## CENTRE OF STUDIES FOR QUANTITY SURVEYING FACULTY OF ARCHITECTURE, PLANNING & SURVEYING UNIVERSITI TEKNOLOGI MARA CAWANGAN SARAWAK

# THE ENVIRONMENTAL IMPACT OF QUARRY ACTIVITIES ON SURROUNDING RESIDENTIAL AREAS IN PULAI CHONDONG, KELANTAN

Dissertation submitted in partial fulfilment of the requirement for the award of Bachelor of Quantity Surveying (Honours)

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### ABSTRACT

Quarry activities is well-known as one of the activities that can contribute to Malaysia's economic growth. Some countries around the world have described the quarry as an activity that can help their economy growth, while others have described it as one of the activities that can harm the environment and habitat flora and fauna. This study looks into the health of residents and the environment in the area of quarry mining. The negative impact of mining activities, such as health issues, air pollution, and noise pollution are several factors influencing human well-being. Hence, the aim of this research is to investigate the environmental impact from quarry activities to residential area, identifying the perception of residents on quarry activities and the possible solution to minimise the impact of quarry activities to residential area. A quantitative research method is used and questionnaire which is through Google Form as the data collection tool to achieve this objective of the research. There are 30 respondents who answered the questionnaire that has distributed to residents that lived near quarry mining in Pulai Chondong, Kelantan. The questionnaire consisted of close-ended questions that need to be answered by respondents based on their knowledge and experience on the issue and impact of quarry activities to the residential area. The data analysis were used in this study are descriptive analysis. As a result, most of residents are aware and agree about the environmental impact of quarry activities to their residential area. Next, there are positive about this research which are most of the residents rarely had any health problem that due to air pollution and their residential area sometimes affected from quarry activities. Meanwhile, most respondents responded that the authority sometimes visited to the affected residential area and rarely conducts environmental monitoring and controls contamination. As conclusion, this research conducted give some useful result on possible solution to minimise the impact of quarry activities to the residential area in Pulai Chondong.

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#### **CHAPTER 1**

### INTRODUCTION

### **1.1 INTRODUCTION**

This chapter will elaborate the general overview of the research that will covering with the background of study, problem statement, research objectives, research questions, and scope of study.

### 1.2 BACKGROUND OF STUDY

Quarries are classified as one of the mining activities, but slightly different from mining activities. Mining is one of the processes carried out under or above land, where the word 'mining' itself refers to the extraction of metal and non-metal substances, while quarrying is open pit mining, which is carried out to extract rock and raw materials for construction purposes, where the word 'quarry' itself is traditionally used to refer to aggregate and sand (The Institute of Quarry, 2016). The Institute of Quarry (2016) also defined the word "mining" as an activity carried out under the land surface to extract minerals while quarrying is an area of uncovered mineral extraction and has a strong connection to blast and explosion.

Nartey et al., (2012) stated that quarrying is a process for the production of quarry products, such as rocks that can be found under or above the surface of the soil. Wan Zulasmin (2007) supported the fact that the quarry is one of the mining types in Malaysia.

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