ABSTRACT

PIPELINE MAINTENANCE AND REPAIR - A REVIEW AND
A CASE STUDY IN THE WATER AND SEWERAGE
AUTHORITY OF TRINIDAD AND TOBAGO

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This Project Report reviews the important aspects of pipeline maintenance and repair as it relates to a properly run water supply system. It first identifies the different piping systems such as transmission mains, distribution mains and service connections. It reviews the commonly available pipeline materials and focuses on pipeline maintenance in relation to its design and construction. The deterioration and failure of pipelines are discussed in relation to corrosion and corrosion control.

The report also highlights the importance of pipeline maintenance management and looks at the planning and scheduling of works, cost reporting and cost control. The repair, rehabilitation and renewal of pipelines are discussed highlighting the different methods involved. In addition, the report examines a case study in the Water and Sewerage Authority of Trinidad and Tobago where poor maintenance practices have lead to a high level of wastage. It finally makes a series of recommendations and presents a checklist for pipeline maintenance.