

## **Remedial grouting works to two dams in Hong Kong**

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**SYNOPSIS.** Tai Tam Upper and West Col Dams in Hong Kong had experienced substantial leakage over an extended period. Recommendations were made in the interests of safety for both dams to investigate and carry out remedial grouting works to reduce leakage to acceptable levels. Reference is made to their history and earlier unsuccessful attempts to reduce and control leakage.

The paper presents a brief history of the dams and gives details of the investigation and remedial grouting works carried out by the Design and Construction Divisions of Water Supplies Department (WSD), Hong Kong under the direction of the Author as Advisor to WSD. Types of grout and injection techniques to effectively to reduce foundation permeability are described. Reference is made to results of leakage monitoring as the works proceeded and to the results of monitoring since completion of the works. Grouting works were carried out at Tai Tam Upper Dam first (2005) followed by West Col Dam (2006).