zone of 300 feet or less is permitted within 1/8 mile (660 feet) of difficult to evacuate sites unless the site is not occupied by children from state-licensed day care centers, students (pre-K to grade 12), patients, or prisoners during the application and the 36-hour period following the end of the application.

Emergency Preparedness and Response Measures:

If the buffer zone is 25 feet, then the Emergency Preparedness and Response Measures are not applicable.

Triggers for Emergency Preparedness and Response Measures

The certified applicator must either follow the directions in the Fumigant Site Monitoring section or follow the directions under the Response Information for Neighbors section if:
- the buffer zone is greater than 25 feet but less than or equal to 200 feet, and there are residences or businesses within 50 feet from the outer edge of the buffer zone, or
- the buffer zone is greater than 100 feet but less than or equal to 200 feet, and there are residences or businesses within 100 feet from the outer edge of the buffer zone, or
- the buffer zone is greater than 300 feet but less than or equal to 500 feet, and there are residences or businesses within 200 feet from the outer edge of the buffer zone, or
- the buffer zone is greater than 300 feet or the buffer zones overlap, and there are residences or businesses within 300 feet from the outer edge of the buffer zone.

Fumigant Site Monitoring

NOTE: Fumigant Site Monitoring is ONLY required if the Emergency Preparedness and Response Measures are triggered AND directions from the Response Information for Neighbors section are not followed.

From the start of the application until the buffer zone period expires, a certified applicator or handler(s) under his/her supervision must:
- Monitor for sensory irritation in areas between the buffer zone outer perimeter and residences and businesses that trigger this requirement.
- Monitoring for sensory irritation must begin in the evening on the day of application and continue until the buffer zone period expires.
- Monitor a minimum of 8 times during the buffer zone period, including these periods:
  - 1 hour before sunset,
  - during the night,
  - 1 hour after sunrise, and
  - during daylight hours.

Implement the emergency response plan immediately if a handler monitoring experiences sensory irritation.

Response Information for Neighbors

NOTE: Response Information for Neighbors is ONLY required if the Emergency Preparedness and Response Measures are triggered AND directions from the Fumigant Site Monitoring section are not followed.

The certified applicator supervising the application must ensure that residences and businesses that trigger the requirement have been provided the required information at least 3 days before the application starts. The information provided may include application dates that range for no more than 4 weeks. If the application does not occur as specified, the information must be delivered again.

Information that must be included:
- The location of the application block.
- Fumigant(s) applied including the active ingredient, name of the fumigant product(s), and the EPA Registration number.
- Contact information for the applicator and property owner.
- Time period in which the application 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 who to call if you believe you are being exposed (911 in most cases).
- How to find additional information about fumigants.
- The method used to share the response information for neighbors can be accomplished through mailings, door hangers, or other methods that will effectively inform the residences and businesses within the required distance from the edge of the buffer zone.

Notice to State and Tribal Lead Agencies

If your state and/or tribal lead agency requires notice, information must be provided to the appropriate state or tribal lead agency prior to the application. Please refer to your state and/or tribal lead agency’s written emergency response plan that identifies:
- Certified Applicator Name, and
- EPA registration number.
- The certified applicator must include in the FMP a written emergency response plan that identifies:
  - Evacuation routes,
  - Locations of telephones,
  - Contact information for first responders and local/state/federal/personnel, and
  - Emergency procedures/responsibilities (e.g., adding water to the field, field, field, and so on).

Site-Specific Fumigation Management Plan (FMP)

Prior to the start of application, the certified applicator supervising the application must verify that a site-specific FMP exists for each application block. In addition, all fumigations utilizing multiple application blocks may format the FMP in a manner whereby all of the information that is common to all the application blocks is captured once, and any information unique to a particular application block or blocks is captured in subsequent sections.

The FMP must be prepared by the certified applicator, the site owner, registrant, or other party.

The certified applicator supervising the application must verify in writing (and date) that the sitespecific FMP meets or exceeds site-specific emergency condition including:
- Time period that fumigation may occur.

Each site specific FMP must contain the following elements:
- CertifiedApplicator Supervising the Application
  - Name,
  - Pesticide applicator license and/or certificate number,
  - Employer address, and
  - Employer name,
  - Date and location of completing EPA approved soil fumigant training program.
- General site information
  - Application block location (e.g., county, township, range-section quadrant), address, or global positioning system (GPS) coordinates.
  - Name, address, and phone number of application block owner
  - Map, aerial photo, or detailed sketch showing:
    - Application block location
    - Application block dimensions
    - Buffer zone dimensions
    - The lines
    - Roadways
    - Rights-of-ways
    - Sidewalks
    - Permanent walking paths
    - Bus stops
    - Nearby application blocks
    - Surrounding structures (occupied and non-occupied)
    - Locations of Buffer Zone signs, and
    - Locations of difficult to evacuate sites with distances from the application block labeled.

