



**COUNTY OF GLENN**  
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#18  
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## **ALUMINUM PHOSPHINE (PHOSTOXIN) and MAGNESIUM PHOSPHIDE**

A Fumigation Management Plan is needed for each type of fumigation application, including burrowing pest control. Cardinal Professional Products ([www.cardinalproproducts.com](http://www.cardinalproproducts.com)) has a plan that can be downloaded and printed (it is 6 pages long).

A Certified Applicator must be physically present, responsible for, and maintain visual and/or voice contact with all fumigation workers during the application of the fumigant. The qualification to be a Certified Applicator is possession of a Qualified Applicator Certificate (QAC), Qualified Applicator License (QAL) or a Private Applicator Certificate.

If you use Phostoxin Tablets or Pellets to fumigate rodent burrows, you would need a private applicator's certificate. If you fumigate stored agricultural commodities that you grew, then a private applicator's certificate is needed. If you fumigate stored agricultural commodities that you bought, then you would need a QAC or a QAL. If you fumigate stored agricultural commodities as a service for someone else, then you would need a QAL and a Pest Control Business License.

For more information on the use of fumigation materials, applicator's manuals are available from the chemical company Degesch ([www.degeschamerica.com](http://www.degeschamerica.com)) for each of the following products:

Phostoxin Pellets/Tablets  
Phostoxin Tablet PrePac and PrePac Rope  
Degesch Magtoxin Spot Fumigant  
Degesch Fumi-Cell/Fumi-Strip  
Degesch Magtoxin Granules  
Detia Phos  
Detia Fumex

Following is a brief description of the various aluminum phosphine and magnesium phosphide products available from Degesch.

Phostoxin Pellets:

- Packed in flasks of 1660 pellets, 21 flasks per case of 34,860 pellets
- Each 0.6g Phostoxin® pellet liberates 0.2g of hydrogen phosphide gas
- 55% aluminum phosphide

#### Phostoxin Tablets:

- Packed in regular flasks of 500 round tablets, 14 flasks per case of 7000 tablets
- Each 3g Phostoxin round tablet liberates 1g of hydrogen phosphide gas
- 55% aluminum phosphide

or

- Packed in small flasks of 100 round tablets, 70 flasks per case of 7000 tablets
- Each 3g Phostoxin round tablet liberates 1g of hydrogen phosphide gas
- 55% aluminum phosphide

#### Phostoxin Tablet Prepacs:

Packed in pails of 48 Tablet Prepacs

- 1 Prepac per pouch, 48 pouches per pail
- 2 Prepacs per pouch, 24 pouches per pail
- 3 Prepacs per pouch, 16 pouches per pail
- 4 Prepacs per pouch, 12 pouches per pail

#### Phostoxin Tablet Rope:

- Packed in pails containing two Prepac Ropes
- Each Rope contains 1,056 3g Phostoxin® round tablets liberates 1056 g of hydrogen phosphide gas
- 55% aluminum phosphide

#### Magtoxin Spot Fumigant:

- Packed in pails of 12 pouches per pail. Each pouch contains 5 serially connected Prepacs
- Each Magtoxin Prepac contains 66 0.6g Magtoxin pellets and liberates 13.2g of hydrogen phosphide gas
- 66% magnesium phosphide

#### Fumi-Cel®:

- Packed individually in aluminum foil pouches, 120 Fumi-Cels per drum
- Each 117g Fumi-Cel liberates 33g of hydrogen phosphide gas
- 56% magnesium phosphide

#### Fumex:

Aluminum phosphide fumigant packaged in a Tyvek® bag to reduce the possibility of ruptures and leakage. Each 34-gram bag releases 11 grams of phosphine. Available in following packaging:

- 50's: 50 aluminum pouches, each containing ten 34-gram bags; 500 bags per drum, liberating 5500 grams of phosphine
- 75's: 75 aluminum pouches, each containing six 34-gram bags; 450 bags per drum, liberating 4950 grams of phosphine

