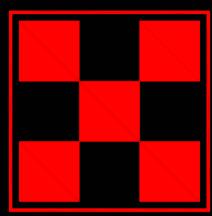
Ralston Purina Company

Larry Dean

Pet Food Facility Davenport, Iowa

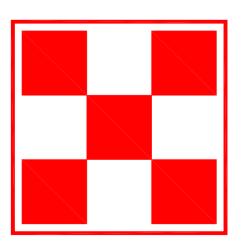






General Plant Information

- Original buildings built in early 1900's.
- Ralston purchased the facility in 1927 from Kellogg's.
- Largest Ralston Purina Manufacturing / Distribution facility.
- 352 R.P.Co. Associates .
- 1400-1700 tons per day.
- Davenport manufactures 35 different products.
- Total tons budgeted FY'00 = 380,000.
- Full service to Central and Midwest regions.
- Responsible for customer base covering 13 states.
- Customer volume averages 96 truckloads per day.



Introduction

- Larry Dean Product Safety Coordinator
- The use of Integrated Pest Management approaches and spot heat treatments as alternatives to Methyl Bromide fumigations.

Topics of discussion today

- Integrated Pest Management strategy for Ralston Purina Co., Davenport, Iowa plant.
- Spot heat treatments at the Davenport, Iowa plant.

History

- Pest control then.....
 - Methyl Bromide
 - Phosphine, 3 week schedule @ 14 a year.
 - Plant foggings, 3 week schedule @ 14 a year.
 - Minor inspections of plant. Mostly fighting fires.
 - Weekly shut down clean up.
 - Heat Treatments began 5/ '93.

History cont.

- Pest control now.....
 - ◆ No Methyl Bromide since 8/'96.
 - Phosphine, max of 3 spot treatments a year. No fumigations in the Pet Treats dept. since 5/ '95.
 - Plant foggings as needed, 5 for the year 2000. Included IGR foggings.
 - ◆ IPM introduced in '95.
 - Major inspections of plant.
 - Weekly shut down clean up done by the same employees' each week as well as ongoing daily efforts.
 - Heat Treatment program expanded. Now have 20 heat carts.

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Integrated Pest Management strategy for Ralston Purina Co., Davenport, Iowa plant.

- Requires complete and thorough inspections.
- Requires continual communication.
- Follows 10 non chemical methods of Pest control.
 - Sanitation, exclusion, harborage removal, harborage denial, environmental alterations, interception, trapping and monitoring, vacuuming, temperature control, and lighting.

Highlights of IPM

- Sanitation makes up 80% to 90% of a good pest control program. My input in this area is a scored audit that is utilized by all areas of the plant to determine which areas should receive extra attention.
- Requires a higher level of knowledge i.e. insect identification, insect habits and what is attracting them to an area. As Dave Mueller says, "Start with the Insect First".

Spot heat treatments at the Davenport, lowa plant.

- We have 12 spot heat treatments of our plant scheduled for this year. This allows for hitting each area a minimum of 3 times and keeping the life cycle disrupted.
- You have in your workshop manual a hard copy of the heat treatment presentations we gave in this workshop, This is a mini how – to guide. Ref. Page 6, 9-11.
- Spot heat treatments have cut our dependency on chemicals and they can work for you as well.

Real Life

- Get the equipment you need to begin your heat treatments.
 Chemical reduction can pay for it in some cases.
- Pick an area to start with.
- Set up your heat treatment as you would a fumigation.
- Heat, heat, heat.

Equipment required for heat treatments

Heaters



How to spot treat areas or equipment during production





How to spot treat areas or equipment during production





What This Means

- The use of an IPM strategy and spot heat treatments gives a more complete management of pest than you can ever get with a Chemical bandage.
- These programs require a higher level of knowledge in handling pest and a commitment from every level to make it happen.

Next Steps

- Determine if your situation or plant layout would lend itself to spot heat treatments.
- Determine how many heat carts you need to rotate the critical areas of your plant.
- Could possibly rent heaters for the first heat treatment, once you see the results you'll want to set up your complete program and rotation.
- Are there any questions at this time?