

Review SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

Laszlo Forgo



SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

- First issued in 1969
- It was the very first standard published by NACE
- It is the flagship of all CP standards, because of Section 6 CP Criteria



The Global Leaders in Materials Protection and Performance 2

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

- Assemble the “army”
- Keeping balance between owners and consultants
- What is a good size of a standard writing/revising team ?
- As a document project manager (DPM) I need a team that willing to work (some work team members were let go)
- Late Norm Moriber warning: “You have to deal with primadonnas”



The Global Leaders in Materials Protection and Performance 3

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

- CP standard or corrosion standard ?
- Asked 12 coating experts
- But it is a corrosion standard
- Assemble a coating team
- Standard writing/upgrade is based on consensus between the team members
- Many questions were decided by voting



The Global Leaders in Materials Protection and Performance 4

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

Main Sections of the document:

Foreword, Scope, Rationale

1 General

2 Definitions (84), Abbreviations , and Acronyms (43)

3 Determination of Need for External Corrosion Control

4 Piping System Design

5 External Coatings



The Global Leaders in Materials Protection and Performance 5

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

6 Criteria and Other Considerations for Cathodic Protection

7 Design of Cathodic Protection Systems

8 Installation of Cathodic Protection Systems

9 Control of Stray Current Interference

10 Commissioning, Operating, Monitoring, and Maintaining of CP Systems

11 External Corrosion Control Records



The Global Leaders in Materials Protection and Performance 6

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

References (110)

Bibliography (136)

Appendices: A (A1, 2, 3) coating standards

B corrosion standards

Negative votes resulted 5 ballots:

Major issues: Appendix B



The Global Leaders in Materials Protection and Performance 7

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

Since cathodic protection is closer to an art than a science, design considerations and not necessarily design criteria. Cathodic protection design should only be done by experienced and knowledgeable corrosion engineers **(with other words: by artists)**. The specific criteria used and the test results for each cathodic protection system are not available.

Therefore, please just simply call me MAESTRO



The Global Leaders in Materials Protection and Performance 8

SP0169, Control of External Corrosion on Underground or Submerged Metallic Piping Systems

THANK YOU !

QUESTIONS ?



The Global Leaders in Materials Protection and Performance 9