A preliminary appraisal on the waste disposal management system in Malaysia — geological and hydrogeological perspectives

MOHAMAD ALI HASAN
Department of Geology
University of Malaya, 59100 Kuala Lumpur

The management and control of any type of waste disposal system will touch on several issues especially if the requirements for the protection of human health and environment are to be met. The three main sets of issues, among others, are (i) safe protection requirements corresponding to the nature of the wastes that are being managed, (ii) the available disposal technology, and (iii) government policy, regulations and conformance requirements. Landfills, wasted land-farms (open space), containment (former mining pools), and underground injection (abandoned) wells are some of the types of waste repositories; with landfills being the most common type of waste disposal. At the present time most waste disposal systems do not take prior consideration of the sources of the waste as well as the manner in which the waste should be handled. Therefore, many of the problems involved are 'buried' in the issues concerning the availability of proper specifications and general technical information only (say for example the geological and hydrogeological considerations relating to disposal criteria, assessment and standards).

In this presentation, an appraisal of the waste disposal management system in Malaysia (taking the Klang Valley as an example) will be highlighted. At the same time the paper will also touch upon the following themes:

i) Existing types of wastes and collection services
ii) Characteristics of wastes studied so far
iii) Evaluation of existing disposal system
iv) Assessment on the effectiveness of the existing legislation and regulations
v) Geological and hydrogeological perspectives of the existing disposal sites
vi) Alternatives and strategy for better waste disposal management system in Malaysia
vi) Conclusion and suggestions

Warta Geologi (Newsletter of the Geological Society of Malaysia), Vol. 18, No. 3, May-June 1992