



## **GUIDANCE DOCUMENT**

# **WEEVIL-CIDE<sup>®</sup> FUMIGANT MANAGEMENT PLAN FOR BURROWING PESTS**

To better protect people from dangerous exposures, EPA has expanded restrictions on aluminum phosphide products that are used to control burrowing rodents. Aluminum phosphide products for burrowing rodent use are formulated as tablets and pellets that are rapidly transformed to highly toxic phosphine gas when exposed to atmospheric moisture. The misapplication of phosphine fumigants have been associated with accidental poisoning incidents, and their use is restricted to specially trained certified restricted use pesticide applicators.

### **Expanded Aluminum Phosphide Use Restrictions**

To increase public safety by reducing potential exposure to phosphine fumigants, EPA has expanded the restrictions and requires clearer label directions and precautions for aluminum phosphide products that are used in rodent burrow fumigation. Phosphine fumigants are highly toxic pesticides that are restricted to use only by specially trained certified restricted use pesticide applicators. Indoor use of such products has long been prohibited. EPA has expanded the outdoor use restrictions for these products as follows:

- The use of this product is strictly prohibited within 100 feet of any building where humans and/or domestic animals do or may reside on single and multi-family residential properties and nursing homes, schools (except athletic fields), daycare facilities and hospitals.
- The products must only be used outdoors for control of burrowing pests, and are for use only on agricultural areas, orchards, non-crop areas (such as pasture and rangeland), golf courses, athletic fields, parks and recreational areas, cemeteries, airports, rights-of-way, earthen dams, and other non-residential institutional or industrial sites.
- Products must not be applied in a burrow system that is within 100 feet of a building that is or may be occupied by people or domestic animals. This buffer zone for treatment around non-residential buildings that could be occupied by people or animals has been increased from 15 feet to 100 feet.

- When this product is used in athletic fields or parks, the applicator must post a sign at entrances to the treated site containing the signal word DANGER/PELIGRO, skull and crossbones, the words: DO NOT ENTER/NO ENTRE, FIELD NOT FOR USE, the name and EPA registration number of the fumigant, and a 24-hour emergency response number. Signs may be removed 2 days after the final treatment.
- When this product is used out-of-doors in a site frequented by people, other than an athletic field or park, the applicator shall post a sign at the application site containing the signal word DANGER/PELIGRO, skull and crossbones, the name and EPA registration number of the fumigant, and a 24-hour emergency response number. Signs may be removed 2 days after the final treatment.
- Fumigant Management Plans must be written before all applications of phosphine products, including all burrowing pest fumigations. A Fumigant Management Plan is a written description of the steps designed to plan for a safe, legal and effective fumigation. The certified applicator and owner of the property to be fumigated must characterize the area to be treated and include all safety requirements in the plan before application.

**Source:** US EPA expanded use restrictions page

Prior to writing a FMP, carefully read and review both the pesticide label and the Applicator's Manual for the fumigant product to be used. Once the FMP has been written, a copy of this information must be given to the appropriate company officials (supervisors, foreman, safety officer, etc.) in charge of the site. Before any fumigation begins you must be familiar with and comply with all applicable federal, state, and local regulations.

Follow the "Guidance for Preparing of a Fumigation Management Plan" contained in the Applicator's Manual for the specific phosphine product you will be applying. A checklist is provided in this manual to help you take into account factors that must be addressed prior to performing all fumigations. It emphasizes safety steps to protect people and property. The checklist is general in nature and cannot be expected to apply to all types of fumigation situations. It is to be used as a guide to prepare the required plan. Each item must be considered. However, it is understood that every fumigation is different and not all items will be necessary for each fumigation site.

# WEEVIL-CIDE® FUMIGATION MANAGEMENT PLAN (FMP)

## **“Burrowing Pests”**

Company:

Address:

Telephone:

### **A. PRELIMINARY PLANNING & PREPARATION**

1. Purpose of Fumigation: Elimination of vertebrate pests
  - Pocket gopher
  - Ground squirrel
  - Prairie dog
  - Mole
  - Vole
  - Chipmunk
  - Norway rat
  
2. Type of Fumigation: Outdoor area
  - Closed-burrow system (pocket gophers, etc.)
  - Open-burrow system (ground squirrels, prairie dogs, etc.)
  
