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Corrosion Control of Pilings in Non-marine Applications

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Foreword

This AMPP standard practice presents guidelines for establishing requirements to ensure corrosion control of steel pilings in non-marine applications. Pilings such as pipe piles, sheet piles and H-piles and other steel piles are included.

This AMPP standard practice is intended for use by corrosion control personnel concerned with mitigation of corrosion for piles used for support of tanks, buildings, highways, and retaining structures.

For this standard, the rate of corrosion, design life, and methods of corrosion control have been considered.

Scope

This document discusses the issues to be taken into consideration with respect to accounting for corrosion on steel piles in non-marine applications. The rate of corrosion, design life and methods of corrosion control are discussed in a manner to provide the reader with guidance as to how to proceed with determining these factors. This standard is applicable to pipe piles, sheet piles, H piles, and other steel piles.

Rationale

The main concern for steel pile supported structures with respect to useful life is the rate of corrosion on the steel piles. Once this has been assessed, determining what options or measures can be implemented in order to achieve the desired useful life is critical. This document provides a roadmap to better understanding the factors that affect the rate of corrosion and methods of corrosion control that can be implemented to achieve the desired service life of the subject pile supported structures.

Referenced Standards and Other Consensus Documents

The latest edition, revision, or amendment of the referenced standards in effect shall govern unless otherwise dated.

AMPP/NACE/SSPC, www.ampp.org:	
NACE SP0169	Control of External Corrosion on Underground or Submerged Metallic Piping Systems
NACE/ASTM G193	Standard Terminology and Acronyms Relating to Corrosion
European Committee for Standardization, www.cencenelec.eu:	
EN 1993-5	Eurocode 3 - Design of steel structures - Piling

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