



Pests: Preventing Rather than Chasing

At Mims Meat Co. in Texas, an Integrated Pest Management program keeps insects and rodents away from the plant before they can get in.

Pest control in the meat processing environment can be a thorny issue. The conventionally effective approach — killing unwanted critters with a pesticide — is the least satisfactory of all solutions. No food plant wants to introduce extraneous, poisonous chemicals on premises unless absolutely necessary.

But just as in many other situations, the best defense is a good offense. A proactive program to keep pests away from a facility is much more effective than chasing them out once they're inside. The way to do that is to eliminate access to food, water, and harborage that are attractive to insects or rodents.

"If you don't give pests a reason to be there, they shouldn't come in," says Dennis Renfro, HACCP coordinator at Mims Meat Co.

Mims Meat is a family-owned processor occupying a fenced-in compound in an old industrial neighborhood on the east side of Houston, Texas. The main plant, about 40,000 square feet, dates from 1961. The property also includes a single-story house converted into offices, an equipment garage, and two other outbuildings. It is bounded on the front by a freeway and on the west by undeveloped woods.

These physical details were important factors to consider when Mims contracted with Orkin Exterminating Co., Atlanta, Ga., for Orkin's Integrated Pest Management (IPM) services. The IPM approach stresses non-chemical methods for eliminating and preventing pests in a given environment. IPM techniques include the biological (growth regulators or parasites), mechanical (traps or exclusion), and even cultural (focusing on better sanitation to prevent pest-conducive conditions). Because there are so many variables among processing plants—from location to climate to the condition and age of the building—each program is customized to the individual facility and its surroundings.

For Mims Meat, which last year rang up \$33 million in sales to wholesale and retail customers, from quick-serve restaurants to the county jail, IPM encompasses a gamut of strategies moving from the outside in, from perimeter protection to protocols for waste disposal on the plant floor.

The program begins at the property line, where exterior rodent bait stations are deployed at 50-foot intervals around the chain link fence. "We placed the bait stations around the fence to avoid drawing an initial burst of rodents from another property," says Frank Ruczynski, who, as the Orkin service manager assigned to Mims, visits the plant once a week. "We want to stop them before they get too far on the site."

The bait stations, which are tamper-resistant so that non-target animals (such as feral cats or dogs) can't get into them, serve as monitoring devices as well as for pest management. "If we have a hit, then we know we've got some rodent activity in that area," Ruczynski continues. "We'll document that and continue to monitor to make sure the problem is taken care of before it has a chance to spread."

Closer in, IPM relies on a combination of prevention and eradication to keep pests at bay. Most external preventive measures are "common-sense" precautions, says Zia Siddiqi, Ph.D., a board-certified entomologist and Orkin's quality assurance director: removing vegetation touching the building; eliminating any water accumulation; sealing openings, cracks, and crevices; covering drains; and installing screens on windows and automatic closers on doors.

Unbaited mechanical traps (either glue or snap traps) are another non-

chemical part of the mix. These are located every 20 feet around the inside perimeter, with special attention to the loading dock area. "If something comes in off a truck we have traps on each side of the doorway, so we'll get it no matter which way it goes," Ruczynski says.

The plant has two main kinds of interior spaces: the production floor, which processes primarily beef and pork, along with small quantities of lamb and veal; and a warehouse where frozen and dry goods are stored. While pests are more of a concern in the dry area, says Renfro, IPM strategies are in place in both.

"A key question in a meat processing plant is how garbage and rendering are handled," says Dr. Siddiqi. "Waste-handling has to be a closed system. Non-edible debris is generally prone to fly infestations, and it's critical to take care of it in a way that doesn't promote pest infiltration."

Mims Meat has strict protocols for waste management and disposal. According to Renfro, processing waste is placed in barrels marked "inedible," and a green denaturing agent is poured on top so it cannot be used for anything else. The barrels are covered to minimize odors and prevent unwanted access; they are also stored in a cooler, where the controlled temperature serves as a deterrent to insects. A rendering company picks up the carefully contained waste once a week.

Because incoming product arrives preboxed, primarily in cardboard and plastic, the plant generates a large quantity of dry waste that is handled separately. All the packaging is returned to the box after product is unwrapped and removed. Instead of being collected in an outdoor dumpster, which can be a fertile breeding ground for flies in the Texas heat, the material is taken out of the plant to the on-premises incinerator as needed during the day.

"This keeps the plant floor clean and picked up. There are no places on the outside for anything to hide," Renfro says.

Mims' 101-person workforce also participates in the overall pest management program by adhering to the stringent cleanliness standards in force in the

meat processing plant. "Being careful what they bring into and out of the facility, wearing lab coats and booties—all these things help us, too," says Bill Stepan, Orkin's Houston branch manager.

Employees understand they have a role to play as well, not only in their clean-up chores but doing things like closing doors and making sure they don't move mouse traps carefully put in place.

Ultimately, successful pest management is a two-way street. "Without cooperation from the customer, you don't win the battle," Siddiqi observes.

And how goes the battle?

"We've caught a few mice, but almost all of them have been on the outside," says Dennis Renfro. "We haven't had any kind of problem on the interior," he concludes. Mp



Keep Out: An Integrated Pest Management program includes common-sense practices such as sealing openings, cracks, and crevices.



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