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EVALUATION OF ENVIRONMENTAL IMPACTS BY ISO 14001 IMPLEMENTATION IN STAR CLASS HOTELS IN SRI LANKA

A dissertation submitted

By

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ABSTRACT

ISO 14001 is a widely used management system standard which is globally recognized and that specifies the requirements for establishing, implementing, maintaining, and continually improving an environmental management system within an organization. It provides a framework to effectively mitigate impacts to the environment while complying with regulations and enhancing the environmental performance. The present study empirically investigates the impact of implementation of ISO 14001 in star class hotels in Sri Lanka. The specific objectives of the study are, to identify the impact on the performance of solid waste, wastewater, smoke emissions and noise emission levels, before implementation of ISO 14001 and the performance of the same after ISO 14001 implementation.

The data was collected using convenient sampling technique and sample size was 32 Star class hotels in Sri Lanka which were certified by ISO 14001. A structured questionnaire was administered to collect the data. Out of the entire population a sample size of 12 hotels provided completed questionnaires and those 12 hotels were considered for the study. The data provided by hotels were evaluated and transferred to a Likert scale and the data were analyzed using SPSS version 25.0. Descriptive statistics, Pearson correlation coefficient and regression analysis were used to analyze the data. The environmental performance of solid waste, wastewater, smoke and noise were evaluated. Impacts to the environment were evaluated on land pollution, water pollution, air pollution and noise pollution.

The findings of the study revealed that the reduction of solid waste, air emissions and noise have a positive strong relationship with reduction of environmental pollution (land, water, air and noise pollution) ($r = 0.910, 0.774, 0.910, 0.910$ $p < 0.01$).

Moreover, the findings indicated that implementation of ISO 14001 has a reduction of environmental parameters (solid waste, wastewater, air emissions and noise) release to the environment and have a positive significant relationship with reduction of environmental pollution (land, water, air and noise pollution). Therefore, the study concluded that the ISO 14001 implementation has a positive impact on environmental performance. According to the findings, all hotels despite the star class ratings, should implement ISO 14001 to enhance the environmental performance and reducing the environmental pollution.