3. Read and review with the facility management and appropriate employees any existing FMP (Fumigation Management Plan), M.S.D.S. (Material Safety Data Sheet), product label, Applicator’s Manual and other relevant safety procedures.
  
4. Obtain or develop a site-drawing (see Appendix No. 1) of the field layout. This drawing is used to make “field-specific” notes, as needed. Attach this drawing to the FMP and update it yearly, or prior to each fumigation. Keep it on file with the FMP.
  
5. Inspect the field site to determine its suitability for fumigation. Consult previous records (FMP) for treatment history information.  
Date of site inspection:  
Name of inspection personnel:

6. Facility / Owner / Manager:

Facility:

Facility Address:

Facility Manager:

Daytime telephone:

Night telephone:

Mobile telephone:

Pager number:

7. Certified Applicator (Fumigator) in charge:

Name:

Company:

Certification No.:

Daytime telephone:

Night telephone:

Mobile telephone:

Pager number:

8. Emergency Information:

Hospital Emergency:

(for first aid information in case of exposure)

Fire Dept.:

Police Dept.:

Poison Control: 866-673-6671

Chem Trec: 800-424-9300

Registrant of Fumigant: 800-438-6071 (UPI)

Other: \_\_\_\_\_

9. Exposure time considerations:

(consult label instructions)

Fumigant to be used: Aluminum phosphide (*WeevilCide*®)

Tablets (3.0 grams / tablet)

Pellets (0.6 grams / pellet)

Ambient temperature: 70 degrees F

(burrow / tunnel system)

Minimum fumigant

Exposure at measured

Temperature: 3 days (72 hours) – Tablets

Fumigation date / time of application:

Month/day/year \_\_\_\_\_

Time of day am/pm \_\_\_\_\_

Recommended label dosage:

Tablets (3.0 grams / tablet) = 2-4 tablets per tunnel or burrow

Pellets (0.6 grams / pellet) = 10-20 pellets per tunnel or burrow

Dosage used:

Tablets: \_\_\_\_\_ / tunnel or burrow

Pellets: \_\_\_\_\_ / tunnel or burrow

Proximity of inhabited structures from treated tunnel / burrow systems: **(must not be applied into burrow system that is within 100 feet of a building that is, or may be occupied by humans, and/or animals, especially residences.)** \_\_\_\_\_

## B. PERSONNEL

1. Scheduled personnel for the fumigation. For use by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

List of personnel scheduled for chemical treatment:

1. (Certified Applicators or persons under their direct supervision – on premises)
  - 2.
  - 3.
3. Instructed all personnel on the following:
    - a. To report any accident and / or incidents related to exposure, provide a telephone number for emergency response reporting.
    - b. To report to proper authorities any theft of fumigant and / or equipment related to the fumigation.
    - c. The established meeting area for all personnel in case of an emergency.

## C. MONITORING

Current E.P.A. approved labeling requires the use of respiratory protection equipment if phosphine concentrations exceed the 8-hour Time Weighted Average (TWA) of 0.3 ppm or the 15-minute Short Term Exposure Limit (STEL) of 1.0 ppm. Respiratory protection must be used when phosphine levels are unknown\*. In addition, respiratory protection must be available during outdoor fumigation operations.

\*SCBA – unknown concentrations or above 15 ppm

## D. NOTIFICATION

1. Confirm that the appropriate local authorities (fire departments, police departments, etc.) have been notified as per label instructions, local ordinances, or instructions of the client.
2. Prepare written procedure (“Emergency Response Plan”), which contains explicit instructions, names, and telephone numbers so as to be able to notify local authorities if phosphine levels are exceeded in an area that could be dangerous to bystanders and / or domestic animals.

## E. SEALING

Flagging of all openings before application of the fumigant, as well as for measurement purposes, is recommended.

### Closed-Burrow Systems:

Following application of label recommended dosage of aluminum phosphide (*WeevilCide*®) to the tunnel main runway, a tight seal should be used to close the probe hole by using a clod of soil or a soil plug to cover the hole or by using the heel of your shoe to push sod and / or soil over the surface opening. If probe hole is more than one (1) inch in diameter, place crumbled paper in the hole before closing it with soil and / or sod.

