



EARTH BUND INVESTIGATION

harrisongroup
ENVIRONMENTAL

DATA SHEET

INTRODUCTION

Assessment of earth bunds surrounding above ground storage tanks is required as part of the Control of Major Hazards (COMAH) Containment Policy. In order to comply with the policy, the Harrison Group offers a professional site investigation and consultancy service to assess earth bund permeability, strength and durability should a leak from an above ground storage tank occur.

INVESTIGATION

We have designed and developed an innovative investigation method to evaluate earth bunds on sites where hazardous liquids are stored. These include refineries, docklands and chemical works.

Intrusive investigation is undertaken by drilling through the crest of the bund into the underlying soil and collecting undisturbed soil samples. This is done using a specialist slope-climbing rig, which is capable of climbing gradients of up to 40° unaided.

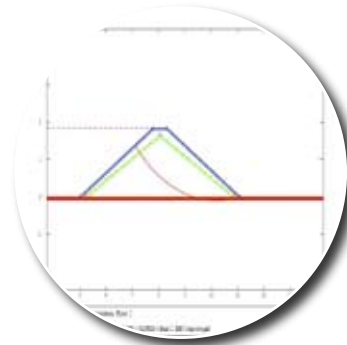


Using this technique, the following information is gathered for assessment of bund integrity:

- Soil type and classification and interaction with the underlying strata
- Bund height, width and profile
- In-situ and laboratory density
- Soil permeability
- Parameters for stability analysis

SLOPE STABILITY MODELLING

Laboratory and field data is used in conjunction with topographical data to measure bund performance with particular regard to stability. Various slope failure scenarios are assessed which give appropriate factors of safety.



Permeability and density data are used to assess the existing performance of the earth bunds and allow recommendations for improvement to be made.

EXPERIENCE

Harrison Group Environmental has over 20 years experience of working on oil refinery sites, fuel storage areas and docklands throughout the UK.

Successful investigations and slope stability modelling on sites to date have resulted in COMAH approval of existing earth bund integrity and agreement of remediation principles.

Our site engineers and technicians are fully qualified to carry out this type of work. They have completed specialist training for working on heavy industrial sites and hold relevant Client / Contractor National Safety Group (CCNSG) Passports, in addition to the Construction Skills Certification Scheme (CSCS) and relevant NVQ's.