

TOTAL HYGIENE MANAGEMENT: THE IMPORTANCE OF PEST CONTROL IN HACCP-CONCEPTS AND HYGIENE ACCREDITATION

DAGMAR ENGEL

DE Training and Consultancy, Im Frontal 33, D67693 Fischbach, Germany

Abstract - The food industry is undergoing major changes following the introduction, by law, of HACCP. Many food companies are going along the road of having their HACCP system externally verified/accredited/certified and, more commonly, are seeking Hygiene Accreditation which includes such pre-requisites as pest management. The paper explains briefly Hygiene Accreditation, pre-requisites and what is required of the PCO in terms of increased professionalism. The emphasis is on the importance of pest control in the food industry and stresses the need for change in the pest control industry to parallel and keep pace with the changes in the food industry.

Key words - HACCP, accreditation, hygiene management, pest management, CCPs

INTRODUCTION

Hazard Analysis Critical Control Point (HACCP) in spite of being around for a long time and being part of the EU legislative requirement for the food industry for several years is still often misunderstood and badly implemented. Unfortunately this misunderstanding of HACCP often occurs in the Pest Control Industry.

This paper describes, briefly, the important part Pest Management has to play in HACCP and Total Hygiene Management systems and stresses in particular: 1) the preventative approach to pest control in food premises; 2) the pre-requisite nature of pest management in a HACCP programme, and 3) the role of PCO as consultant, trainer and partner to the food industry.

HACCP

HACCP is a system developed for the food industry which, if properly implemented and operated, will assure the safety of the product and thus protect the health of the consumer. It deals with the three types of hazards - microbiological, chemical and physical - by identifying the points in the process which are critical to food safety (Critical Control Points or CCP's) and establishing procedures for monitoring the CCP's and correcting any deviations from laid down criteria. Before implementing a HACCP system certain pre-requisite programmes should be in place and operating effectively, such as staff training, cleaning and disinfection, personal hygiene and pest management.

Pest management pre-requisite

A pre-requisite programme is simply something which must be in place before a HACCP system can be implemented. Many people make the mistake of thinking that pest management in itself is a Critical Control Point or that HACCP can be applied to pest management. HACCP is something which is applied to the food process in itself no matter what type of food premise or operation - pest management is not part of the food process but is quite simply a means of eliminating or reducing pests which may cause a hazard in the food. In certain circumstances, for example in some storage areas, it may be considered by the HACCP team that the presence of pests is "critical" to food safety and in such cases the absence of pests becomes a CCP and pest management becomes the means of controlling and monitoring pests in that part of the food process. This can lead to the complicated perception that every bait station has to be regarded as a Critical Control Point. Still we must not forget that pest management is NOT a CCP but is simply the means of controlling and monitoring a CCP. This situation is, however, rare and normally pest management is dealt with as a pre-requisite as stated above.

Looking at a CCP means we are looking at a point in a food process where we need to control, monitor, take corrective action and document something. Pest management is different - we would expect it to operate throughout the food process. We would not, for example, expect better rodent control in a kitchen than in a storage room. We would expect it to be equally good in both places. Equally we wouldn't expect the inside surfaces of a refrigerator to be cleaner than the inside surfaces of a freezer. We would expect them to be equally clean. Whilst the level of hygiene training may differ according to the responsibilities of a food handler we would expect all food handlers to be well trained to the required level and so on. Pest management is, therefore, important throughout the food premises - indeed throughout the food chain, and not just at a CCP here and there. That is why it is a pre-requisite for HACCP.

Hygiene accreditation

Hygiene accreditation is seen as the way forward by many companies in the food industry, and not just the big companies. Many food companies, having introduced a HACCP system, like to have their system checked by an external auditor who then gives them a document from a recognised body which either verifies, certifies or accredits their system - sometimes this is done as part of their existing ISO 9000 scheme. Most food companies, however, recognise that there is more to food safety than simply a piece of paper which states that the HACCP system is in place and working - they want a holistic approach which includes all the elements required in a Total Hygiene Management System. What are these elements? Usually they would be along the following lines: Management controls, Management review, Documentation, Hygiene training, Personal hygiene, Inspection and testing of raw material, Control of work in progress and the final production area, Prevention of cross-contamination, Maintenance of production machinery and equipment, Microbiological criteria, Waste disposal, Premises, Cleaning schedule, Foreign body and glass control, Pest control, Hygiene auditing, Incident reporting, Distribution, Sub-contractors, Separate sites, Admission to site procedure, and Customer complaints.