### Open-Burrow Systems:

Following application of label recommended dosage of aluminum phosphide (*WeevilCide*®) to the burrow openings, pack each treated entrance with crumpled paper and shovel soil to completely cover the paper. Using crumpled paper will prevent soil from covering the tablets or pellets and slowing down their action. Rocks, clods of soil, cardboard, etc. may be used for this purpose. Be sure to seal all untreated entrances by shoveling and packing soil and / or sod to completely seal the opening.

## F. APPLICATION PROCEDURES & FUMIGATION PERIOD

1. Plan carefully and apply the fumigant in accordance with the label requirements.
2. Protective Clothing: Wear dry gloves of cotton or other material when applying aluminum phosphide (*WeevilCide*®) tablets or pellets, or if contact with fumigant dust is likely. Gloves should remain dry during use.
3. Wash hands thoroughly after handling aluminum phosphide (*WeevilCide*®) tablet or pellet products.
4. Aerate used gloves and other clothing that may be contaminated in a well ventilated area prior to laundering.
5. Use Restrictions:
  - a. Aluminum phosphide (*WeevilCide*®) may be applied to underground burrow systems located in non-crop areas, crop areas, or orchards occupied by pocket gophers and other burrowing pests as listed on the pesticide label.
  - b. All treatments for control of the target pest species in burrows must be made outdoors. Tablets or pellets must be applied directly to underground burrow systems. Before using aluminum phosphide (*WeevilCide*®) tablets or pellets for burrowing pest control, read the applicable restrictions under Environmental Hazards, Endangered Species and Special Local Restrictions in the Applicator's Manual.
  - c. Aluminum phosphide (*WeevilCide*®) products may be used out-of-doors only for control of burrowing pests. **THIS PRODUCT MUST NOT BE APPLIED INTO A BURROW SYSTEM THAT IS WITHIN 100 FEET OF A BUILDING THAT IS, OR MAY BE OCCUPIED BY HUMANS, AND / OR ANIMALS, ESPECIALLY RESIDENCES.** Document any burrows that open under or into occupied buildings and do not apply to these burrows. In addition, check for any other source through which the gas (phosphine) may enter into occupied buildings as a result of application to burrows. If there is any way gas can move through pipes, conduits, etc., from burrows – **DO NOT TREAT THESE BURROWS.** Prior to treating a rodent burrow on property containing an inhabited structure, the applicant must provide the customer (e.g. tenant, homeowner, or property manager) with a MSDS or appropriate sections of the Applicator's Manual. Application Directions: Use application procedures appropriate to the type of burrow system being treated. **DOSAGE RATES MUST NOT BE EXCEEDED UNDER ANY CIRCUMSTANCES.**
  - d. Application Directions: Use application procedures appropriate to the type of burrow system being treated. **DOSAGE RATES MUST NOT BE EXCEEDED UNDER ANY CIRCUMSTANCES**
  - e. Do not apply under the following conditions: 1) foggy; 2) when soil is so wet that moisture has accumulated; 3) when snow is on the ground; 4) when rain is forecasted within 24 hours.

PEST SPECIES WITH “CLOSED-BURROW” SYSTEMS:  
(pocket gophers, etc.) (refer to Section E for sealing requirements)

Locate the main underground runway by probing with a smooth-sided rod 12-18 inches from a fresh mound. For pocket gophers, begin probing on the flat side of the mound. A sudden reduction in soil resistance to the probe indicates that the main runway has been located. Once the main runway is located, remove the probe and apply 2-4 tablets or 10-20 pellets through the probe hole. Adjust treatment rate according to the level of soil moisture, using more tablets or pellets if the soil is relatively dry. Do not treat if soil is extremely dry or if there are no signs of recent gopher activity.

PEST SPECIES WITH “OPEN-BURROW” SYSTEMS:  
(ground squirrels, prairie dogs, etc.) (refer to Section E for sealing requirements)

Locate all entrances to each burrow system. Treatment of more than one (1) entrance in a system is often desirable as systems often overlap and are not defined. Treat all entrances except for those entrances you are not sure connect to already treated entrances. Insert 2-4 tablets or 10-20 pellets into each entrance to be treated. Use the lower rates for smaller burrows and / or when soil moisture is high. Use higher rates for larger burrow systems and when soil moisture is relatively low.

