Technical Bulletin – Corrosion Protection

Bulletin Issued: January 19th, 2024

Regarding: Corrosion Protection - Petrolatum Tape & Cathodic Protection Systems

Background

The Drinking Water Infrastructure Design Standards are now updated to require the use of a petrolatum tape systems on all direct buried metallic fittings, valves, and joint restraints. The goal of this change is to ensure corrosion protection mechanisms are in place that will perform for the full life cycle of an appurtenance with a system that does not require future maintenance.

Definitions

Petrolatum tape system: an anti-corrosion system that encapsulates/wraps metallic surfaces such that air and moisture are unable to contact the metallic surfaces. These systems do not expire or require maintenance beyond the initial installation, which removes any need to excavate or access appurtenances in the future.

Cathodic protection: a technique used to control the corrosion of a metal surface by connecting the metal surface to another more easily corroded metal (anode). These systems require future excavation to assess and replace the anode when it fully corrodes.

Implementation

The new standards are effective as of January 26, 2024 and are applicable to all new infrastucture projects. Voluntary compliance for existing projects is appreciated but not expected.

Design Requirements

- The following sections of the City's Drinking Water Design Standard, W500A. have been updated.

  Section 4.5.5 Corrosion Protection – Petrolatum Tape Systems

  Section 4.5.6 Corrosion Protection - Cathodic Systems

- The Approved Product for Drinking Water Systems W500D has been updated to include details on performance expectations of all petrolatum tape systems used.

- General document formatting has been applied to W500A – there should be no impacts to requirements other than those listed above.

For more information please contact:

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