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RELATIONSHIP BETWEEN KNOWLEDGE AND PERCEPTION OF INTEGRATED WASTE MANAGEMENT DISPOSAL TECHNOLOGY AND ACCEPTANCE BY PUBLIC IN MPKJ

AHMAD SAIRI

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Name of Candidate : Ahmad bin Sairi

Candidate's ID No. : 2004192188

Programme : AS 990 Doctor of Philosophy

Faculty : Faculty of Applied Science

Thesis Title : Relationship Between Knowledge and Perception of Integrated Waste Management Disposal Technology and Acceptance by Public in MPKJ

Signature of Candidate : .....

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ABSTRACT

Planning and engineering for Integrated Waste Management (IWM) facilities requires some form of public participation in considering the types of technology to be adopted by the local authority. The study aims to identify the relationship between knowledge and perception on IWM disposal technology and its level of acceptance by the public in Majlis Perbandaran Kajang, Malaysia (MPKj). The data collected from 5 main development area of MPKj is hope to assist planners and engineers to locate, build and programmed the facilities in achieving the objectives of sustainable waste management. About 654 respondents were sampled through Likert-style structured questionnaires quantitatively and qualitatively to provide the perceptions and understanding on IWM disposal technologies, the acceptance of IWM facilities and technologies, choices of waste disposal technology and types of waste management technology that resolve the environmental problem. 6 knowledge components were identified in the model of relationship between perception and acceptance of IWM disposal technology; knowledge on information and disposal methods, knowledge on waste management issues, knowledge on participation and recycling, knowledge on fundamental waste concepts, knowledge on types of waste technologies and knowledge on the environmental issues associated to waste technologies. The Acceptance model shows key knowledge variable having greatest influence is knowledge on the environmental issue related to waste disposal activities. Acceptance of technologies is influence by the respondents' practices of waste collection and disposal, the understanding of benefits from waste facilities, attitudes and willingness to bear the cost of waste disposal. Components determining the choice of waste disposal technology include the knowledge on the advantages of disposal technologies and the needs and cause for waste treatment. Three components which determine the acceptance of waste technology are the concern of pollution, preferred distance of waste facilities and the order on choice of disposal technologies. This study confirms that the public were not fully informed on the fundamental knowledge on integrated waste management due to the failure of the local authority to disseminate factual and correct information on the current waste disposal technology. The current experience of inefficiency of waste services as well as poor management of waste contractors had

created doubt and sceptics by the public on the success of integrated waste management system. Thus the acceptance of waste disposal technologies by the public offered under the integrated waste management system is actually influence more by the misinformation provided by the third parties and not due to the disadvantages or environmental pollution from waste technologies.

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