



8/14/97

PM 01

3377-17

PM 14/14

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES, AND
TOXIC SUBSTANCES

AUG 14 1997

Louise L. Wen, Ph.D.
Manager, Regulatory Affairs
Albemarle Corporation
451 Florida Street
Baton Rouge, LA 70801

Subject: WPS and Environmental Hazards Labeling Amendments and Applications Manual

M-B-R 98 Fumigant	EPA Reg. No. 3377- 7
M-B-R 2 Penetrating Fumigant	EPA Reg. No. 3377-16
M-B-R 33 Soil Fumigant	EPA Reg. No. 3377-17 ✓
M-B-R 98 Technical	EPA Reg. No. 3377-27
M-B-R 75 Preplant Soil Fumigant	EPA Reg. No. 3377-30

Your Letters Dated June 2, 1997

Dear Dr. Wen:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, are acceptable subject to the condition below.

On the front panel, delete "OVER" in the statement "IN ALL CASES OF OVER EXPOSURE, GET MEDICAL ATTENTION IMMEDIATELY." because persons may not be aware that they are "over" exposed to methyl bromide.

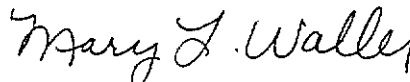
The applications manual is acceptable subject to the following conditions:

1. On page 10, revise the last paragraph under **PLACARDING OF FUMIGATED AREAS** to include the information on chloropicrin such as the safe air concentration level.
2. On page 13, change "hey" to "they" in the first sentence after 4.

If these conditions are not complied with, the subject registrations will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release of the products for shipment constitutes acceptance of these conditions. Please submit one copy each of your final printed labeling before you release the products for shipment. Stamped copies of the labels and applications manual are enclosed for your records.

If you have any questions, then please contact Terri Stowe of my staff at (703).305-6117.

Sincerely,



Mary L. Waller
Acting Product Manager (21)
Fungicide Branch
Registration Division (7505C)

Enclosures

3/14

RESTRICTED USE PESTICIDE DUE TO ACUTE TOXICITY

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

M-B-R 33 SOIL FUMIGANT FOR PREPLANT CONTROL OF MANY SOIL-BORNE PESTS IN PLANT BEDS AND NURSERIES

ACTIVE INGREDIENTS:

Methyl Bromide.....	67%
Chloropicrin.....	33%

97 JUN -4 P 4:02

RECD EPA/OPP/DPD1

KEEP OUT OF REACH OF CHILDREN

DANGER

PELIGRO



POISON

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

IN ALL CASES OF OVER EXPOSURE, GET MEDICAL ATTENTION IMMEDIATELY. TAKE PERSON TO A DOCTOR OR EMERGENCY TREATMENT FACILITY.

STATEMENT OF PRACTICAL TREATMENT

IF INHALED - Get exposed person to fresh air. Keep warm. Make sure person can breathe freely. If breathing has stopped, apply artificial respiration. Do not give anything by mouth to an unconscious person.

IF ON SKIN - Immediately remove contaminated clothing, shoes, and any other item on skin. Wash contaminated skin area thoroughly with soap and water.

IF IN EYES - Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes.

ALBEMARLE CORPORATION
451 Florida Street
Baton Rouge, LA 70801

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

AUG 14 1997

In case of an emergency endangering life or property involving this product, call collect (504) 344-7147.

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

EPA Reg. No. 3377-17
EPA Est. No. 3377-AR-1
NET CONTENTS.....LBS.

3377-17

4/14

METHYL BROMIDE
AND MORE THAN 2% CHLOROPICRIN
MIXTURE, LIQUID
UN 1581



WARRANTY

Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

WARNING

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

**PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS
AND DOMESTIC ANIMALS**

DANGER

EXTREMELY HAZARDOUS LIQUID AND VAPOR UNDER PRESSURE. DO NOT BREATHE VAPOR. INHALATION MAY BE FATAL OR CAUSE SERIOUS ACUTE ILLNESS OR DELAYED LUNG, NERVE OR BRAIN INJURY. LIQUID OR VAPOR CAN CAUSE SERIOUS SKIN OR EYE INJURY WHICH MAY HAVE A DELAYED ONSET. DO NOT GET LIQUID ON SKIN, IN EYES OR ON CLOTHING.