FUMIGATION MANAGEMENT PLAN (FMP)

“Tree-Hole Sites”

**A. Supervising Certified Applicator On-Site**

Name:	
Company (if by PCB):	
Certification No.:	
Telephone (office/cell):	
Contact information on file w/ CAC?	<input type="checkbox"/> Yes <input type="checkbox"/> No

**B. Operator of the Property**

Name:	
Permit Number:	
Certification No.:	
Telephone (office/cell):	
Contact information on file w/ CAC?	<input type="checkbox"/> Yes <input type="checkbox"/> No

**C. General Application Information**

1. Fumigant to be used:

Product Name	EPA Registration Number	Target Date

2. Application site

Site Identification Number	Block Number	Map and Site Information on Permit
		<input type="checkbox"/> Yes <input type="checkbox"/> No

3. Purpose of Fumigation: Control of soil-borne pests/diseases

Control of *Armillaria mellea* (oak root fungus) for orchard replant applications

Non-tarp nematode control (only for hand held tree-hole application in Calif.)  
See section G for a description of other product specific GAPs from label that will be followed.

4. Type of Fumigation: Hand Probe

Tree Replant Application Using Handheld Equipment

**D. Tarps Used**                     Yes             No

1. If yes, fill in table below. Tarp Type (e.g., High Barrier, HDPE, SIF, TIF, VIF):

Tarp Type:	
Tarp repairs by:	
Response time:	
Minimum size to be repaired	
Minimum time after application tarps will be repaired	
Person responsible for cutting tarps	
Telephone number (include Area Code)	
Person responsible for repairing tarps	
Telephone number (include Area Code)	
Tarp cutting method	
Cutting schedule/target date	
Tarp removal method	
Removal Schedule/target date	
Factors that determine when tarp will be repaired:	

**E. Weather Conditions**

1. Summary of the weather **on the day of the application** (a printed copy may be attached to the FMP):

Check here if printed copy is attached to the FMP or complete the following:

Wind speed/direction:	
Inversion conditions:	
Air-stagnation advisories:	
Other:	

2. Summary of the weather forecast **during the 48-hour period following the fumigant application** (a printed copy may be attached to the FMP):

Check here if printed copy is attached to the FMP or complete the following:

Wind speed/direction:	
Inversion conditions:	
Air-stagnation advisories:	
Other:	

**F. Soil Conditions (Immediately prior to application)**

Soil moisture/depth	Method used	Soil texture	Soil temperature/depth

**G. Personnel/Protection Measures**

1. Scheduled personnel for the fumigation. Product labeling requires that at least one state certified / licensed pesticide applicator to be present and on-site to oversee all phases of the fumigation procedure.

List of personnel scheduled for treatment:

1.	
2.	
3.	
4.	
5.	
6.	

2. Personal Protective Equipment (PPE) – Training Date:

- Long-sleeved shirt/long-pants, shoes, socks  
 Protective eyewear (NOT goggles)  
 Protective gloves: Type:  
 Apron: Type:  
 Protective footwear and socks  
 Half-mask air-purifying respirator  
 Full-face air-purifying respirator  
 Self-contained breathing apparatus  
 No respirator  
 Other:

3. Written Respiratory Program document on file:  Yes  No  N/A

If No or N/A explain here:	
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**H. Air Monitoring Plan**

When sensory irritation is experienced, operations will:

- Cease; personnel will be withdrawn from the site
- Continue with handlers wearing air purifying respirators

	Handler Tasks to be Monitored	Monitoring Equipment	Timing
1.			
2.			
3.			
4.			

