Pest Control and Food Safety

Even Pest Control Is Changed by FSMA 2
5 Common Ways to Lose Points on Your Pest Control Audit 5
The Pest That Came in From the Cold 6
Sanitation Is Pest Control 8

Start ▶
Pest management programs in the food & beverage processing industry are increasingly influenced by food safety audits and government regulations. Between the two-year-old FDA Food Safety Modernization Act and third-party audits that comply with the Global Food Safety Initiative (GFSI), there are more rules and more prescribed steps to follow. And a lot more record-keeping.

Just this January, FDA expanded the requirement for hazards and analysis and critical control points (HACCP) programs to food processors that previously were not impacted by the requirement. In the agency’s Jan. 16 addition to the Federal Register (www.gpo.gov/fdsys/pkg/FR-2013-01-16/html/2013-00125.htm), problems with both pests and pesticides are called out as contributors to food safety incidents in the recent past.

Pest control has always been a part, although largely implied, in federal food safety requirements, at least since the 1938 Federal Food, Drug & Cosmetic Act, says Zia Siddiqi, director of quality systems for Orkin LLC (www.orkin.com), Atlanta. “But now the FDA has become more specific about how pest infestation is a part of food contamination. And now the FDA has more resources and its own power to shut down plants,” he says. As the agency extends the HACCP requirement, “pest control clearly should be a part of your HACCP program,” he says.

In another read of the January expansion of FSMA, “Pest management in the future will pay heightened attention to production transport vehicles, loading dock and non-food storage areas, facility maintenance deficiencies that create pest and microbial harborage and utilization of pest-sighting logs as part of pest management trend analysis,” says Jerry Heath, product manager and staff entomologist for Industrial Fumigant Co. (www.ind-fumico.com), Lenexa, Kan.

Rodent management is one of those areas that has seen some significant changes. Rodent bait packaging, distribution and labels were revised in the past two years in response to concern for exposures to children and non-target animals.

“Mitigation of non-target animal exposure had the most impact on the food processing industry,” Heath continues. “Label revisions in 2011 limited most outdoor rodenticide placements to within 50 ft. of buildings. A number of shortcomings were identified in EPA’s directive and, in remarkably fast action, the labeling directive was revised to within 100 ft. of broadly defined structures. Rodenticides with this new labeling were on the market by late 2012.”

“Old-fashioned fence line baiting is prohibited unless within 100 ft., but the current labels have sufficient flexibility to allow rodenticide protection for the diverse kinds of facilities and outdoor storages food processors utilize,” he continues.

GFSI-recognized programs are another huge motivator for better pest management programs. “In some ways, GFSI will have more impact on pest control than FSMA,” says Siddiqi. While FSMA considers pest control a general recommendation of a HACCP program, “All the GFSI-recognized programs have very specific requirements for pest control,” he says.

One change, thanks to most programs certified by GFSI, is the placement and spacing of rodent devices. Most pest management programs in the past followed a formula, placing them every so many feet, but most popular audit standards compliant with GFSI now allow for more flexible device placements based on known threats, ongoing inspection and history of activity.

“There have been examples where numbers of rodent control devices have been dramatically reduced, and pest management service has evolved to a more general inspection routine,” says Heath.

But many facilities in the food & beverage industry are still governed by audit standards requiring a formula-based device placement scheme – or the plants lack trend data to support a reduction in device numbers. So it’s best to check with your auditors for what is allowed. Also, many facilities are just more comfortable with a conservative program.

Correct and efficient identification is the first step to solving any pest challenge. Today, pest control experts are turning more and more to digital technology, specifically digital microscopes and digital photos as a reliable means for pest identification, says Patricia Hostel, technical director of McCloud Services (www.mccloudservices.com), Hoffman Estates, Ill.

“Digital technology such as there allow entomologists, field personnel and plant managers the ability to work together to quickly and accurately identify pests of concern without sacrificing employee, product and facility safety,” she says. Also inside the plant, for widespread pest control processors should consider the debate between fumigation and fogging. Both approaches have their proponents. Neither leaves any residual chemical on surfaces, which in most cases is a benefit but does not provide long-term killing power.

Fumigation probably is a more effective method, but it requires a shut down of whatever work area is being fumigated. Fumigation penetrates all cracks and crevices and provides a high degree of certainty that every bug in the room is dead. But it also penetrates packaging and machines. Fumigation also has been dealt some setbacks by the EPA, which de-listed methyl bromide, probably the most popular fumigant. Other effective chemicals also have been removed.

