

# SPCC and Industry Standards

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# Key Theme - Industry Standards

- SPCC has 2 goals
  - Prevention
  - Emergency Response
- Industry standards are preventive
- There are hundreds of tank standards

# The Link Pin - the PE

- Must be familiar with SPCC
- PE or agent has visited site
- Plan meets requirements
- Plan in accordance with “good engineering practice”
- Applicable industry standards have been considered

# Industry Standards

- 2 Key Resource Documents
  - API 2610 Design, Construction, Operation, Maintenance and Inspection of Tank and Terminal Facilities
  - API 340 Liquid Release Prevention and Detection Measures for Aboveground Storage Facilities

# Existing Only (Major Simplification)

- Tank Inspection Codes
  - API 653 Tank Inspection, Repair, Alteration, and Reconstruction
  - STI SP001-00
  - API 12R1
- API 570 Piping Inspection Code
- API 2350

**API 653**  
Tank Inspection, Repair,  
Alteration and  
Reconstruction

**Underlying  
Design Standards  
New Construction**

**API 620**  
Design and Construction  
of Large, Welded, Low-  
Pressure Storage Tanks

**API 650**  
Welded Steel tanks  
for Oil Storage

ASME Boiler and Pressure  
Vessel Code  
Section V "Nondestructive  
Examination"

ASME Boiler and Pressure  
Vessel Code Section VIII,  
Division 2  
  
"Alternative Rules"

ASME Boiler and Pressure  
Vessel Code  
Section IX  
"Welding and Brazing  
Qualifications"

**Corrosion Mitigation  
Standards**

**API 651**  
Cathodic Protection of  
Aboveground Storage  
Tanks

**API 652**  
Lining of Aboveground  
Petroleum Storage  
Tanks

**API 2015**  
Safe Entry and  
Cleaning of Petroleum  
Storage Tanks

**API 2217A**  
Guidelines for Work in Inert  
Confined Spaces in the  
Petroleum Industry

**Hotwork**

**API 2207**  
Preparing Tank  
Bottoms for Hot  
Work

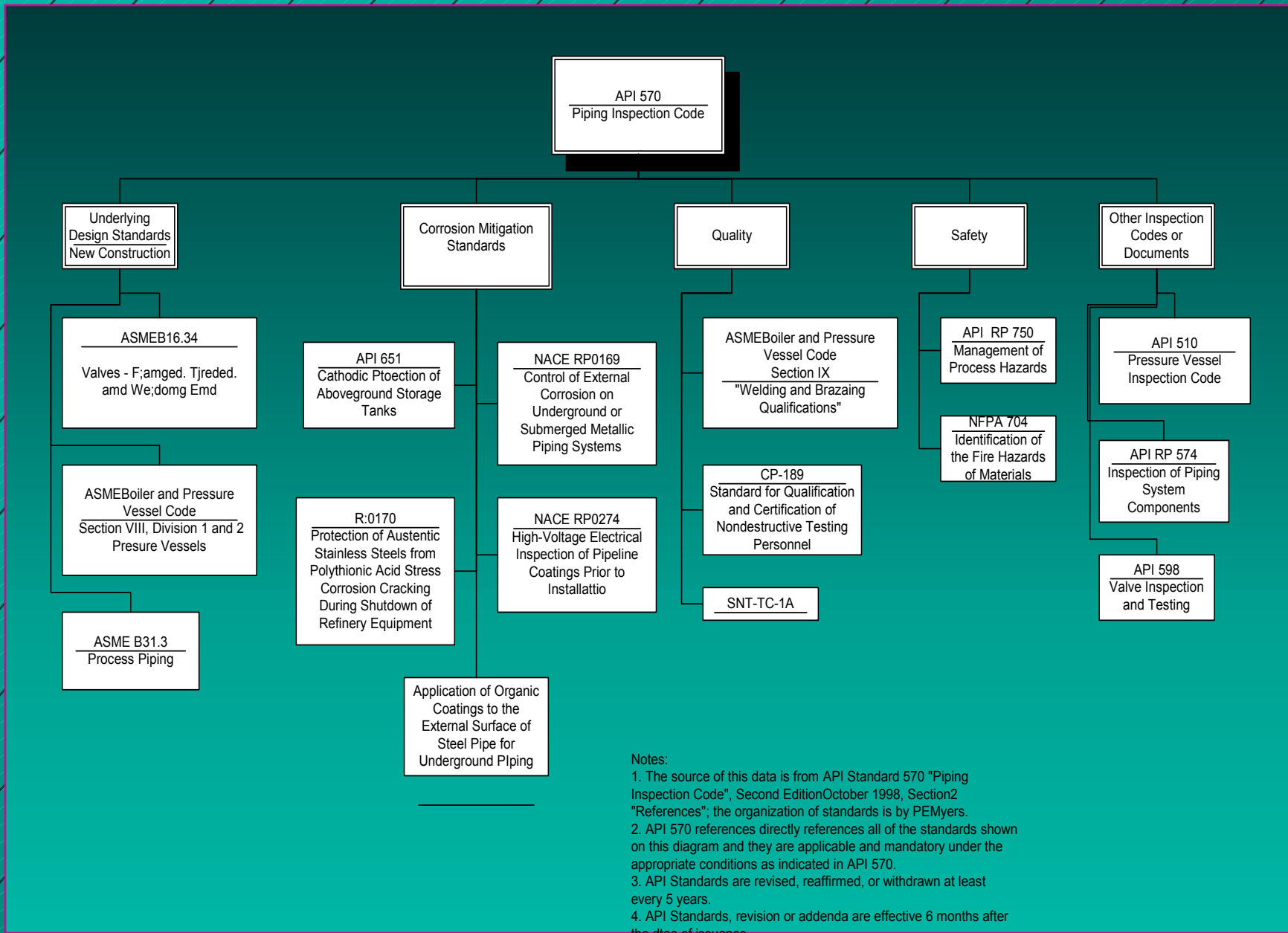
**API 2201**  
Procedures for Welding  
and Hot Tapping

