

Some Aspects of Embankment Dams Constructed on the Mercia Mudstone

T. BLOWER, Mott MacDonald, Cambridge, UK

L. F. JARVIS, Mott MacDonald, Cambridge, UK

SYNOPSIS. The Mercia Mudstone is a widespread stratum in the UK, underlying large swathes of the Midlands and North West England, and outcropping in locations as diverse as Devon, South Wales, Lincolnshire and Carlisle. Unsurprisingly, a number of reservoirs are constructed on this stratum, mostly impounded by earth-filled embankment dams, and many of them fall under the remit of the Reservoirs Act 1975. However, with the proposed change in legislation, it can be anticipated that many more such reservoirs constructed with and/or on this material will fall under the Act.

This paper deals with the geotechnical challenges posed by dam construction on the Mercia Mudstone. It highlights some of the essential features of this formation using examples from the site of a proposed new reservoir in Lincolnshire, but also from some historical dams.