

System Integration of OHSAS 18001 and ISO 14001 in BASO Co.

Overview

Established in 1970, BASO Precision Optics Ltd. is the first manufacturer for high-quality optic components in Taiwan. The company was taken over by Eastman Kodak in 1986 for manufacturing precision optic lenses. Currently, the major products of BASO are lens for digital camera, scanner, LCD projector, and CRT projector. BASO also provides professional consultation on optical system design, lens system prototyping, testing and production optimization to customer with satisfactory services. With about 600 employees, BASO has two manufacturing sites located in Taichung. The company is certified with ISO 14001 since 1996 and certified with OHSAS 18001 since 1999.

Prior to the establishment of the OHSAS 18001, the top executive of BASO clearly iterated that the ultimate purpose was to keep continual operation, maintenance and improvement of the system. Thus, through the implementation of standard-based management systems into the corporate business activities, the company hopes to pursue quality assurance, to reduce the environmental impacts as well as health and safety risks. The entire implementation process of OHSAS 18001 in BASO took eight months to complete. Basically, the framework and content of OHSAS 18001 is similar to those of ISO 14001 standard, except for the appropriate amendments affected on the titles and contents of regulations to accommodate health and safety features. The process was divided into three work phases; the work objectives and related matters of each phase are provided in the following:

The first phase started with the initial review for hazard identification and risk evaluation. The scope of the OHSAS 18001 is limited to the health and safety issues of the “workplace” of an organization; it does not cover those issues of the “products or services”. From technical point of view, identification of health and safety aspects is more difficult than that of environmental aspects. Therefore, OHSAS 18001 set more clear statements concerning the identification and evaluation of risks. Before the initial review actually started, various training endeavors such as personnel training, document interpretation, and orientation were conducted to specific employees; at least 12 hours of training regarding health and safety were required for each employee in the year of 2000. Documents used for initial review were integrated with existing ISO 9000 and 14001 documents. The initial review started with reviewing the relevant laws and regulations, corporate operations and processes. Upon completion of the initial review in the year of 2000, 14 significant aspects associated with various health and safety issues (including physical, chemical, and biological hazards) were identified; 10 objectives, 21

targets and management programs were set up to reduce the impact.

The second phase was the implementation of the occupational health and safety management system to provide an understanding of the rationality and applicability of the occupational health and safety management system. The internal communication within BASO was enhanced through seminars and intranet website. The external communication among the company, contractor and neighboring residents were conducted through conference, internet, and plant visits. It was also in this phase that ISO 9002 and ISO 14001 documents were integrated with health and safety management system documents. It was found that 5 procedures were similar with the quality management and environmental management procedures; 17 procedures were similar with the environmental management procedures; only 9 procedures were established specifically for the health and safety management system.

The third phase was rectification, audit and certification of the process. Internal audit training was conducted at this phase. Prior to the inspection of the certification body, an external audit simulation was conducted to help the departments discover and rectify system problems before the official inspection.

In 2001, 34 OH&S management programs were implemented in BASO. The total cost of implementation of ISO 18001 in 2001 was about US\$120,000. The breakdown of the cost is shown below:

Training: 2%

Measurement and analysis: 5%

Waste disposal: 40%

Certification: 3%

Equipments and hardware: 50%