Under each of these of these headings there are a number of conditions to be met before Accreditation is given. The Royal Society of Health (RSH) in London from whom the above headings are quoted run a number of schemes for the food industry and the food packaging industry and their conditions for Pest Control in a food company are as follows:

The conditions that have to be met are: 1) Responsibility must be allocated to a senior manager, 2) Adequate measures must be taken to prevent pests from entering buildings, 3) Appropriate measures of insect control, such as fly screens, electronic fly killers, rodent baits etc. must be provided, properly placed and maintained, 4) A reputable pest control contractor must be employed unless the company has equivalent expertise and resources. In the case of a company-based pest control service, the operation must be managed by an appropriately experienced supervisor, 5) The contractor must be provided with a contract specification which requires the contractor to report to the responsible manager before and following visits to the premises. An exit meeting should take place within an agreed time schedule to review findings of the visit, 6) The contractor must provide the company with a written report of any pest control activities undertaken on the premises and must provide, where needed, written recommendations of action required to solve pest related problems, 7) All instances, as seen by any employee, of pests within buildings or, in the case of rodents, within the site perimeter must be immediately reported to the responsible manager, 8) Hygiene auditing must encompass routine surveillance of buildings and perimeter for pests, 9) A manual must be available which will contain all the relevant information of the pest control programme

Another Specification of Pest Control Requirements can be obtained from QA International Certification Ltd. (QAI Ltd./D. Engel, 1997). Essentially hygiene accreditation ensures that everything possible is being done to ensure the safety of the product and thus ensures a healthy, happy customer by providing them with a safe product, reduces customer complaints, reduces product wastage, gives staff an agreeable and motivating place to work, ensures compliance with food safety laws, and gives a good due diligence defence in law.

ROLE OF PEST CONTROL

Some might say there is no new role for pest controllers in this scenario - PCO's all work to this kind of standard. Sadly, our experience of auditing against the above standards has shown us that in almost every case the pest control company came nowhere near meeting the above requirements in spite years of IPM and in spite of them writing such things on one page, often illegible, reports as hygiene inspection carried out according to HACCP with no details about what this actually entailed or indeed what it actually means, I certainly don't know what it means!

What then should the pest control company be prepared to do in a food company in the Millennium: 1) advise on proper pest prevention, 2) use appropriate monitoring procedures for all anticipated pests, 3) use appropriate elimination methods, 4) supply and have correct documentation, 5) have a system of mapping and numbering of baiting/monitoring points, 6) correctly select, use and site all chemical and biological substances, 7) have properly trained operatives not only in pest management but also food hygiene and basic HACCP, 8) regularly inspect all monitoring points followed by written reports showing any action which has been taken, 9) agree with customer about working times, types of materials used, customer's expectations from the PCO, PCO's expectations from the customer, 10) have the knowledge and ability to advise the customer on the potential hazard to his product arising from the pest management operation, 11) have ability to train customer's staff on basic pest management and where this fits into the HACCP system, and 12) have the knowledge and ability to take part in the HACCP team's deliberations and provide constructive advice on pest management.

CONCLUSION

Pest management has generally speaking come a long way from the days of the vermin killer and many pest control companies provide an excellent service which more than meets the requirements outlined above. Many companies, however, are not as professional as they should be and they let down not only themselves but their customers and their colleagues. The rapidly changing world of the food industry needs to have alongside it a rapidly changing pest control industry prepared to provide a first class, transparent, documented service. A chain is only as strong as its weakest link and the pest control industry cannot afford to be the weak link in the food chain.

REFERENCES CITED

- Bryan, F. 1992.** Hazard Analysis Critical Control Point Evaluations, 1992. WHO, Geneva ISBN 92 4 154433 3.
- Engel, D. 1996.** HACCP, Lebensmittelhygiene und Schädlingsbekämpfung - Zusammenspiel der Zukunft ? Der praktische Schädlingsbekämpfer 7/96.
- Engel, D. 1998.** Lebensmittelhygiene und HACCP im Training. LVT II/98.
- Engel, D. 1998.** Food Packaging Hygiene Management, International Food Hygiene Vol 9 Number 5.
- Engel, D. 1999.** Lebensmittelhygiene und HACCP in der Praxis - von der Eigenkontrolle zum ganzheitlichen Hygienekonzept. K. i. A., Vincentz Verlag. 4/99.
- Engel, D. 1999.** Hygienemanagement - ein Konzept muß leben. K. i. A., Vincentz Verlag. 5/99.
- Engel, D. and D. MacDonald. 1996.** A Guide To HACCP - Hazard Analysis For Small Businesses. ISBN 1 871912 90 3.
- QAI Ltd./D. Engel 1997.** Specifications of Pest Control Requirements. Quality Assurance Int. Ltd., Billingham.
- The Royal Society Of Health Accreditation Scheme.** Hygiene and Product Safety Management Systems for Food and Beverage Processing Companies. RSH House 38A St George's Drive, London SW1V 4BH.
- The Royal Society Of Health Accreditation Scheme.** Hygiene and Product Safety Management Systems for Food Packaging Manufacturers. RSH House 38A St George's Drive, London SW1V 4BH.
- The Campden Food & Drink Research Ass.** UK HACCP: A Practical Guide. Technical Manual No. 38.
- WHO, Geneva, 1996.** Report of the WHO Workshop on Training in HACCP Training Aspects Of The Hazard Analysis Critical Control Point System (HACCP).