Monitoring will be performed by: \_\_\_\_\_

**I. Hazard Communication**

- On-site communication will conform to 3 CCR sections 6618, 6619, 6723, 6723.1 and this FMP
- MSDS for all pesticides will be available on-site

**J. Field Posting**

Person posting signs: \_\_\_\_\_

- Posting will conform to 3 CCR section 6776

**K. Emergency Procedures**

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 fumigant levels are exceeded in an area that could be dangerous to bystanders and / or domestic animals.
3. The established meeting area for all personnel in case of an emergency.
4. Emergency Information:

Hospital Emergency:	911 or
Fire Department:	911 or
Police Department:	911 or
Poison Control:	
Chem Trec:	800-425-8765
County Agricultural Commissioner’s Office:	
Other:	

**J. Good Agricultural Practices (GAPs)**

Check here if applicable mandatory GAPs are attached to the FMP (this could be a copy of the label highlighting the applicable GAPs). If this box is not checked, the checklist below must be completed.

General

- |   |   |
|---|---|
| <input type="checkbox"/> Tarps            | <input type="checkbox"/> Weather Conditions |
| <input type="checkbox"/> Soil Temperature | <input type="checkbox"/> Soil Moisture      |
| <input type="checkbox"/> Soil Preparation |   |

Tree Replant Application Using Handheld Equipment

- |   |  |
|---|--|
| <input type="checkbox"/> Soil Preparation | <input type="checkbox"/> Application Depth |
| <input type="checkbox"/> System Flush     | <input type="checkbox"/> Soil sealing      |

- Control of *Armillaria mellea* (oak root fungus) for orchard replant applications  
 Non-tarp nematode control (only for hand held tree-hole application in California)

Description of other product specific GAPs from label that will be followed:

**K. Attachments**

- Authorized on-site personnel     Weather forecast     Post application summary  
 Other

*I verify that the information provided in this Fumigant Management Plan and its attachments accurately reflect the actual conditions associated with this application. I certify that I will maintain this record and make it available for inspection for two years from the date of the application.*

\_\_\_\_\_  
SIGNATURE OF CERTIFIED APPLICATOR SUPERVISING APPLICATION

\_\_\_\_\_  
DATE

FUMIGATION MANAGEMENT PLAN (FMP)

“Burrowing Pests”

Company:	
Address:	
City/State/Zip Code:	
Telephone:	

**A. PRELIMINARY PLANNING & PREPARATION**

1. Purpose of Fumigation: Elimination of vertebrate pests

- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> Pocket gopher   | <input type="checkbox"/> Mole        |
| <input type="checkbox"/> Ground squirrel | <input type="checkbox"/> Chipmunk    |
| <input type="checkbox"/> Norway rat      | <input type="checkbox"/> Prairie dog |
| <input type="checkbox"/> Vole            |                                      |

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 area to be treated. This drawing is used to make “site-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 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:

Property Operator:	
Address:	
City/State/Zip Code:	
Daytime telephone:	

Night telephone:	
Mobile/cell telephone:	
Other contact information:	

7. Certified Applicator (Fumigator) in charge:

Name:	
Company:	
Certification No.:	
Daytime telephone:	
Night telephone:	
Mobile/cell telephone:	
Other contact information:	

8. Emergency Information:

Hospital Emergency:	
Fire Dept.:	
Police Dept.:	
Poison Control:	
Chem Trec:	800-425-8765
Registrant of Fumigant:	
Other:	

9. Exposure time considerations:  
(consult label instructions)

Fumigant to be used:	
----------------------	--

- Tablets (3.0 grams / tablet)
- Pellets (0.6 grams / pellet)

Ambient temperature:  degrees F

(burrow / tunnel system)

Minimum fumigant

Exposure at measured

Temperature: 3 days (72 hours) - Tablets

Fumigation date / time of application:	
--	--

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: > 15 ft. (5 meters)

## B. PERSONNEL

1. Scheduled personnel for the fumigation. Product labeling requires that at least one (1) state certified / licensed pesticide applicator to be present and on site to oversee all phases of the fumigation procedure.

List of personnel scheduled for chemical treatment:

1.	
2.	
3.	
4.	
5.	
6.	

