

GLOBAL FOOD SAFETY INITIATIVES AND ITS IMPACT ON PEST MANAGEMENT PROGRAMS IN NORTH AMERICA

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Abstract Traditionally food safety involving pest control in commercial food establishments in North America has been the responsibility of each food manufacturer or retail establishment and then subject to any audit or inspection by regulatory agencies. Third party food safety auditors also played an active role as they were and are retained either on a voluntary basis or if and when required by their customers. During this phase, the government regulatory agencies have requirements for controlling pests and preventing food contamination. The third party food safety auditing agencies also have their specific guidelines for pest control. The food safety and pest control requirements became more stringent after the introduction of Hazard Analysis and Critical Control Point program. The National Pest Management Association in the United States created standards that met most of the requirements making it easier for service provider to deliver a pest management program. The Global Food Safety Initiative (GFSI) was created in May 2000. GFSI contains criteria for food standards including pest management. An organization may comply with GFSI specifications in the United States or Canada or elsewhere. With the introduction of GFSI the North American pest management service providers are challenged to quickly adopt the new requirements of these audit criteria. This article reviews how Orkin has been impacted and has modified its documentation that is required to satisfy global food safety audit criteria.

Key Words IPM, Food Safety Auditors, Standards for Food Plants, Orkin

INTRODUCTION

Food safety as related to pest control is regulated by the Food, Drug and Cosmetic Act of 1938 in the United States and the Food and Drug Administration's Food Code, and by Canadian Food Inspection Agency. Besides these regulatory standards, there are multiple food safety audit standards for pest control

The Global Food Safety Initiative (GFSI) framework, launched in Europe in May 2000, has recently taken on added importance. In 2008, Wal-Mart became the first nationwide grocer in the United States and Canada to adopt GFSI standards and mandated that its suppliers adhere to them. GFSI does not undertake any accreditation or certification activities. However, the GFSI guidance document contains commonly agreed-upon criteria for food standards against which any food or farm assurance standard can be benchmarked. In short, an organization complies with GFSI specification in the United States if it adheres to one of the following standards among others: 1) International Featured Standards; 2) Dutch Hazard Analysis and Critical Control Point (HACCP) standards; 3) Safe Quality Food (SQF) 2000- standards, managed by the Food Marketing Institute, which approves third-party auditors to perform certification audits; and 4) British Retail Consortium (BRC) approves third-party auditors. Each of these standards has its own auditing rules. The BRC and SQF are typically the most commonly used standards for the food processors in the USA and Canada.

Earlier to the introduction of the GFSI in North America, the National Pest Management Association in cooperation with leading third party food safety auditors developed a set of standards for food plants, in its third edition now. American Institute of Baking's guidelines were significantly revised in 2009. It is one of the most commonly used comprehensive voluntary food safety standards. The introduction of GFSI requirements and the revision of AIB standards imposed a challenge to the pest management service providers in North America to modify their processes and documentation of the pest management programs and to meet these new upcoming food safety requirements.

GFSI and Its Impact on Orkin's Gold Medal Program

The launch of the GFSI requirements has impacted the commercial pest management service provided by Orkin, a leading commercial pest management service provider in North America. It is anticipated that other commercial

pest control service providers are also experiencing similar challenges. GFSI's Pest Control requirement in its guidance document states "The standard shall require that a system be in place for controlling or eliminating the risk of pest infestation on the site or in the facilities" under the Good Manufacturing Practices (GMP) D13 and E14. While under Good Agricultural Practices (GAP) A11 19, GAP A1 20 it states, "The standard shall require that, when primary production is carried out in indoor establishments, the recommendations of the Codex Alimentarius Recommended Code of Practice – General Principles of Food Hygiene CAC/RCP1-1969, Rev 4-2003, and specifically Code of practice for fish and fishery products CAC/RCP 52-2003 (and for Meat CAC/RCP 54-2005) be followed." It does not describe the details, while the other standards that are acceptable under GFSI have more in depth pest control requirements, for example SQF and BRC. AIB's revised consolidated standards for inspections, prerequisite and food safety programs² have significant details under Section 4. The impact and challenges of these audits have been described earlier by Siddiqi (2009, 2010).

Orkin launched its Gold Medal Program about 12 years ago to meet the pest management elements of various food safety requirements not only for the regulatory agencies (United States Department of Agriculture, Food and Drug Administration, and State and local agencies) but also for various voluntary organizations (AIB, NSF/Cook and Thurber, 2011) and often its customer's own requirements including global quality standards, in fact it was the first commercial pest management program to obtain an ISO9000 certification because of its extensive documented quality system. Currently Orkin services more than 1000 food processing, food warehouse and food distribution centers in North America under its Gold Medal Program. Orkin also recognizes its Gold Medal customers annually, by giving Gold Medal Integrated Pest Management (IPM) Partner Award, to those who embrace the IPM principles by subjecting their program for an unbiased evaluation by a team of external IPM experts. The details for these IPM success stories are published on Orkin's website.

The changes that Orkin has to make in its documentation and processes, of its Gold Medal Program, is an example of how the GFSI has impacted the pest management service delivery and required documentation in North America. These changes in documented processes at Orkin are described below:

Initial Assessment. Before the implementation of an IPM program the facility must be inspected by a trained and qualified person to assess the existing and potential pest infestation and then design the program.

