3736417 ENTM/M

: MAJOR : TECHNOLOGY OF ENVIRONMENTAL

MANAGEMENT; M.Sc. (TECHNOLOGY OF

ENVIRONMENTAL MANAGEMENT)

KEY WORDS

: SICK BUILDING SYNDROME / THE ENERGY

CONSERVATION BUILDING

KULLAPORN NOKCHAN: THE TREND TOWARDS SICK BUILDING SYNDROME AMONG PEOPLE WHO USE ENERGY CONSERVATION BUILDINGS. THESIS ADVISORS: AURAPIN EAMSIRI Ph.D., PISIT SUKREEYAPONGSE M.Sc., VANAWIPHA PASANDHANATORN M.A., 183 p. ISBN 974-664-092-1

This research studied the illnesses of people who used Energy Conservation Buildings. Personal illness data of people using Energy Conservation Buildings and those using another type of building were compared. This study was the primary statement of the standard of the indoor air quality and the indoor air pollution, which may cause the illness of "Sick Building Syndrome". At the same time, this study might lead to discover the illness data to control, prevent and manage the environment and improve the health of people inside these buildings. A questionnaire was distributed for this study. It included questions such as symptoms, type of symptoms, affect of the symptoms, and other personal primary data. The personal opinions and recommendations for building or office improvement were also studied in the samples of six buildings, three Standardized Buildings and three Energy Conservation Buildings. SPSS for Windows programme was used to compare the variance between these two types of buildings by t-test.

The results showed no significance difference in illnesses among the people who use the two types of buildings. However the people using a standard energy conservation building did have a higher percentage of sick building syndrome than the other type of building. The symptoms of sick building syndrome, cold or flu symptoms, sore throat, nose irritation, Nausea, Respiratory problems, neckaches, fever, and headaches were 20 percent higher. A rest or absence from those sites might relieve these symptoms. Consequently, this study could not conclude that the energy conservation building might cause sick building syndrome, but the personal behavior and the indoor air quality management were factors causing the sick building syndrome. This study might be the frontier and lead to the further diagnosis of this syndrome.