2. 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 U.S. EPA approved labeling does not require the use of respiratory protection equipment if phosphine concentrations do not 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. Documented worker exposure studies conducted during burrowing rodent applications with aluminum phosphide confirm that exposure levels were routinely and consistently below the TWA and STEL levels. Therefore, no respiratory protection is required as long as fumigation operations are conducted according to current label directions. These operations include, (but not limited to) personnel initially entering chemical storage areas, changing flasks, riding in the truck cabs, or making applications of aluminum phosphide tablets or pellets.

## **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**

### Closed-Burrow Systems:

Following application of label recommended dosage of aluminum phosphide 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 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 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 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 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 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 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 15 FEET (5 METERS) 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.
- d. Application Directions: Use application procedures appropriate to the type of burrow system being treated. DOSAGE RATES MUST NOT BE EXCEEDED UNDER ANY CIRCUMSTANCES.

PEST SPECIES WITH "CLOSED-BURROW" SYSTEMS:

(pocket gophers, etc.)

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.)

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 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 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. Return all unused fumigant product to an approved, locked chemical storage area.
2. 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

YES    NO

### PRELIMINARY PLANNING & PREPARATION:

- |    |     |     |   |
|----|-----|-----|---|
| 1. | [ ] | [ ] | Read & reviewed existing FMP, MSDS, product label, Applicator's Manual, and other relevant safety procedure with appropriate personnel. |
| 2. | [ ] | [ ] | Develop a site drawing of the area to be treated.   |

### RECORD KEEPING:

- |    |     |     |  |
|----|-----|-----|--|
| 1. | [ ] | [ ] | Name and address of Certified Applicator is recorded.  |
| 2. | [ ] | [ ] | Specific site of application recorded.   |
| 3. | [ ] | [ ] | The fumigation treatment was conducted when the ambient temperature is 40 degrees F or more. |
| 4. | [ ] | [ ] | Local officials provided with safety information.  |

### CERTIFIED APPLICATOR:

- |    |     |     |   |
|----|-----|-----|---|
| 1. | [ ] | [ ] | Certified applicator physically present during application. |
| 2. | [ ] | [ ] | Certified applicator is certified in required category.     |

### NOTIFICATION:

- |    |     |     |  |
|----|-----|-----|--|
| 1. | [ ] | [ ] | Confirmation that the appropriate local authorities have been notified as per label instructions, local ordinances, or instructions of the client. |
| 2. | [ ] | [ ] | Confirmation that a written procedure ("Emergency 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.). |
| 2. | [ ] | [ ] | Confirmation protective clothing was properly used.  |
| 3. | [ ] | [ ] | Confirmation that personnel handling fumigant thoroughly washed their hands following treatment.                               |
| 4. | [ ] | [ ] | Confirmation that proper distance was maintained between treated burrow / tunnel systems and any inhabited structures on site. |

**COMPLIANCE CHECK LIST (cont.)**

YES NO

SEALING PROCEDURES:

1.           Sealing of burrow / tunnel systems following application of fumigant was properly performed.

POST APPLICATION PROCEDURES:

1.           Confirmation that Post Application Procedures were completed correctly.

CHEMICAL – PRODUCT STORAGE:

1. Storage:      Under lock & Key  
                     Posted as Pesticide Storage  
                     Dry storage  
                     Well-ventilated area  
                     Away from heat

2. Not Stored:

- Humans & Animals Reside  
   Food / Feed Stored

Comments:

# Fumigation Management Plan

## Master Fumigation Management Plan (FMP)

### Preliminary Planning & Preparation

A Fumigation Management Plan is required for each type of fumigation application. If you perform multiple or daily fumigations of the same type, copies of pages 5 & 6 can be used for efficacy and worker/public safety monitoring, and filed with the "Master" FMP (Pages 1-4). Monitoring must be performed periodically, with a minimum of at least once per day. Some situations may require more frequent monitoring (or even continuous monitoring) depending upon the potential for exposure. Efficacy monitoring is not mandatory, but is highly recommended. If you have any questions re: FMP's, please contact Cardinal Professional Products at 1-800-548-2223.

