A STUDY ON INDOOR AIR QUALITY OF OFFICE BUILDING

AHMAD IZZAT NAZMI MUHAMMAD
(2012208348)

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“I hereby declare that this academic project is the result of my own research except for the quotation and summary which have been acknowledged”

Student’s Name : Ahmad Izzat Nazmi Bin Muhammad
Signature : [Signature]
UITM No. : 2012208348
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Abstract

In modern day, people mostly adult living in indoor compare to outdoor due to working purposed. A result of a research from cdc.gov, 2014 indicate that people spent about 90% of their time indoor. The research also indicate that the air inside a building is more polluted compare to outdoor air. The problems arise when these indoor air quality affect the health of the occupants health. Therefore, three office building was studied in this research. In this studies, only one factor of indoor air quality is being focused which is dust in the air. By using appropriate equipment which is Dust Trak Meter, the air in the selected office room of case study building will be tested. Other than that, an interview to the occupant of the room will be conducted to get more information about the IAQ in the selected room. Finally, the data collected will be analyzed. The finding from the study shows dust concentration in each case study room are appropriate condition whereby room with renovation works represent the highest dust concentration. Follow up by the old office room and lastly the new office room that has lowest dust concentration. Thus, proper conclusion and recommendation will be provided to overcome the indoor air quality problems in the future.
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1.1 Introduction

Indoor Air Quality is referring to the quality of air inside a building and other enclosures. It covers many different types of environments and many different agents. Almost any chemical, particle, or biological element that can circulate in an indoor environment and cause irritation or health effect can be categorized as indoor air pollution. When indoor air pollutions occurred, the indoor air quality is said to be poor. Most of the sources of these agents are anthropogenic, but some are also naturally occurring. It is difficult to provide a comprehensive list that would be applicable to all indoor environments.

Poor indoor air quality can be caused by variety agents. Commonly known agents of indoor air quality are Radon, Formaldehyde, Asbestos, biological pollutants and secondhand tobacco smoke (Mid-Atlantic, 2014). These factors that commonly affecting the indoor air quality are usually found in old, new building and newly renovated building.