General application information
- Target application date/window,
- Fumigant Product Name, and
- EPA registration number.
- If a buffer zone is required, the certified applicator must do the following:
  - Qualifies for a quarantine exemption and is listed in Table 2.
  - Follows the directions under the FMP.
- If application qualifies for a quarantine exemption, identify:
  - The buffer zone, and
  - U.S. Federal, state, or local plant, animal, environmental protection or health authority requiring the quarantine application and the particular quarantine/phytosanitary requirement
  - Qualify for a quarantine exemption and is listed in Table 2.

Emergency Response Plan

The certified applicator must include in the FMP a written emergency response plan that identifies:
- Evacuation routes,
- Locations of telephones,
- Contact information for first responders and local/state/federal/personnel, and
- Emergency procedures/responsibilities (e.g., adding water to the field, field, field, and so on).

Record Emergency Response Plan as described in the Emergency Response Plan section.
For handlers: Confirmation of receipt of Applicable handler PPE including:
- Date of PPE training for each handler
- Tasks that each handler is authorized and responsible for completing emergency tasks, changes in handler activities, and
- Employer has confirmed that the appropriate respirator and cartridges/canisters are immediately available for each handler who will wear one.

Air monitoring plan
- For monitoring after tarp perforation is complete and before tarp removal begins, indicates monitoring equipment to be used, and
- Timing of monitoring.
- If sensory irritation is experienced, indicate whether operations will cease or operations will continue with use of an air-purifying respirator.

Good Agricultural Practices (GAPs)
- Identify (e.g., list, attach applicable label section) applicable mandatory GAPs.

Pesticide Product Labels and Material Safety Data Sheets (MSDS)
- Ensure that labels and MSDS are on-site and readily available for employees to review.

Record-Keeping Procedures
The owner of the application block as well as the certified applicator supervising the application must keep a signed copy of the site-specific FMP for 2 years from the date of application.

For situations where an initial FMP is developed and certain elements do not change for multiple application blocks (e.g., applicator information, certified applicator, handlers, record-keeping procedures, emergency procedures) only elements that have changed need to be updated in the site-specific FMP provided the following:
- The certified applicator supervising the application has verified that those elements are current and applicable to the application block before it is fumigated.
- Record-keeping requirements are followed for the entire FMP (including elements that do not change).

The certified applicator must make a copy of the FMP immediately available for viewing by handlers involved in the application. The certified applicator or the owner of the application block must provide a copy of the FMP to any local/state/federal/tribal enforcement personnel who request the FMP. In the case of an emergency, the FMP must be made immediately available when requested by local/state/federal/tribal emergency response and enforcement personnel. The certified applicator supervising the application must ensure the FMP is at the application block during all handler activities.

Within 30 days after the application is complete, the certified applicator supervising the application must complete a Post-Application Summary.

<table>
<thead>
<tr>
<th>Post-Application Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual date and time of the application</td>
</tr>
<tr>
<td>Size of application block</td>
</tr>
<tr>
<td>Weather Conditions</td>
</tr>
</tbody>
</table>

Summary of the National Weather Service weather forecast during the application and the 48-hours after the application is complete including:
- wind speed, and
- air stagnation advisory (if applicable).

Record must be checked on the day of, but prior to the start of the application, and on a daily basis during the application if the time period from the start of the application until the application is complete is greater than 24 hours.

Tarp damage and repair information (if applicable):
- Date and time of tarp repair completion.
- Tarp perforation/removal details (if applicable):
  - Date and time tarp(s) were perforated,
  - Date and time tarp(s) were removed,
  - Record if tarp(s) were perforated and/or removed.

Description of incidents, equipment failure, or other emergency and emergency procedures followed if applicable.

Record details, including:
- Person filing complaint (e.g., on-site handler, person off-site),
- If off-site person, name, address, and phone number of person filing complaint, and
- Description of control measures or emergency procedures followed after complaint.

Fumigant Treated Area and Buffer Zone Signs:
- Dates of posting and removal.

Any deviations from the FMP (e.g., changes in emergency response actions, changes in handler information, changes in handlers responsible for completing emergency tasks, changes in communication between certified applicator, owner, and other handlers).