For fogging, chemicals are sprayed in controlled areas. There is less penetration. The chemicals provide a quick kill, but dissipate more rapidly than fumigation, so down-time is greatly reduced. Sequential fogging treatments can eliminate or reduce the frequency of fumigations.

Heath notes that fogging can be done by pest control personnel or by a fixed fogging system.
As an Orkin Man, I can tell you which pests carry the most bacteria and which ones will eat into your inventory. That’s because my career with Orkin started in a classroom, studying everything from FIFO to flour beetles.

I will start with a comprehensive inspection to diagnose your pest problem. Then, I’ll help you build a custom program for maximum protection and make sure your pest control is ready when the auditor arrives.

Whether it’s in our labs or at your loading dock, I know how important it is to be scientific. After all, food safety starts with science. Your pest control should, too.

Call 800-ORKIN NOW for a free inspection and customized recommendation.

With the ever increasing demands of our daily jobs, sometimes it’s easy to lose sight of pest management details that can make a big difference during a third-party audit, especially with the current focus on the Global Food Safety Initiative (GFSI). That’s why Orkin Commercial Services and NSF International teamed up on myauditprep.com – a simple and free, web-based tool that counts down the days until your next audit and sends you reminders and tips on important milestone dates.

While developing the tips for myauditprep.com, Orkin and NSF inspectors identified five of the most common ways food facilities lose pest control points. With pest control counting for up to 20 percent of a total audit score, be on the lookout for these common but avoidable traps.

1. No documentation of changes to service or materials since contract was signed. After a contract is signed, it is easy to forget to document changes in service or materials that evolve over time. If any elements of the current service or materials used do not match the original signed contract, be sure you have documentation of the changes and why they were made. It is also a good idea to include a written “roles and responsibilities” list that delineates the responsibilities of plant personnel vs. the pest management provider’s personnel.

2. No record of actions taken as a result of the annual pest control assessment. Your auditor likely requires that an annual facility assessment be performed by your pest management provider. Be sure your records include corrective actions indicated by the assessment AND proof that these corrective actions were actually taken. Not closing this loop properly is a common way to lose points on your third-party audit.

3. Missing proof of training for pest management professionals. Auditors may require any or all of the following. Your pest management professional may be trained in all of these, but do you have the proof on hand? This is a commonly missing piece.

4. Pest sighting and trend reports don’t correspond to corrective actions taken. Be sure any pest activity recorded in a pest-sighting log and/or in trend reports have corresponding documentation of corrective actions taken to address them. It is common for facilities to lose points for having one without the other.

5. Records of light trap and pheromone trap inspections, but no records of insects found or corrective actions taken. Auditors typically require all services provided to light and pheromone traps to be documented, including the types and quantities of insects found in light traps. Many facilities omit documentation of the types and quantities of insects found in insect traps. Even if they include this data, they still could lose points if they do not have proof of corrective actions taken based on light trap inspections. Be sure you have documentation of all three: 1) services performed, 2) findings of each service AND 3) any actions taken.

Looking for more? Visit myauditprep.com and enter the date of your next third-party audit. We’ll send you – and anyone else you choose – timely pest control reminders that will help you on your path to heightened audit scores.
Seasonal approaches to pest control can prevent a cold-weather invasion.

By David Phillips, Technical Editor, Food Processing

Est control is an important consideration for food manufac-
turing facilities at any time of the year. But as summer ends
and winter approaches, food plant managers need to change
their focus and strategy if they want to keep insects and rodents
out of their plants.

“Depending on geographical location, winter can provide some relief
from exterior pest pressures. However, certain parts of the U.S. will see
year-round pressures from outdoor insects,” says Patricia Hottel, techni-
cal director at McCloud Services (www.mcloudservices.com), Hoffman
Estates, Ill.

“There are definitely some seasonal pest differences in the temperate
climes. There are several types of fall invading pests to expect as sum-
mer comes to a close. Several of these pests invade structures in search of
a place to overwinter,” she says.

In agricultural areas, the harvesting of crops can spark changes in pest
behavior, even before the harvest begins to drop. And there are other
seasonal forces at work.

“Ants are one of the insects we see early in the spring in northern cli-
mates,” Hottel says. “Fifth flies, small flies and stinging insects like yellow
jackets, hornets and paper wasps, peak in July and August.”

Pests that can become more of a nuisance in the fall/harvest season include:

• Rodents, including field mice
• Boxelder bugs
• Brown marmorated stink bugs
• Foreign grain beetles
• Multicolored Asian lady beetles
• Cluster flies

“Each season brings different opportunities for pests to find food, wa-
ter and shelter within or around food processing, packaging or handling
facilities,” adds Dale Bauerkemper, vice president of operating companies
at Wil-Kil Pest Control, Wisconsin, and Holder’s Pest Solutions, Texas.

