

Pipeline Construction

STD.8700

Scope

This standard covers the general requirements for pipeline construction performed by the Contractor. All work shall be performed in strict compliance with all applicable federal, state, and local laws, orders, rules, regulations, rights-of-way, and permits. The Contractor shall comply in strict accordance with all referenced attachments and the articles of the Contract, and perform those duties necessary to complete the work.

TABLE OF CONTENTS

1.0	REFERENCES	4
1.1.	Pipeline and Hazardous Materials Safety Administration (PHMSA).....	4
1.2.	American Society of Mechanical Engineers (ASME)	4
1.3.	American Petroleum Institute (API)	4
1.4.	American Welding Society.....	4
2.0	INTRODUCTION	4
3.0	GENERAL CONDITIONS	5
4.0	SURVEY.....	5
5.0	FENCING	5
6.0	CLEARING, GRADING AND EARTHWORK.....	5
7.0	DITCHING	5
8.0	BLASTING	5
9.0	HORIZONTAL DIRECTIONAL DRILLING.....	5
10.0	PIPELINE CONSTRUCTION NEAR POWERLINES	5
11.0	PIPE STRINGING AND MATERIAL HANDLING	5
12.0	BENDING AND ALIGNMENT	5
13.0	WELDING AND RADIOGRAPHIC PROCEDURES.....	5
13.1.	General Welding Requirements	5
13.2.	Preheat and Stress Relief	6
13.3.	Visual and Nondestructive Examination	6
13.4.	Repair of Defects	6
13.5.	Filler Metal	6
13.6.	In-Service Welding.....	6
13.7.	Welder Qualification	6
13.8.	Welding Inspector Qualification.....	6
13.9.	Welding Procedure Qualification	6
13.10.	Welding Procedures.....	6
13.11.	Hot Taps	6
14.0	BOLT TORQUING	6
15.0	COATINGS.....	6
16.0	PIPE LOWERING AND BACKFILLING.....	6
17.0	CONCRETE	7
18.0	HYDROSTATIC TESTING	7
19.0	ROAD AND RAILROAD CROSSINGS.....	7
20.0	CLEANUP AND RESTORATION	7

21.0 CATHODIC PROTECTION	7
Attachment: Revision Log/Record.....	8

1.0 REFERENCES

The latest approved editions of the following regulations, codes, and standards shall form an integral part of this specification:

1.1. Pipeline and Hazardous Materials Safety Administration (PHMSA)

49 CFR 192	Transportation of Natural and Other Gas by Pipeline
49 CFR 195	Transportation of Hazardous Liquids by Pipeline

1.2. American Society of Mechanical Engineers (ASME)

B31.4-2006	Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids
B31.8-2007	Gas Transmission and Distribution Piping Systems
2007 BPVC Section IX	Welding and Brazing Qualifications

1.3. American Petroleum Institute (API)

API 5L	Specification for Line Pipe, 45th edition, December 2012
API 6D	Specification for Pipeline Valves, 23rd Edition, April 2008, includes errata 1 (June 2008), errata 2 (November 2008), errata 3 (February 2009), errata 4 (April 2010), errata 5 (November 2010), errata 6 (August 2011), addendum 1 (October 2009), addendum 2 (August 2011), and addendum 3 (October 2012)
API 1102	Steel Pipelines Crossing Railroads and Highways, 7th Edition, includes Errata 1 (2008), Errata 2 (2010), Errata 3 (2012), Errata 4 (2014), and Errata 5 (2014)
API 1104	Welding of Pipelines and Related Facilities - 20th Edition, October 2005, errata/addendum (July 2007), and errata 2 December 2008)

1.4. American Welding Society

D1.1	Structural Steel Welding Code, 22nd Edition
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2.0 INTRODUCTION

- (1) This document lists the Company Pipeline Construction Standards, hereinafter referred to as "Standards," to be utilized during the fabrication and/or installation of pipelines and/or facilities for Company. The Standards describe requirements for the fabrication, testing, painting, coating, handling, transportation, and installation of pipelines and related facilities. The directions, provisions, and requirements of these Standards pertain to the Scope of Work. However, these Standards are general in nature and are intended to cover many of the Company's similar construction projects.