This product contains chloropicrin. Chloropicrin may be irritating to the upper respiratory tract, and even at low levels cause painful irritation to the eyes, producing tearing. If these symptoms occur, leave the fumigation area immediately.

NOTE TO PHYSICIAN

Early-symptoms of overexposure 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 overexposure can result in blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Blood bromide levels suggest the occurrence, but not the degree, of exposure. Treatment is symptomatic. See the product MSDS for additional information.

AIR CONCENTRATION LEVEL

The acceptable air concentration level for persons exposed to chloropicrin is 0.1 ppm (0.7 mg/m³). The acceptable air concentration for persons exposed to methyl bromide is 5 ppm (20 mg/m³). The air concentration level is measured by a direct reading detection device, such as a Matheson-Kitagawa, Draeger or Sensidyne

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Loose-fitting or well ventilated long-sleeved shirt and long pants

Shoes and socks

Full-face shield or safety glasses with brow and temple shields when handling liquid product (Do NOT wear goggles). When the acceptable air concentration level is above 5 ppm and a respirator is required, protect the eyes by wearing a full-face respirator.

No respirator is required if the air concentration level of chloropicrin in the working area is measured to be less than 0.1 ppm AND the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm.

A respirator is required if the acceptable air concentration level of 0.1 ppm for chloropicrin OR 5 ppm for methyl bromide is exceeded at any time. The respirator must be one of the following types: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

Under normal soil fumigation conditions, the air concentration level of chloropicrin in the working area will not generally exceed 0.1 ppm AND the air concentration level of methyl bromide in the working area will not generally exceed 5 ppm. Therefore, no respiratory protection is required. However, there is the possibility of a spill or leak during soil fumigation. Therefore, a respirator of a type specified above must be available and will be required for entry into an affected area in the event of a leak or spill.

PRECAUTIONARY STATEMENTS (Cont.)

WORK SAFETY REQUIREMENTS

1. Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Methyl bromide and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.
2. If liquid fumigant splashes or spills on clothing, remove them at once, as fumes will be an intolerable source of irritation.
3. Immediately after contamination remove outer clothing, shoes, and socks and do not reuse until thoroughly aerated or ventilated. Keep such clothing and shoes outdoors until thoroughly aerated. Then follow the PPE manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE and work clothing separately from other laundry.
4. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
5. Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

7/14

STORAGE AND DISPOSAL

STORAGE AND HANDLING

Store in secure manner either outdoors under ambient conditions or indoors in a well ventilated area. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage or disposal.

Store cylinders upright, secured to a rack or wall to prevent tipping. Cylinders should not be subjected 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.

CONTAINER DISPOSAL

When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only the registrant is authorized to refill cylinders. Do not use cylinders for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinders.

PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticides 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 representatives at the nearest EPA Regional Office for guidance.

SPILL AND LEAK PROCEDURES

Evacuate everyone from the immediate area of the spill or leak. For entry into affected area to correct problem, wear the personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow spilled fumigant to evaporate. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into the spill or leak area by any other person until the air concentration level of chloropicrin is measured to be less than 0.1 ppm AND the air concentration level of methyl bromide is measured to be less than 5 ppm.

Contaminated soil, water, and other cleanup debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8802) if the reportable quantity of 1000 lbs. is exceeded.

ENVIRONMENTAL HAZARD

This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Eliminations System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

CHEMICAL HAZARD

M-B-R 33 is nonflammable. There is no danger from fire or explosion in use concentrations. However, flame can change the chemical to produce some corrosive damage to items in the space being fumigated. Pilot lights and glowing wire heaters should be turned off.

Do not apply gas directly to metal surfaces because of possible corrosive effect on certain metals.

Do not use containers or application equipment made of magnesium, aluminum, zinc or their alloys.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in any 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 protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

PLACARDING OF FUMIGATED AREAS

The applicator (or supervisor of the application) must placard all entrances to the fumigated area with signs bearing:

- skull and crossbones symbol,
- "DANGER/PELIGRO,"
- "Area under fumigation, DO NOT ENTER/NO ENTRE,"
- "Methyl Bromide and Chloropicrin Fumigants in use,"
- the date and time of fumigation, and
- name, address, and telephone number of the applicator.

Do not allow entry by unprotected persons into fumigated area until the signs are removed. Such signs must only be removed when the air concentration level of chloropicrin is measured to be less than 0.1 ppm AND the air concentration of methyl bromide is measured to be less than 5 ppm. Signs must remain legible during the entire posting period.

9/14

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 C.F.R. 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements in this labeling about personal protective equipment, restricted-entry levels, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

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

ENTRY RESTRICTIONS

Greenhouse Soil Fumigation: Entry (including early entry that would otherwise be permitted under the WPS) by any person -- other than a correctly trained and equipped handler who is performing a handling task permitted by the WPS -- is **PROHIBITED** in the entire greenhouse (entire enclosed structure/building) from the start of application until 48 hours after application **AND** until the air concentration level of chloropicrin in the working area is measured to be less than 0.1 ppm **AND** the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm. Until the aeration of the soil is complete (usually 10-14 days), non-handlers are permitted in the greenhouse **ONLY** while the air concentration level of chloropicrin in the working area remains less than 0.1 ppm **AND** the air concentration level of methyl bromide in their working area remains less than 5 ppm. If tarps are used for the application, non-handler entry is prohibited during tarp removal and until the air concentration level of chloropicrin in the working area is measured to be less than 0.1 ppm **AND** the air concentration level of Chloropicrin in the working area remains less than 0.1 ppm **AND** the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm.

Outdoor Soil Fumigation: Entry (including early entry that would otherwise be permitted under the WPS) by any person -- other than a correctly trained and equipped handler who is performing a handling task permitted on this labeling -- is **PROHIBITED** from the start of application until 48 hours after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

NOTIFICATION

Notify workers of the application by warning them orally and by posing fumigant warning signs, as described in the "Placarding of Fumigated Areas" section of this labeling. Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal.

Greenhouses -- Soil or Space Fumigation: Post the fumigant warning signs outside all entrances to the entire greenhouse (entire enclosed structure/building).

Outdoor Soil Fumigation: Post the fumigant warning signs at entrances to treated areas.

PPE FOR ENTRY DURING THE ENTRY-RESTRICTED PERIOD

PPE for entry that is permitted by this labeling is listed in the "Hazards to Humans and Domestic Animals" section of this labeling.

DIRECTIONS FOR USE (Cont.)

When used for fumigation of enclosed spaces, two persons trained in the use of this product must be present during introduction of the fumigant, initiation of aeration, and after aeration when testing for reentry. Two persons do not need to be present if monitoring is conducted remotely (outside the area being fumigated).

Do not fumigate with this product when soil temperature is below 50°F.

This fumigant is a highly hazardous material and should be used only by individuals trained in its proper use. Before using, read and follow all label precautions and directions, including the attached product manual. All persons working with this fumigant must be knowledgeable about the hazards, and trained in the use of required respirator equipment and detector devices, emergency procedures, and proper use of the fumigant.

SOIL FUMIGATION: Use M-B-R 33 for preplanting application in soil for control of nematodes, certain soil-borne diseases, insects and weeds in nurseries and in certain seed bed, plant bed and field crop areas. Typical pests controlled are nematodes, such as root-knot, lesion, dagger, stunt, spiral, cyst formers, lance, citrus, burrowing, false root-knot, ring, stubby root, awl sheath, stunt, sting and pin damping off diseases caused by certain species of Rhizoctonia, Pythium, Fusarium, Phytophthora, Pyrenochaeta, Sclerotinia and certain others, insects (wireworms, cutworms, rootworms and white grubs) in the soil at time of treatment, and weeds such as chickweed, pigweed and nutgrass, crabgrass, goosegrass, crowfootgrass, barnyard grass, purslane, morning glory and many other broadleaf and grass weeds.

M-B-R 33 will give excellent performance in forest trees, ornamental shrub and turf, nurseries, in annual and perennial flower, ornamental seed and plant beds, vegetable seed beds, and in soil where ~~crops are grown for food~~.

WHEN TO TREAT: Treatments can be made in the spring, summer, or fall whenever soil conditions are suitable. In northern states, late summer or early fall treatments are best for land to be planted to early spring crops.

SOIL PREPARATION: To facilitate fumigant penetration, crop residues should be worked into the soil and allowed time to decompose before treating. Soil must be in good and workable seed bed condition, with a temperature between 50°F and 80°F at the five-inch level and with adequate moisture for good seed germination. Deep tillage, 12 to 18 inches, often improves results, especially in heavy or muck soils.

APPLICATION AND DOSAGE: For overall application of M-B-R 33 use 250 to 350 pounds per acre with chisel-type applicator, having the chisels spaced no more than 12 inches apart and injecting the fumigant at a depth of 6 to 8 inches below the soil surface. For row applications, use at the same dosage rates per acre as suggested for overall treatment. The actual amounts used per acre, however, will be proportionately less and dependent upon the distance between rows and the width of the treated row area. Due to the volatility of this fumigant, treated soil must be covered with polyethylene film immediately after treatment with simultaneous film laying equipment or by sealing with a roller or cultipacker immediately behind the injection chisels and covered within 20 minutes with polyethylene film or other suitable gas-tight tarpaulin.

AERATION: Remove tarpaulin after 24 to 48 hours. Allow the soil to aerate for two weeks before planting. If, after this period, M-B-R 33 persists in the soil as indicated by odor or by eye irritation on close examination, disc or plow the soil to help aeration. Crop seeds may be planted after 96 hours following the end of exposure period. Where polyethylene film is to be utilized as a mulch, aeration is accomplished by making holes in the film and planting the crop directly through the film.

FLORIDA CITRUS: Preplant or replant treatment of citrus soil for control of Phytophthora and citrus nematodes. Trees which are planted in this treated soil will not bear harvestable fruit for a period of at least 24 months. Apply M-B-R 33 at the rate of 1.5 to 2 lbs. per 100 square feet with chisels spaced 12 inches apart to a depth of 6-8 inches. Seal immediately with polyethylene film and expose soil to fumigation for 96 hours. Remove cover after exposure and aerate for a minimum of two weeks before setting transplants in treated soil. For non-tarp nematode control: Inject to a depth of 16-24 inches when tarp is not used.

* Specific food crops have been deleted per Stephen Johnson letter to CDPR dated February 20, 1997. The Agency has determined that the use of Methyl Bromide and soil fumigation applications should be considered non-food uses and no tolerances are required.

DOSAGE TABLE FOR M-B-R-33				
Pest Control Desired	TYPE OF SOIL OR MATERIAL	Dosage	Minimum Exposure Time*	Aeration Time Before Planting**
Nematodes, insects and weed seeds	Turf Renovation: Lawns, parks, golf greens, athletic fields and other ornamental and recreational turf areas. Nonfood and Nonfeed Crop Areas: Seed and plant beds for tobacco, flowers, shade and forest trees, ornamental shrubs, and vines, and other similar plants. Also vegetables for production of transplants. Permanent planting sites for tobacco, flowers, shade and forest trees, ornamental shrubs and vines and other similar plants.	1 lb per 100 sq. ft.	24 hrs.	48 hrs.
	Food Crop Areas: Field soils for planting food crops.	250-350 lbs. per acre	48 hrs.	14 days
	Well rotted compost, manure and top soil.	½ lb. per cu. yd.	24 hrs.	72 hrs.
	Mulching straw or hay.	1½ lb. per 6 bales	48 hrs.	24 hrs.
Damping-off Organisms such as: Pythium Rhizoctonia Fusarium	Turf Renovation: Same sites as listed above. Nonfood and Nonfeed Crop Areas: Same plants as listed above.	2 lb. per 100 sq. ft.	24 hrs.	24 hrs. or longer
	Food Crop Areas: Field soils for planting food crops.	250-350 lbs. per acre	48 hrs.	14 days
	Well rotted compost and manure.	1 lb. per cu. yd.	24 hrs.	72 hrs. or longer
Citrus, burrowing, root knot nematodes, Phytophthora and Armillaria root rot organisms.	Protecting replacement trees by replant site fumigation of sandy and fine-textured clay soil in peach and almond orchards and citrus groves.	2 lbs. per 100 sq. ft.	48 hrs.	14 days

* Exposure and aeration times should be doubled if soil temperature is between 50°F and 60°F. M-B-R-33 should not be used if temperature is below 50°F.

** Soil in which plants are to be set should be aerated for a week to ten days.

12/14

DIRECTIONS FOR USE (Cont.)

GREENHOUSES: The use of methyl bromide and chloropicrin in enclosed spaces presents a potential hazard to humans and plant life. Before fumigation, train all personnel involved in fumigation (including use of safety equipment). Never fumigate alone. Follow USE PRECAUTIONS. Follow directions for row application with doors open and fans running. After application and tarping, secure and post the structure to prevent unprotected persons and domestic animals from entering.

AFTER FUMIGATION: At the end of the exposure period, remove all seals and open all doors and windows that are operational. Allow for complete ventilation. Use ventilation fans whenever possible to remove fumigant from dead air pockets. Follow exactly the instructions in the entry restriction section of the Agricultural Use Requirements box. After fumigation, fumigated areas must be aerated until the air concentration level of chloropicrin in the working area is measured to be less than 0.1 ppm AND the air concentration level of methyl bromide is measured to be less than 5 ppm. Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.

13914

DIRECTIONS FOR USE (Cont.)

GREENHOUSES: The use of methyl bromide and chloropicrin in enclosed spaces presents a potential hazard to humans and plant life. Before fumigation, train all personnel involved in fumigation (including use of safety equipment). Never fumigate alone. Follow USE PRECAUTIONS. Follow directions for row application with doors open and fans running. After application and tarping, secure and post the structure to prevent unprotected persons and domestic animals from entering.

AFTER FUMIGATION: At the end of the exposure period, remove all seals and open all doors and windows that are operational. Allow for complete ventilation. Use ventilation fans whenever possible to remove fumigant from dead air pockets. Follow exactly the instructions in the entry restriction section of the Agricultural Use Requirements box. After fumigation, fumigated areas must be aerated until the air concentration level of chloropicrin in the working area is measured to be less than 0.1 ppm AND the air concentration level of methyl bromide is measured to be less than 5 ppm. Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.

USE PRECAUTIONS

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 plants, fertilize as indicated by plant nutrient tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, to crops, avoid using fertilizers containing ammonium salts and use only those containing nitrate nitrogen until after the crop is well established and the soil temperature is above 65° F. Certain crops are tolerant to ammonia, therefore the above rule does not apply to them. Liming highly acid soil before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

Vapors of M-B-R 33 are extremely irritating to the eyes. Provide good ventilation when applying or transferring it to other containers.

M-B-R 33 should not be applied when there is little or no air movement, nor when there is an atmospheric inversion. Do not apply to areas adjacent to fields where valuable crops are growing or near buildings inhabited by humans or livestock.

PRIOR TO FUMIGATION:

Post all treated areas with warning signs. Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Agencies as required.

Never fumigate alone. It is imperative always to have an assistant and proper protective equipment in case of accidents.

Drivers of application equipment or persons in charge must advise other workers of all precautions and procedures. In addition, they must instruct their helpers in the mechanical operation of the tractor and how to safely work with the tractor and driver while fumigating.

Handle this fumigant in the open, with the operator "up wind" from the container where there is good ventilation. Check fumigant pressure system for leaks before beginning operation.

Two trained persons must be present during introduction of the fumigant.

When fumigating soil from a tractor, 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 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."

All trash should be cleaned from the field before starting fumigation.

DURING FUMIGATION:

This fumigant should not be applied when there is an atmospheric inversion. Since uncomfortable concentration of chloropicrin may drift to nearby areas, immediately cover treated area with plastic tarpaulin for a minimum of 48 hours.

Do not lift injection shanks to turn at the end of a pass until fumigant has drained from system following closure of shutoff valve.

If trash is inadvertently pulled by the shanks to the ends of the field when fumigating, it must be covered by lifting the shanks, then covering the trash with polyethylene film before making the turn for the next pass.

When changing the cylinders, be certain they are turned off and fumigant system is not under pressure.

AFTER FUMIGATION:

Keep pets, livestock, and other domestic animals out of the treated area during application, during the exposure period as specified for applications in Directions for Use, and during removal of tarpaulin.

Two trained persons must be present during removal of the tarpaulin.

SPILL AND LEAK PROCEDURES FOR SOIL FUMIGATION:

In case of a rupture of hose or fitting while applying fumigant, immediately stop tractor and motor. Evacuate everyone from the immediate area of the spill or leak. Wear the personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling for entry into affected area to correct problem. Approach from upwind to make necessary repairs. Do not enter area without the required PPE until the spill has evaporated or the leak has been fixed.