# APPLICABILITY OF TOTAL QUALITY MANAGEMENT SYSTEM IN METAL QUARRY INDUSTRY IN SRI LANKA

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Degree of Master of Science in Project Management

Department of Building Economic

University of Moratuwa

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Dissertation submitted in partial fulfillment of the requirements for the degree Master of Science in Project Management

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#### **DECLARATION**

#### **Student Declaration**

I declare that this is my own work and this submission does not incorporate without acknowledgement any material previously submitted for a Degree or a Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously publish or written by another person except where the acknowledgement is made in the text.

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#### **ABSTRACT**

Total Quality Management (TQM) is a very important and significant management practice which used in the world industries. TQM is used for the total operation process of the organization and it talks about the all aspect which engages with the final outcome. Mining is the most historical engineering practice in this world and the world largest mining companies use the TQM in their companies to improve the quality of their product and services.

Usage of TQM in metal quarry industry at Kaluthara district in Sri Lanka is addressed in this report. Questionnaire survey was done to collect the data from mining engineers. The total sample was interviewed. This research used a quantitative analysis, RII method and the graphical illustrations to present the results. The results show a huge gap in use of TQM at metal mining. Lack of TQM knowledge and the lethargic attitude on TQM practices of the management are the main problems that have been identified.

Organizing the Lecture series, training programs, video training programs are recommended to address the knowledge and attitude problems. Development of TQM as a culture than a practice would be more effective in quality management in

metal quarry industry at Kaluthara district.

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Key words: TQM, Knowledge

### **DEDICATION**

This report is dedicated to my loving parents who got every possible effort to make me an educated and useful person to the world.



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### LIST OF ABBREVIATIOS

Abbreviation Description

ABC Aggregate Base Cores

AIV Aggregate Impact Value

AML Artisanal Mining License

B.C.E Before the Common Era

CQI Continuous Quality Improvement

EL Exploration license

GSMB Geological Survey and Mines Bureau

ICMM International Council on Mining and Metal

IML Industrial Mining License

University of Moratuwa, Sri Lanka.

ISO

Electro-International Standard of Organization

JIT WWW.libuseth Fink

LAAV Los Angeles Abrasion Value

LPSD Leading Practice Sustainable Development

OSHAS Occupational Health & Safety Advisory Services

PDCA Plan – Do – Check –Act

PPE Personal Protective Equipment

QA Quality Assurance

QC Quality Control

QMS Quality Management System

RII Relative Importance Index

SPC Statistical Process Controlled

TQM

## **Total Quality Management**

