# FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

### **DUST CONTAMINATION DURING BUILDING RENOVATION WORKS**

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**CENTRE OF SUDIES** 

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#### **ABSTRACT**

Renovation of the building is quite common in this country, and it has been a trend to the building owner and to extend and maximize the function of the building. Airborne dust is one of the problems encountered by workers and contractor during the renovation of building. Dust is a substance found in the air, usually it has a very small size and not visible to the human. There are many negative affects faced by workers and contractors of the building during renovation works is carried out, especially work involving a lot of dust. This study is carried out to identify the level of dust contamination during building renovation work and to identify the precaution use by the contractor for reduce the level of dust during renovation work. The research methodology for this project includes review of the literature, interview with the project contractor, and data collection through testing level of dust with dusttrak. The study is carrying out on five case studies which are Clinic Noor Hajar Padang Jawa, KFC Plaza Alam Central, Hailam Kopitiam Section 7, Masjid Section 16 Shah Alam and Library FSPU UiTM Shah Alam. From the study, the level of dust contamination is influenced by various factors, which is types of building renovation either closed or ventilated space, renovation area of the building either big or small and type of activity performed. All these factors affect the level of dust contamination in the workplace. This study can be used as guidelines to the contractor to make the building renovation work and is also useful to the building owner to ensure the safety of workers building renovation.

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 OVERVIEW

Airborne dust is one of the problems encountered by occupant during the renovation of building. Dust is a substance found in the air, usually it has a very small size and not visible to the human. It is also known as airborne dust, airborne dust is one of the contaminant that occurs in the gaseous from gases and vapours or as aerosol. Dust is usually generated from construction activities, such as when the workers perform demolish work.

Renovation is the meaning of the modifier building or remodelling a building a better and more comfortable as the intended use of the building. Renovation of buildings divided into two types consists of commercial buildings and residential building. Generally, all types of renovation of the building will generate the harmful dust. It arise from materials easily remove dust such as asbestos, cement dust and other. Dust will be produced through the work involving the destruction of an item in the building for example by hacking the brick wall; it will produce dust hazardous to workers and building occupants. If the dust problem is not taken seriously by the occupant and the contractor, it wills give bad effects to the occupant of the building, such as difficult to breathing and lung problems.

Nowadays, the people may not take attention on the contaminant of airborne dust generated during the renovation work, because of that, it will affect on human health. Due to the need, an awareness of the occupant and the contractor in this problem need to be addressed during renovation work. It is to ensure the safety and health of the occupant or workers.