**Auxiliary  
Standards**

ASTM A6 General  
Requirements for  
Rolled Steel Plates,  
Shapes, Sheet Piping,  
and Bars for Structural  
Use  
ASTM A20 General  
Requirements for Steel  
Plates for Pressure  
Vessels  
ASTM A36 Structural  
Steel  
ASTM A370 Standard  
Test Methods and  
Definitions for  
Mechanical Testing of  
Steel Products

**Notes:**

1. The source of this data is from API Standard 653 "Tank Inspection, Repair, Alteration and Reconstruction", Second Edition, including 4th Addendum, December 1999 Section 1.6 "Referenced Publications"; the organization of standards is by PEMyers.
2. API 653 references directly references all of the standards shown on this diagram and they are applicable and mandatory under the appropriate conditions as indicated in API 653.
3. API Standards are revised, reaffirmed, or withdrawn at least every 5 years.
4. API Standards, revision or addenda are effective 6 months after the date of issuance.
5. The rules given in API 653 are minimum requirements.



- Notes:
1. The source of this data is from API Standard 570 "Piping Inspection Code", Second Edition October 1998, Section 2 "References"; the organization of standards is by PEMyers.
  2. API 570 references directly references all of the standards shown on this diagram and they are applicable and mandatory under the appropriate conditions as indicated in API 570.
  3. API Standards are revised, reaffirmed, or withdrawn at least every 5 years.
  4. API Standards, revision or addenda are effective 6 months after the date of issuance.

API 2350  
Overfill Protection for  
Storage Tanks in Petroleum  
Facilities

Fire Protection

API 2610  
Design, Construction, Operation,  
Maintenance and Inspection of  
Terminal and Tank Facilities

API 2550  
Measurement and  
Calibration of Upright  
Cylindrical Tanks

NFPA 30-1993  
Flammable and  
Combustible Liquids  
Code

API RP 500  
Recommended Practice  
for Classification of  
Locations for Electrical  
Installations at  
Petroleum Facilities

API RP 2003  
Protection Against  
Ignitions Arising Out of  
Static, Lightning, and  
Stray Currents

API 2201  
Procedures for Welding  
and Hot Tapping

Notes:

1. The source of this data is from API Recommended Practice 2350 "Overfill Protection for Storage Tanks in Petroleum Facilities, Second Edition, January 1996 Section 1.5 "Referenced Publications"
2. API 2350 references directly references all of the standards shown on this diagram and they are applicable and mandatory under the appropriate conditions as indicated in API 2350.
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# Conclusions

- Prevention will protect the environment more than emergency response (spills are reduced)
- The stronger use of industry standards is exactly what is required (and implied by SPCC).
- The PE is the link pin holding it all together
- Owners must allocate resources and