Environmental Hazards:

Aluminum phosphide (*WeevilCide*®) products are very highly toxic to wildlife. Many non-target organisms exposed to phosphine gas in burrows will be killed. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes.

Endangered Species Restrictions:

The use of aluminum phosphide (*WeevilCide*®) in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of Federal laws. Before using this pesticide on range and / or pastureland you must obtain the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES for the county in which the product is to be used. This bulletin is available from your County Extension Agent, State Fish and Game Office, or your pesticide dealer. Use of this product in a manner inconsistent with the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES is a violation of Federal Laws.

**G. POST APPLICATION PROCEDURES**

1. Confirm that all required postings have been placed at and around the field.
2. Return all unused fumigant product to an approved, locked chemical storage area.
3. Re-inspection / Re-treatment



Closed-burrow systems:  
(pocket gophers, etc.)

Two days after treatment, you may check area for residual pest activity by poking holes in the main runways of burrow systems, flagging holes and inspecting them two (2) days later. You should retreat all reclosed systems, on both sides of the plug.

Open-burrow systems:  
(ground squirrels, prairie dogs, etc.)

Inspect treated areas 1-2 days following treatment for signs of residual activity of target species. Treat all reopened burrows in the same manner as prescribed for application / treatment.

**COMPLIANCE CHECK LIST**

	<u>YES</u>	<u>NO</u>
<u>PRELIMINARY PLANNING &amp; PREPARATION:</u>		
1. Read & reviewed existing FMP, MSDS, product label, Applicator's Manual, and other relevant safety procedure with appropriate personnel.	<input type="checkbox"/>	<input type="checkbox"/>
2. Develop a site drawing of the facility layout.	<input type="checkbox"/>	<input type="checkbox"/>
<u>RECORD KEEPING:</u>		
1. Name & address of Certified Applicator is recorded.	<input type="checkbox"/>	<input type="checkbox"/>
2. Specific site of application recorded.	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the fumigation treatment conducted when the ambient temperature is 40 degrees F or more.	<input type="checkbox"/>	<input type="checkbox"/>
4. Local officials provided with safety information.	<input type="checkbox"/>	<input type="checkbox"/>
<u>CERTIFIED APPLICATOR:</u>		
1. Certified applicator physically present during application:	<input type="checkbox"/>	<input type="checkbox"/>
2. Certified applicator is certified in required category:	<input type="checkbox"/>	<input type="checkbox"/>
<u>NOTIFICATION:</u>		
1. Confirmation that the appropriate local authorities have been notified as per label instructions, local ordinances, or instructions of the client.	<input type="checkbox"/>	<input type="checkbox"/>
2. Confirmation that a written procedure ("Emergency	<input type="checkbox"/>	<input type="checkbox"/>

Response Plan”) has been properly prepared and communicated to appropriate personnel.

APPLICATION & FUMIGATION PERIOD:

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. Confirmation that the fumigant was applied in accordance with label requirements. (dosage, exposure period, temperature, etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Confirmation that protective clothing was properly used.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Confirmation that personnel handling fumigant thoroughly washed their hands following treatment.                               | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Confirmation that proper distance was maintained between treated burrow / tunnel systems and any inhabited structures on site. | <input type="checkbox"/> | <input type="checkbox"/> |

SEALING PROCEDURES:

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. Properly performed sealing of burrow / tunnel systems following application of fumigant. | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

POST APPLICATION PROCEDURES:

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. Confirmation that Post Application Procedures were completed correctly | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

CHEMICAL – PRODUCT STORAGE:

- |                |  |
|----------------|--|
| 1. Storage:    | <input type="checkbox"/> Under lock & Key            |
|                | <input type="checkbox"/> Posted as Pesticide Storage |
|                | <input type="checkbox"/> Dry storage                 |
|                | <input type="checkbox"/> Well-ventilated area        |
|                | <input type="checkbox"/> Away from heat              |
| 2. Not Stored: |  |
|                | <input type="checkbox"/> Humans & Animals Reside     |
|                | <input type="checkbox"/> Food / Feed Stored          |

3. Comments:

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**APPENDIX NO. 1**  
**SITE/FIELD DRAWING**