

HEAT TREATMENT

Perspectives from the Pest Management Industry

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TERMS USED

- HEAT STERILIZATION
- HEAT FUMIGATION
- BAKE-OUT
- ANY OTHER TERMS?

Sterilization

Complete destruction of all forms of microbial life, including bacterial spores.

Fumigation

To apply smoke, vapor, or gas to especially for the purpose of disinfecting or destroying pests

Are pest management companies aware of the possibilities of using heat for managing pests?

HEAT TREATMENT

- Residential
 - Termites
 - Other Wood Destroyers
 - Roaches

HEAT TREATMENT

- Commercial
 - Stored Product Insects
 - Flies

Other areas of opportunities

- Silo's
- Pallets
- Wooden artifacts and museum pieces
- Stuffed animals
- Mattresses/ Furniture

Areas where fumigation is not feasible or may be risky....

- Facilities attached to offices, close to schools, etc
- Silo's within a structure
- Organic facilities
- Pieces of sealed equipment where gas will not penetrate (transfer lines?)

How are pest management companies currently doing heat treatment?

- Some do spot treatments with small heaters
- Some sub-contract to heating companies
- Some act as consultants for the facility (monitoring, fumigating products, spot application of pesticides)

What kind of information is needed?

- Economics
- Types of buildings that can be heated
- Heat source
- What happens to the product?
- Who picks up the liability?
- What about insurance?

What kind of information is needed?

- Impact on electrical equipment
- Where are the heat sinks?
- How does heat work in different facilities?

Eg. Dairy, cheese plants, poultry houses, etc

Are heat treatments safe?

WHY DO FOOD FACILITIES HIRE
PEST MANAGEMENT
COMPANIES?

PEST MANAGEMENT COMPANY

- **Specialized, trained full time employees**
- **Regular, scheduled appointments**
- **Inventory headaches**
- **Insurance, Licensing, Certification**
- **Keeping up with updates**
- **Responsible for screw ups**

IN-HOUSE PEST MANAGEMENT

- **Knows the food business and plant**
- **Quality assurance**
- **Knows the inside players**
- **Can pick out the “nooks and crannies”**
- **Control over the person**

Why do we need a Pest Management Company for a heat treatment?

- **Experience**
- **Familiarity with the facility being treated.**
- **Know where the pests are hiding**
 - Walls
 - Ceiling
 - Cracks in the floor
 - Expansion joints
 - Product
 - Hollow support columns

Limitations for the Pest Control Industry

- **Knowledge of the Heat treatment process**
- **Liabilities involved**
- **Economics of heat**

Insurance

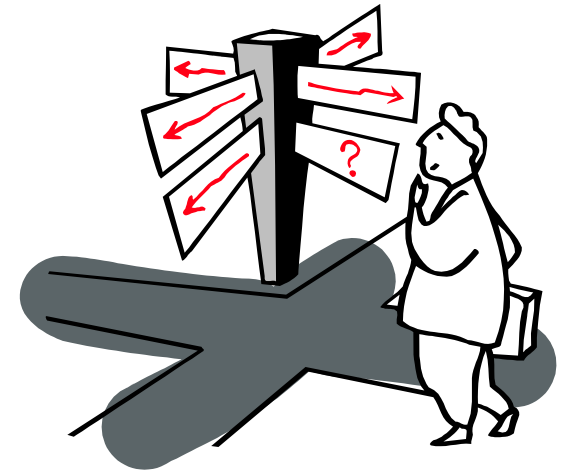
- **Some insurance companies will not continue coverage to a facility when the sprinklers are turned off**

Heat treatment vs Fumigation

- Many variables involved
- Each treatment is a learning process
- Lack of technical support
- Higher levels of heat can damage equipment

- Easier to figure out
- Companies that supply the fumigant provide support
- Higher gas concentrations do not cause any damage

- Will Methyl Bromide actually be phased out?
- What are the alternatives?



PROFUME IS COMING.....

The Waiting Game!!

How are pest management companies dealing with the impending phaseout of Methyl Bromide

- **Stepping up the IPM program**
 - Improved sanitation
 - Rectifying building design flaws
 - More reliance on IGR's, monitoring programs

Research needed...

- **Impact of heat on**
 - Equipment
 - Commodities
 - Containers
- **Different species**
- **Different life stages**
- **Heat tolerance**

Information on...

- **Cost analysis (energy, labor, etc)**
- **How to heat up rooms, walls, parts of equipment?**

The Future in heat treatment for the pest management professional

- **Small, highly specialized treatments**
- **Spot heat treatments**
- **Role as an advisor/consultant**

Any Questions?