IPM Contract. A signed contract between the facility and the external IPM providers holds both the provider and the facility accountable for effective pest management activities. Besides a legal service agreement between Orkin and its customer, a separate IPM Contract is required summarizing the scope of service, roles of Orkin and its customer, list of documentation, and who to contact in case of emergency or when changes to the program is made.

Annual IPM Plan. A written IPM Program ensures the facility has effective controls and processes in place to minimize pest activity. This document has the following components: age and description of the facility; what are the potential pest risks; what should be done in case a pest is found; what pests have been found in the last 12 months; training plan for the facility employees, and how often the reviews are conducted.

Annual IPM Assessment of the Facility. An annual assessment of the facility provides an evaluation of the IPM Program to ensure that it is effective. An annual IPM assessment documents the comprehensive inspection findings from an IPM trained and qualified person. It reports the findings of pest activity, any sanitation, housekeeping and building maintenance issues, documentation trail to show service details, and follow up action for both Orkin and its customer.

Quarterly Site Inspection Report. This report shows the findings from an inspection conducted by the Branch or Service Manager on a quarterly basis. There are different forms for different types of facilities, for example food manufacturing/processing, warehouses, pharmaceutical plants, etc. Findings from each inspection are reviewed with the pest management/food safety responsible manager for the facility.

Annual IPM and GMP Training Records. The facility protects its food products by verifying that IPM service providers, whether in-house or contractors, are qualified. Various new food safety audit standards require an annual IPM and GMP training, especially for the pest control service provider. It's just not only for the service specialist but for any personnel involved in either inspecting or servicing.

Threshold Limits. Describes the threshold limit set by the customer. Different pests in different sections of the facility may have different threshold levels. It also describes the corrective and preventive action that will be taken either by Orkin or the customer.

Pest Activity and Trend Analysis. Documentation of pest sightings and activity are reviewed and used to identify and eliminate areas where pest activity is observed, and to document Corrective Actions taken. This is not a new requirement but the pest activity trend must be analyzed, reviewed and the information used for modifying the pest program. Often the electronic data capture system gives the trend report.

Corrective Action Report. Any pest activity, findings about sanitation, housekeeping, and building maintains initiated a corrective action that must be followed wither by Orkin or its customer is documented when completed.

List of Approved Pesticides. While there are several national food processors that have their own approved pesticide list, others who do not need to mutually establish a list of pesticides that could be used at their facility. In any case the pesticide application data must be maintained as well.

Additionally, Orkin in cooperation with NSF and Cook and Thurber have jointly prepared a check list that can be used by either their existing customers or any other facility that would like to ensure that their pest management program is ready for these food safety audits by registering on a website¹¹.

CONCLUSION

Since Orkin has implemented these changes in its Gold Medal Program documentation, its customers are successfully meeting the GFSI requirements thru any of its accredited auditors.

REFERENCES CITED

- FDA Food Code 2010.** <http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/ucm188149.htm> (March 12, 2011)
- American Institute of Baking. 2011.** <https://secure.aibonline.org/php/ecommerce-catalog.php?catalogNbr=06-1500&site=1> (March 14, 2011)
- British Retail Consortium. 2011.** <http://www.brcglobalstandards.com/> (March 11, 2011)
- Canadian Food Inspection Agency. 2011.** <http://www.inspection.gc.ca/english/reg/rege.shtml> (March 12, 2011)
- Duggal, N. and Z. Siddiqi. 2008.** Global Quality Standards and Pest Management Service. Proceedings of the Sixth International Conference on Urban Pests. William H. Robinson and Daniel Bajomi (Editors). 41-50.
- Federal Food and Drug Cosmetic Act of 1938.** <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm> (March 12, 2011)
- Food Marketing Institute. 2011.** <http://www.fmi.org/> (March 11, 2011)
- Global Food Safety Initiative. 2011.** <http://www.mygfsi.com/information-resources/gfsiguidancedocumentsixthedition.html> (March 8, 2011)
- Hazard Analysis and Critical Control Point Certification. 2011.** <http://haccpcertifications.com/tag/dutch-haccp> (March 14, 2011)
- International Featured Standards. 2011.** http://www.ifs-certification.com/index.php?page=home&content=public_content&desc=ifs_standards (March 2011)
- My Audit Prep Com. 2011.** <http://www.myauditprep.com/> (March 11, 2011)
- National Pest Management Association. 2011.** http://www.npmapestworld.org/documents/Foodplantstandards2010_000.pdf (March 14, 2011)
- NSF/Cook and Thurber. 2011** http://www.nsf.org/business/NSF_cook_and_thurber/index.asp (March 14, 2011)
- Orkin's IPM Partner Award. 2010.** <http://www.orkin.com/press-room/united-states-best-earn-2010-gold-medal-ipm-partner-award> (March 14, 2011)
- Siddiqi, Z. 2009.** Many Auditors, One Standard. Universal guidelines help simplify pest control audit prep. Food Quality, 16 (2): 38-42.
- Siddiqi, Z. 2010.** You, Pests, and a Food Safety Audit. Know the basics of GFSI, SQF, and BRC. Food Quality.com. Exclusive Online Content. http://www.foodquality.com/mag/04012010_05012010/q_04012010_OC1.html (4/13/2010)
- Safe Quality Food. 2011.** <http://www.sqfi.com/> (March 11, 2011)

