

# Corrosion Management of Atmospherically Exposed Reinforced Concrete Structures

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## ABSTRACT

*This standard provides a structure for maintaining a Corrosion Management System for existing atmospherically exposed conventionally reinforced concrete structures. Risk-based management of corrosion may maintain the safe operation of structures and plants and minimize the risk of unexpected failures and unplanned closures and outages. Corrosion management may require investigation and evaluation by qualified corrosion, materials, and structural engineering personnel, depending on the nature and extent of the distress.*

## KEYWORDS

*Corrosion, corrosion management system, reinforced concrete, TG 400.*

## Foreword

*In NACE standards, the terms **shall**, **must**, **should**, and **may** are used in accordance with the definitions of these terms in the NACE Publications Style Manual. The terms **shall** and **must** are used to state a requirement, and are considered mandatory. The term **should** is used to state something good and is recommended, but is not considered mandatory. The term **may** is used to state something considered optional.*

This NACE International standard practice provides a structure for setting up and maintaining a Corrosion Management System (the System) for existing atmospherically exposed conventionally reinforced concrete structures. This standard is concerned with the risk-based management of corrosion to maintain the safe operation of structures and plants and to minimize the risk of unexpected failures and unplanned closures and outages.

The System may require investigation and evaluation by qualified corrosion, materials, and structural engineering personnel, depending on the nature and extent of the distress.

This standard is intended for use by corrosion specialists, civil engineers, structural engineers, and asset owners involved with the maintenance, management, and operation of reinforced concrete structures susceptible to corrosion-induced deterioration.

This standard was prepared in 2012 by NACE TG 400, "Corrosion Management of Atmospherically Exposed Reinforced Concrete Structures," which is administered by Specific Technology Group (STG) 01, "Reinforced Concrete," and sponsored by STG 08, "Corrosion Management." The TG is composed of manufacturers, users, consulting engineers, and other interested parties. This standard represents a consensus of those members. It was reaffirmed (with editorial revisions) by STG 01 in 2017. It is issued by NACE under the auspices of STG 01.

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