



**THE STUDY ON THE INTEGRATION OF RISK ASSESSMENT  
EVALUATION**

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I declared that this thesis is the result of my own work except for the ideas and summaries which I have clarified in the sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree.”

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## **ABSTRACT**

In general, risk assessment is a step that is taken to measure the risk towards employees or equipment well-being surfacing from hazards at work. Risk assessment plays an important part in keeping the work environment safe for everyone including the environment. This project aim is to incorporate the elements of the Environmental Aspect and Impact (EAI) with the Hazard Identification Risk Assessment and Risk Control (HIRARC) to produce an Integrated Risk Assessment (IRA) for the Engineering Services Department. Both of these evaluations are basically risk assessments which have been used to evaluate the safety and environmental elements of the working process. Two similar evaluation forms would promote waste of space and papers. A new risk assessment complete with appropriate Impact Analysis and Risk Assessment Ranking Criteria for evaluation have been designed and then proposed to increase efficiency and reduce waste in the office. The design of the new risk assessment table was based on the ISO14004:2004 guidelines for the EAI along with the guidelines for HIRARC that was prepared by the Department of Occupational Safety and Health (DOSH). Feedback by the means of a survey was conducted to assess the effectiveness of the new IRA for the end user. The results from the survey can be concluded that the new IRA is easier to understand, and is more efficient to work with compared to the current risk assessments. In conclusion, the new risk assessment has been able to be used as an alternative to the EAI and HIRARC risk assessments. This risk assessment can still be improved so that it can be used solely with out depending on other risk assessments.

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