

# WHY CONSIDER FUMIGATION?

## Fumigation Can Be a Beneficial Tool in Your IPM Toolbox

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Fumigation can be a cost-effective approach in pest management programs for certain commodities and food processing facilities, and in other situations, it may be an effective consideration for emergency situations. In cases where an elusive infestation of insects or rodents is intolerable, fumigation is a great tactic to stop certain persistent problems. Another advantage to fumigation is that they provide a reset of pest populations to zero so that a sustainable integrated pest management program can maintain acceptable conditions and prevent future infestations. For these reasons and the ability to do fumigations with less down time, fumigation can be a very beneficial part of the modern pest management toolbox.

### HOW A FUMIGATION TREATMENT WORKS

It is important to get a professional fumigation assessment. Some of the first things to evaluate are pest identification, the circumstances of the infestation and site conditions. When time is a factor, there are ways to limit the scope or timeframe of a fumigation to help minimize expense and disruption to business operations, reducing valuable downtime.

Fumigation is the ultimate tactic to penetrate into the most protected harborage, within equipment, and sometimes into packaging, products and commodities, to kill all life stages of insects and rodents. Fumigants are distinguished from other pesticides by being active in the gas phase (i.e. fogging materials) rather than liquid aerosolized droplets. At the conclusion of a fumigation treatment, the fumigant gas typically diffuses back into the atmosphere, leaving behind no meaningful residue. In the atmosphere, fumigant gasses become diluted to harmless concentrations and are broken down to ordinary elements by factors such as ultraviolet light. There are different fumigant gasses particularly suited for specific pest organisms and situations.





### **REQUIREMENTS, MONITORING & SAFETY PRECAUTIONS**

All fumigations fundamentally require certain temperatures and sustained gas concentrations throughout the target space. This requires spaces to be adequately sealed to hold gas, whether it be a sealed structure, truck trailer, barge, railcar, bin, processing equipment system or something encased under a gas-tight tarp. Fans are often used within fumigated spaces to help achieve distribution and penetration of effective concentrations. Sensitive gas monitors are used to measure concentration and to assure the quality of treatments throughout the space. In addition to holding gas, allowances need to be made for a thorough and safe aeration of the fumigant.

Safety is a huge aspect of fumigations. Fumigants, when used by experienced and highly trained fumigators, have an excellent safety record. Regulatory requirements associated with fumigations are extremely robust in order to help ensure safety and proper usage. Many steps and techniques are utilized to prevent applicator, client personnel and the surroundings being exposed to fumigants. Gas detection instruments are used to ensure atmospheres are safe for re-entry. Extraordinary safety precautions extend to the transportation of fumigants and any waste disposal. Needless to say, fumigations require an expert assessment and planning process.

### **FOCUS ON PREVENTION FIRST**

It is important to remember that as great as it is for eliminating all life stages of pests, fumigation has no residual efficacy. Endeavoring to get to the root of the problem is critical. Take advantage of the reset afforded by a fumigation to maximize the performance of a solid Integrated Pest Management (IPM) program. A wide variety of strategies can be utilized to minimize down time and the associated expense. Strive for pest prevention. Finding and correcting the source and root cause of pest problems is the most effective approach to prevent infestations. There are often structural deficiencies making exclusion difficult and creating pest harborage. Sanitation practices may need to be improved to help break pest life cycles and to deprive pests of food and harborage. Monitoring and inspection programs are critical toward helping you stay on top of potential pest risks and allow for rapid action when needed.