Manual of Water Supply Practices

Geomembrane Floating Covers and Liners

for Potable-Water Reservoirs

M25

Fourth Edition

American Water Works Association

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Chapter 1

Introduction

PURPOSE AND SCOPE

This manual is intended to serve as a technical reference guide for designing, installing, operating, and maintaining geomembrane liners and floating covers for potable water storage reservoirs. Source information was gathered by reviewing and collecting the experience of designers, manufacturers, and owners of geomembrane products available to the water industry.

This manual is not intended to be a design handbook or the equivalent of an AWWA standard. Rather it should serve as a technical reference document to be used in conjunction with ANSI/AWWA D130, Geomembrane Materials for Potable Water Applications. The purpose of this manual is to recommend minimum design criteria and minimum operation and maintenance procedures for potable water reservoir floating covers and liners. Site-specific conditions should be evaluated by a qualified professional engineer and the recommendations adjusted accordingly to provide a comparable performance level.

Information in this manual may not apply to all types of installations or materials. In applying specific recommendations, the user must assume responsibility for accommodating a specific set of conditions.

DESCRIPTION OF FACILITIES

Geomembrane liners and floating covers can be incorporated into many types of water-storage facilities, both new construction and rehabilitated structures. Some examples of facilities include:

- **An earthen reservoir for storage of untreated or raw water.** A geomembrane liner used in this type of installation is normally intended to minimize water losses due to seepage and prevent the introduction of any contaminants that may exist