What is the purpose of the fumigation?

- Elimination of insect infestation
- Elimination of vertebrate pests
- Plant pest quarantine
- Other: (explain)

What type of fumigation is it?

- Space: tarp, mill, warehouse, food plant or other
- Vehicle: railcar, truck trailer, van, container
- Commodity: raw agricultural or processed foods or non-food
- Type of Storage: vertical silo, farm storage, flat storage, etc.
- Vessel: ship or barge
- Rodent Burrow

Commodity to be fumigated:

Area to be fumigated:

Fully describe the fumigation structure, and draw a diagram, including adjacent buildings and critical areas nearby:

Diagram

# Fumigation Management Plan

Describe fumigation enclosure construction materials:

Construction material:	
Design of structure:	
Approximate age of structure:	
Fire or combustibility issues	
Connected structures	
Additional information:	

Previous treatment history:


Accessibility of utility service connections:

Emergency shut-off stations for electricity, water and gas  
Nearest telephone or other means of communication

Show on Diagram  
Show on Diagram

Persons who routinely enter area to be fumigated  
(employees, visitors, customers, etc.)

List of people:	

Name and phone numbers of company officials:

Names	Phone #'s (day & night)

Emergency phone numbers of local health, fire, police, hospital, etc.:


Emergency Response Plan:

Reviewed Emergency Response Plan with employees

If Fumigating a Truck Trailer (piggyback), rail car or other:  
(For In-Transit Fumigation)

Verify that training has been offered to receiving company  
 Verify that written notice has been given to receiver along with the Applicators Manual

Review Applicator's Manual and MSDS:

<input type="checkbox"/>	Phostoxin pellets & tablets	EPA Reg. No. 72959-4 Tablets, 72959-5 Pellets
<input type="checkbox"/>	Phostoxin Pre-pacs	EPA Reg. No. 72959-8 Prepac Rope, 72959-9 Prepac Tablets
<input type="checkbox"/>	Fumi-Cels/Fumi-Strips	EPA Reg. No. 72959-6
<input type="checkbox"/>	Magtoxin Pre-pac Spot Fumigant	EPA Reg. No. 72959-7
<input type="checkbox"/>	Delta Furnex	EPA Reg. No. 72959-10
<input type="checkbox"/>	ECO2FUME or VAPORPH3OS	EPA Reg. No. 68387-7
<input type="checkbox"/>		EPA Reg. No. 68387-8

# Fumigation Management Plan

**Application:**

Product Used:

Phostoxin pellets & tablets	EPA Reg. No. 72959-4 Tablets, 72959-5 Pellets
Phostoxin Pre-pacs	EPA Reg. No. 72959-8 Prepac Rope, 72959-9 Prepac Tablets
Fumi-Cels/Fumi-Strips	EPA Reg. No. 72959-6
Magtoxin Pre-pac Spot Fumigant	EPA Reg. No. 72959-7
Delta Fumex	EPA Reg. No. 72959-10
ECO2FUME	EPA Reg. No. 68387-7
VAPORPH30S	EPA Reg. No. 68387-8

Rate of Application

Rate:
-------

Commodity Temperature or Ambient Temperature

Temperature:
--------------

Humidity or Commodity Moisture

Humidity or Moisture:
-----------------------

Wind Speed

Wind Speed:
-------------

Volume of the Structure (cubic footage)

Volume:
---------

Sealing Procedure:

List sealing procedures and methods: (If building or structure has been treated before, review previous FMP)

Warning Signs Posted:

Warning signs with EPA Reg. No., protected from weather
---

Minimum Exposure Period:

Minimum Exposure Period:
--------------------------

Special Aeration Requirements

--

Other Tasks:

Label and MSDS available
Emergency Response Plan reviewed
Documented training of all applicators and handlers
Minimum of two applicators (if entering structure)
Confined Space Entry Compliance
All Safety Equipment Available: List the equipment:

Personnel:

Confirm in writing that all personnel in and around the structure and/or area to be fumigated have been notified prior to application of the fumigant. Use a checklist showing that each employee has received notification and attach to FMP.