Both are part of Copesan (www.copesan.com), Menomonee Falls, Wis.

Solutions typically include blocking ingress and chemical treatments, but there are some new technologies in the market.

“Although chemical applications can offer some immediate relief,
environmental control methods that drop the relative humidity levels,
removing the water pests need to survive, are required for real long-term
resolution,” says Bauerkemper.

Paying attention to landscaping also can limit opportunities for
outdoor critters and insects to find their way indoors. The latest tech-
nologies for eradication are focused on disrupting reproduction, says
Hottel. McCloud has recently introduced such a product that helps
control moths.

“The pheromone mating-disruption products for Indianmeal moths,
and related species are relatively new and making a dramatic impact on
the way we perform stored-product moth control,” Hottel says. “These
products are working exceptionally well in impacting stored-product moth infestations.”

In pest control, an industry that has traditionally relied heavily on
hazardous chemicals, these kinds of innovations represent a way to go
“green.” They are also especially pertinent for food-industry clients, who
must be more careful than other companies when it comes to internal
environmental issues.

“Just as our world has seen technology advance exponentially in re-
cent years, being green today is merely one small step compared to what
green, sustainable practices will mean five or 10 years from now,” says
Bauerkemper. “While we may still need pesticides, the components and
use of them could be completely different.”

Food processors are accustomed to working with very specific govern-
ment regulations and, for food manufacturing pest control, an example of
this can be found in the area of documentation.

“The third-party food safety standards and regulatory changes are
having the greatest impact on documentation requirements,” Hottel
says. “Documentation has always been important but it has taken a new
emphasis with more detailed information required. For example, trap
captures have always been required documentation but we see increase
demand for proof of written protocols and detailed documentation show-
ing that the protocol has been followed.”

Another regulatory change has eliminated the use of a specific
fumigant – methyl bromide. “There are still some use patterns that
have not been suitably replaced by alternative fumigants or strate-
gies,” Hottel notes. “The food industry, pest management manufactu-

ners and pest management industry have been working to continue

To achieve food safety at HACCP standards, pest control has to go beyond just
reactive pest treatment. That’s why Terminix® Commercial takes an Integrated Pest
Management approach.

Our technicians work with your staff to develop a strategy that denies pests
food, water, harborage and access. We help teach your employees to spot pest
activity. And when treatment is necessary, we go beyond the norm, deploying
resources like RapidFreeze® for chemically sensitive areas. From cockroaches
and flies to rodents, birds and more, Terminix Commercial understands that food
safety is not just about getting pests out. It’s about keeping pests out.
Sanitation / Pest Control

By Stoy A. Hedges, BCE; Terminix International

Good sanitation practices are an important component for a higher standard of living and drive many of the regulations in food storage, production, and preparation as well as medical care and many other areas of modern life. Good Manufacturing Practices mandate food production facilities create and maintain comprehensive sanitation programs. HACCP is designed to prevent biological, physical, and chemical contaminants from adulterating food products, and the sanitation program plays a major role in any facility’s HACCP program.

To most people, sanitation means cleaning up or keeping areas clean or sanitary. To those in food production, a sanitation program is much more. To those who are responsible for pest management, sanitation is pest control.

Pest management is a prerequisite program under GMPs, and a food facility may choose to conduct their pest program in-house or contract some or all of it to a professional pest control company. It is obvious why pests need to be controlled, as their presence can compromise regulatory. To those in food production, a sanitation program is much more. To those who are responsible for pest management, sanitation is pest control.

Pest management is a prerequisite program under GMPs, and a food facility may choose to conduct their pest program in-house or contract some or all of it to a professional pest control company. It is obvious why pests need to be controlled, as their presence can compromise regulatory. To those in food production, a sanitation program is much more. To those who are responsible for pest management, sanitation is pest control.

Pest management is a prerequisite program under GMPs, and a food facility may choose to conduct their pest program in-house or contract some or all of it to a professional pest control company. It is obvious why pests need to be controlled, as their presence can compromise regulatory. To those in food production, a sanitation program is much more. To those who are responsible for pest management, sanitation is pest control.

Pest management is a prerequisite program under GMPs, and a food facility may choose to conduct their pest program in-house or contract some or all of it to a professional pest control company. It is obvious why pests need to be controlled, as their presence can compromise regulatory. To those in food production, a sanitation program is much more. To those who are responsible for pest management, sanitation is pest control.