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SANITATION FOR SITE AND SERVICE SCHEMES

- a technical and economic appraisal of sanitation alternatives for urban Kenya.

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Abstract:

This paper reviews some of the current sanitary engineering problems that result from the use of conventional waterborne sewerage in site and service housing schemes in Kenya. Three alternatives are proposed and are compared with the conventional sewerage system. These are: pour flush toilets and improved aqua privy toilets on small-bore UPVC sewers and improved ventilated pit latrines (ROECs) with both on - and off site sullage water disposal options. The study is based on a synthetic neighbourhood model and uses an improved household water supply service, employing automatic self-closing taps. The economic costing exercises have been "shadow priced" and are based on the average incremental cost method. The results of this brief study indicate not only that huge cost savings can be achieved with the combined use of modern materials and technique but that in addition the proposed alternatives are likely to perform better technically than the conventional system in low-income housing areas. The paper emphasises the need to establish demonstration projects from which lessons can be learnt and techniques further developed.