Fumigation Management Plan

1. An FMP is an organized, written description of requirements to help ensure a safe, legal and effective fumigation. It will assist you in complying with pesticide product label requirements.

2. It must be completed prior to actual treatment.

A. Planning and Preparation
Obtain and read (study!) a copy of the fumigant label.

1. What is the purpose? Insect control     Rodent Control     Other

2. Is the space to be fumigated a steel grain bin?_____ If not, what is it?_________________

3. Acquaint yourself with the site and the commodity:
   a. The general layout - a map of the bin site with special note of the following:
      - particular areas of interest - fire or combustion hazards, copper or other sensitive materials (electric motors) that should be protected from phosphine gas
      - Location of utility service connections - emergency shut-offs
      - Location of nearest phone
      - Fire number, if assigned
   
   b. Identify those who may frequent the site ____________________________________________

   c. The commodity_______________________
      storage situation________________________________________
      condition ____________________________________________________

   d. Any previous treatment of this commodity?______ With what?____________________

   e. Emergency phone numbers:
      Fire dept ____________________ Police/Sheriff___________________
      Hospital or EMT _______________________________

   f. Check, mark, and prepare points of fumigation application if you must enter the structure.
      Doors_______________ Hatches _________________ Other _____________

   e. What are the exposure time considerations?
      1. Name of product used:_____________ Form:  Pellet        Tablet         Gas Bag

      2. Minimum fumigation time: _____________ Grain Temperature:__________
         Grain moisture: __________________

      3. Down time required to be available:_______________________

   4. What are the aeration requirements?

   5. What are the cleanup requirements, if any?

f. Calculate the dosage to use:
   1. Cubic feet calculations:
2. Structure sealing capability and methods:

3. Label recommendations:

4. Past history of fumigation in this structure:

5. Fumigant/commodity exposure time required considering:
   - Commodity_______________________________
   - Volume________________________________
   - Temperature______________________________
   - Sealing capability__________________________________
   - Wind_____________________________________________

B. Personnel

1. All personnel involved, in or around the area to be fumigated, must initial this form indicating they understand the area is to be fumigated, the precautions they must adhere to, how to report an accident or incident, how to report a theft of fumigant or of fumigation equipment, and where the appropriate meeting place for all personnel in case of an emergency:

   ______________ ______________ ______________ ______________

2. All personnel actively involved in the fumigation must initial this form indicating they have read the applicators manual, the product label, are aware of the hazards involved and of the personal protection equipment available.

   ______________ ______________ ______________ ______________

3. All personnel actively involved in the fumigation must initial this form indicating they are aware of and how to proceed in case of an emergency

   ______________ ______________ ______________ ______________

C. Monitoring

1. Safety
   a. Where and when will monitoring for phosphine (phosphide) take place?

   ______________

   b. Where and how will monitoring be recorded to include times and levels?

   ______________

   c. Was monitoring continued throughout aeration and levels recorded?

2. Efficacy
   a. Were appropriate gas concentrations maintained throughout the fumigation period?________ What readings were obtained and where were they recorded?

D. Notification

1. List all local authorities and emergency personnel that must be and have been notified that fumigations is/are about to occur with tentative dates and times:

   ________________________________________________

   ________________________________________________
2. List emergency procedures if phosphine levels exceed dangerous levels:

E. Sealing Procedures
1. List procedures used to insure the bin(s) are properly sealed and will remain intact until the fumigation is complete:
   How to be sealed:__________________________________________________________
   How to keep intact:________________________________________________________
   Length of time required:___________________________________________________

2. Where and how will warning placards be placed on every possible entrance? ________
   _______________________________________________________________________

F. Application Procedures and Fumigation Period
1. Who all will be involved in this fumigation? Always work in pairs!
   ____________________________________________________________

2. How will the fumigant be applied?_________________________________________
   _______________________________________________________________________

3. How will the area be secured to prevent entry by unauthorized persons? _______
   _______________________________________________________________________

4. Initial that all electric lights are turned off and all non-essential electric motors are both turned off and protected from the fumigant:__________________________________

G. Post-Application Operations
1. Initial that you have and will use a suitable gas detector be3fore reentry into a fumigated structure:
   ____________________________________________________________

2. How will appropriate written records of monitoring to determine completion of aeration be obtained and maintained?
   ____________________________________________________________

3. Who will remove warning placards when aeration is complete?_________________
4. Who is to be notified when aeration is completed? ________________________________
Application Procedures for Farm Bins

1. **Obtain and read (study!) a copy of the fumigant label, Applicator’s Manual, MSDS and related safety materials!**

2. Can sensitive equipment (copper winding in motors) be adequately protected?________
   
   How will it be protected?____________________________________________________________

3. Can this bin be fumigated effectively? _________ Can it be completely sealed?________
   
   How will it be sealed?_______________________________________________________________

   Can the fumigant be contained at the appropriate concentration for the required time?______

4. Is this bin located in an area where workers or bystanders could be exposed because of leakage from the bin?____________________
   
   What monitoring will be done to confirm leakage?____________________________________

   List the authorities to be notified when and where you will be fumigating:

   ___________________________  _________________________  __________________________

5. What are the dimensions of the bin/grain to be fumigated?____________________________________
   
   Show your calculations to determine the amount of fumigant to be applied to the bin you described above:

6. Describe the method(s) of distributing the fumigant in the grain:

7. Where and when will warning placards be placed?

8. Following aeration how will fumigant levels be monitored for safety?

9. How and when will a protectant be applied to prevent reinfestation?