# Fumigation Management Plan

Personnel Continued:

- Instruct all fumigation personnel to read the Applicator's Manual concerning the hazards that may be encountered, the selection of personal protective equipment (PPE), including detection equipment
- Confirm that all personnel are aware of and know how to proceed in case of an emergency response reporting
- Instruct all personnel on how to report any accident and/or incidents related to fumigant exposure. Provide a telephone number for emergency response reporting
- Instruct all personnel to report to proper authorities any theft of fumigant and/or equipment related to fumigation
- Establish a meeting area for all personnel in case of an emergency

Special Notes:

Fumigation Management Plan Prepared By: \_\_\_\_\_  
Company: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone Number: \_\_\_\_\_


For monitoring fumigations, use pages 5 and 6 for individual or daily applications and attach or keep in a file with the Master FMP (Pages 1-4)

# Fumigation Management Plan

## Fumigation Monitoring: Efficacy and Worker/Public Safety

For multiple fumigation applications, Make copies of Pages 5 & 6 and attach to the Master FMP. Worker exposure and aeration monitoring must be performed for every application, or at least on a daily basis and documented. Each fumigation may have different monitoring requirements.

### Post Application: Efficacy Monitoring

Monitoring: Monitoring is necessary for efficacy  
Monitor periodically during the exposure period to assure gas concentrations are maintained for efficacious control  
Note: Efficacy monitoring is not mandatory

#### Monitoring Log: (During Exposure Period)

Application Date:	
Application Time:	
Efficacy Monitoring	Readings (ppm)
Application Date:	
Application Time:	
Location in structure:	

Efficacy Monitoring	Readings (ppm)
Application Date:	
Application Time:	
Location in structure:	

Efficacy Monitoring	Readings (ppm)
Application Date:	
Application Time:	
Location in structure:	

Efficacy Monitoring	Readings (ppm)
Application Date:	
Application Time:	
Location in structure:	

### Post Application: Worker & Public Safety

Watchmen provided when structure cannot be secured

Monitoring Log: Monitoring of phosphine concentrations must be conducted in areas to prevent excessive exposure and to determine where exposure may occur. Document where monitoring will occur. Show on Diagram on Page 1

#### Monitoring Log:

Application	Readings (ppm)
Date:	
Time:	
Location:	

Detection Equipment Used:	
If levels above 0.3 ppm, corrective actions must be taken:	Readings (ppm)
List corrective actions:	
Date:	
Time:	
Location:	

Note: Worker exposure monitoring is mandatory

# Fumigation Management Plan

Post Application: Worker & Public Safety

Exposure Period	Readings (ppm)
Date:	
Time:	
Location:	

Exposure Period	Readings (ppm)
Date:	
Time:	
Location:	

Exposure Period	Readings (ppm)
Date:	
Time:	
Location:	

Aeration	Readings (ppm)
Date:	
Time:	
Location:	

Aeration	Readings (ppm)
Date:	
Time:	
Location:	

Aeration	Readings (ppm)
Date:	
Time:	
Location:	

Aeration Commencement:

<input type="checkbox"/>	Certified Fumigator Available	
<input type="checkbox"/>	Temperature at aeration commencement:	
Licensee:		
License Number:		
Date:		
Time:		
Fans Utilized	Type:	

Final Aeration:

<input type="checkbox"/>	Levels are 0.3 ppm or below
<input type="checkbox"/>	Remove warning placards
<input type="checkbox"/>	Inform employees that area is clear and allow re-entry
	Final aeration readings taken by:
Date:	
Time:	
Licensee or Trained Applicator:	
License Number (if licensed):	

Sample FMP Prepared By:  
Cardinal Professional Products 2004