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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 37190-2023

Replacing GB/T 37190-2018

**Pipeline corrosion control engineering life cycle - General
requirements**

管道腐蚀控制工程全生命周期 通用要求

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document replaces GB/T 37190-2018 "General Requirements for the Whole Life Cycle of Pipeline Corrosion Control Engineering" and is consistent with GB/T 37190-Compared with:2018, in addition to structural adjustments and editorial changes, the main technical

changes are as follows:

- a) Changed the scope of application (see Chapter 1, Chapter 1 of the:2018 edition);
- b) Added the terms and definitions of "pipeline corrosion testing and monitoring system", "temporary outage" and "permanent outage", and deleted "pipeline corrosion control":
Terms and definitions of "corrosion sources" throughout the project life cycle (see Chapter 3, Chapter 3 of the:2018 edition);
- c) Changed some technical contents in the "General Provisions" (see 4.1, 4:2, 4:1, 4:2 of the:2018 version);
- d) Added a chapter on "Objectives" (see Chapter 5);
- e) Changed some technical contents of "corrosion sources" (see Chapter 6, Chapter 5 of the:2018 edition);
- f) The "Materials" chapter has been deleted (see Chapter 6 of the:2018 edition);
- g) Added a chapter on "Pipeline Materials" (see Chapter 7);
- h) Changed some technical content of "Technology" (see Chapter 8, Chapter 7 of the:2018 edition);
- i) The "Development" chapter has been deleted (see Chapter 8 of the:2018 edition);
- j) Changed some technical content of "Design" (see Chapter 9, Chapter 9 of the:2018 edition);
- k) Added a "R&D" chapter (see Chapter 10);
- l) Changed some technical content of "manufacturing" (see Chapter 11, Chapter 10 of the:2018 edition);
- m) Changed some technical content of "Construction and Installation" (see Chapter 12, Chapter 12 of the:2018 edition);
- n) Changed some technical contents of "Loading, Unloading, Storage and Transportation" (see Chapter 13, Chapter 11 of the:2018 edition);
- o) Changed some technical content of "Debugging" (see Chapter 14, Chapter 13 of the:2018 edition);
- p) Changed part of the technical content of "Acceptance" (see Chapter 15, Chapter 14 of the:2018 edition);
- q) Changed some technical content of "operation" (see Chapter 16, Chapter 15 of the:2018 edition);
- r) Changed some technical contents of "Maintenance" (see Chapter 17, Chapter 16 of

the:2018 edition);

s) The chapter "Investigation and Assessment" has been deleted (see Chapter 17 of the:2018 edition);

t) The "Maintenance" chapter has been deleted (see Chapter 18 of the:2018 edition);

u) Added a "Repair" chapter (see Chapter 18);

v) The chapter "Scrap and Disposal" has been deleted (see Chapter 19 of the:2018 edition);

w) Added a chapter on "Outage, Scraping and Disposal" (see Chapter 19);

x) Changed some technical content of "Documents and Records" (see Chapter 20, Chapter 20 of the:2018 edition);

y) Deleted the "Resources" chapter (see Chapter 21 of the:2018 edition);

z) Added a "Resource Management" chapter (see Chapter 21);

aa) Added a "Comprehensive Assessment" chapter (see Chapter 22):

This document is equivalent to ISO 23221:2020 "General Requirements for the Whole Life Cycle of Pipeline Corrosion Control Engineering":

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the general requirements for various factors in the entire life cycle of pipeline corrosion control projects:

This document is applicable to various pipeline corrosion control projects:

2 Normative reference documents

This document has no normative references:

3 Terms and definitions

The following terms and definitions apply to this document:

Technology for online real-time testing and feedback of internal and external corrosion conditions of pipelines:

System outage due to emergencies (such as natural disasters, corrosion leaks, etc.):

Note: After the emergency is handled, the pipeline can resume normal operations:

Permanent shutdown of the system:

Note: Systems that are found to have significant technical and economic risks after rigorous program evaluation will no longer be used:

4 General principles

4.1

This document targets various factors in the entire life cycle of pipeline corrosion control projects, and proposes an overall guide for the selection of technical standards and management standards:

Require: This document does not stipulate specific technical and management procedures for pipeline corrosion control:

4.2

A traceable and supportive management system should be established for all factors in the entire life cycle of pipeline corrosion control projects to achieve overall control and keep improve:

5 Goals

5.1

Optimize and coordinate various factors in the life cycle of pipeline corrosion control projects, so that the life cycle of pipeline corrosion control projects should be consistent with the life cycle of the protected pipes:

Compatible with the entire life cycle of Tao:

5.2

Pipeline corrosion control engineering goals should be communicated, implemented and maintained in all aspects of the pipeline life cycle, and should be reviewed regularly and improvements to ensure its suitability: