

ABSTRACT

The rapid and continuing growth of global population, together with the movement of people to cities, has placed great demand on agriculture for increased food production. To meet this demand, farmers have resorted to greater use of fertilizer, insecticides, herbicides, growth promoters and other agricultural and veterinary chemicals. Large quantities of chemicals are employed to prevent or reduce damage and destruction by insects, rodents and other vermin. They are also widely used in achieving satisfactory levels of hygiene in food processing plants. In addition, a wide range of additives including preservatives, colors, flavors, emulsifiers, antioxidants and artificial sweeteners are used in the manufacture of processed foods.

While the use of these materials is deemed necessary to satisfy the food requirements of growing world population, consumer awareness of their right to purchase food that is safe has increased significantly over the past few years. So, the manufacturer has to pay much attention to making food safe, therefore, providing brand quality protection as well as consume protection.

HACCP (Hazard Analysis Critical Control Points) is a system of food control based on prevention by identifying where the hazards are likely to occur in the process. This will facilitate the move towards a preventive quality assurance approach within a food business, reducing the traditional reliance on end product inspection and testing. Use of HACCP system should, therefore, give the growers, manufacturers, caterers and retailers confidence that the food they provide is safe. The culture that evolves through this approach makes it much simpler to progress to additional programmes such as quality improvement, productivity and cost reduction.

Manufacturers must consider many other requirements alongside HACCP in order to assure both the safety and quality of food produced. These requirements make up the HACCP support network such as good manufacturing practices (GMP) and supplier quality assurance (SQA) and other formal quality management systems such as ISO 9000 accreditation schemes. ISO 9000 is a quality management system aimed primary at preventing and detecting any non-conformity during production and distribution of product to the customer, and by taking corrective and preventive action to ensure that the non-conformance does not occur again. ISO 9000 means that the product meets its specification 100% of the time. Therefore, in managing food safety, the highest degree of confidence may be achieved by

ensuring that the HACCP system is maintained 100% of the time by using the ISO 9000 approach to meet the specification (in HACCP terms, the critical control points)

This project covers development of HACCP safety assurance system in food industry and amalgamation with the ISO 9002 quality system that is prescribed above. The project helps to implement this concept for “ Daintee “ company Limited that produces confectionaries according to the ISO 9002 requirements which is used as a framework for their quality management system. Now, the company is well down the road towards ISO 9002 accreditation in near future.

Prior to the beginning of the project, it has been endeavored to cover a comprehensive literature review on HACCP, ISO 9000, food quality, food standards and food acts as well as confectionary industry and, finally, the integrated approach for using the above system, obviously for the management of food product safety and quality.

The methodology of the project was based on consultation, interviewing and observation, and the Codex Guidelines for Application of the HACCP system provided a foundation for the more in- depth HACCP project.

Planning and preparation, HACCP studies and plan development, amalgamation of HACCP with ISO 9002, implementing the HACCP plan and maintaining the HACCP system are the key stages of this project to obtain an effective safety assurance system. Here, almost all the elements of planning and preparation, HACCP studies and HACCP plan development are covered well and necessary action has been suggested for the amalgamation of HACCP with ISO 9002, which the management of the “Daintee: Ltd may view as a goal to be reached in no time.