

Renewal of Potable Water Pipes

Pipeline Infrastructure Committee

Edited by

Mohammad Najafi, Ph.D., P.E.; and Mario Perez, Ph.D.

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PREFACE

The purpose of this manual is to provide engineers, water agencies, consultants, pipeline owners, and municipalities with a resource to use when considering a trenchless water pipe renewal project. This manual focuses specifically on renewing potable water pipes. The reader is referred to *Pipe-Bursting Projects*, ASCE Manual of Practice No. 112, for consideration of trenchless pipe-bursting and replacement approaches. The objective is to provide an updated and comprehensive review of the trenchless pipeline renewal methodologies for potable water pipeline applications, with emphasis on planning and construction operation. A set of references and standards is provided so that the reader can obtain further details on a particular subject. This document is organized to reflect the order in which a trenchless potable water renewal project is typically carried out.

This manual covers such topics as planning and construction requirements, cleaning and pre-renewal inspection, lining operation, safety, certification, and final inspection. Trenchless renewal methods applicable to potable water pipes are described in Chapter 5. In this chapter, important topics, such as background information, installation procedures, design considerations, and special installation requirements, are presented. The topic of condition assessment of host pipelines will be covered in a future ASCE Manual and Report on Engineering Practice.