- (2) Local, state, and federal regulations, ordinances, statutes, or codes shall govern where compliance is mandatory. However, requirements of these Standards shall apply when they are more exacting or do not conflict with such regulations, ordinances, statutes or codes.

3.0 GENERAL CONDITIONS

See Enterprise STD.8701 *General Conditions*.

4.0 SURVEY

See Enterprise STD.9002 *Surveying and Mapping*.

5.0 FENCING

See Enterprise STD.2600 *Fencing*.

6.0 CLEARING, GRADING AND EARTHWORK

See Enterprise STD.8703 *Clearing and Grading*.

See Enterprise STD.8712 *Earthwork*.

7.0 DITCHING

See Enterprise STD.8704 *Ditching*.

8.0 BLASTING

See Enterprise STD.8715 *Blasting*.

9.0 HORIZONTAL DIRECTIONAL DRILLING

See Enterprise STD.8709 *Horizontal Directional Drilling*.

10.0 PIPELINE CONSTRUCTION NEAR POWERLINES

See Enterprise STD.8710 *Pipeline Construction Near Powerlines*.

11.0 PIPE STRINGING AND MATERIAL HANDLING

See Enterprise STD.8705 *Pipe Stringing and Material Handling*.

12.0 BENDING AND ALIGNMENT

See Enterprise STD.8706 *Bending and Alignment*.

13.0 WELDING AND RADIOGRAPHIC PROCEDURES

13.1. General Welding Requirements

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.2. Preheat and Stress Relief

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.3. Visual and Nondestructive Examination

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.4. Repair of Defects

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.5. Filler Metal

See Enterprise STD.8015 *Filler Metal*.

13.6. In-Service Welding

See STD.8004 *In-Service Welding Pre-Assessment*.

13.7. Welder Qualification

For welder qualification to API 1104, ASME BPVC Section IX, and AWS D1.1, see Enterprise STD.8006 *Welder Qualification*.

13.8. Welding Inspector Qualification

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.9. Welding Procedure Qualification

See Enterprise STD.8008 *Welding of Pipeline and Related Facilities, and Nondestructive Examination Requirements*.

13.10. Welding Procedures

See Enterprise STD.8001 *API 1104 Welding Procedures*.

13.11. Hot Taps

See Enterprise STD.8012 *Welded Hot Taps*.

14.0 BOLT TORQUING

See Enterprise STD.8501 *Bolt Torquing and Flange Assembly*.

15.0 COATINGS

See the following Enterprise coatings standards:

- STD.7001 *Protective Coatings – Aboveground Steel Surfaces*
- STD.7002 *Protective Coatings – Below Ground Steel Surfaces - Field Applied*
- STD.7003 *Protective Coatings – Below Ground Steel Surfaces - Plant Applied Fusion Bonded Epoxy and Abrasion Resistant Overlay*

16.0 PIPE LOWERING AND BACKFILLING

See Enterprise STD.8707 *Lowering-In and Backfilling*.

17.0 CONCRETE

See Enterprise STD.2802 *Concrete Construction*.

18.0 HYDROSTATIC TESTING

See Enterprise STD.4507 *Pipeline Hydrostatic Testing*.

19.0 ROAD AND RAILROAD CROSSINGS

See API Recommended Practice 1102 *Steel Pipelines Crossing Railroads and Highways*.

20.0 CLEANUP AND RESTORATION

See Enterprise STD.8708 *Cleanup and Restoration*.

21.0 CATHODIC PROTECTION

See Enterprise STD.7000 *Corrosion Prevention for the Construction of New Pipelines, Storage Tanks and Facilities*.

Attachment: Revision Log/Record

Revision 0.0		Publish Date: 03 Jan 12
Location of Change	Type of Change	Reason for Change
N/A	N/A	
Revision 1.0		Publish Date: 26 Jan 12
Location of Change	Type of Change	Reason for Change
Section 12.1	Update	Updated reference and hyperlink to STD.8014.
Section 12.2	Update	Updated reference and hyperlink to STD.8013.
Section 12.5	Update	Updated reference and hyperlink to STD.8015.
Revision 2.0		Publish Date: 03 Apr 12
Location of Change	Type of Change	Reason for Change
Section 12.1	Update	Updated reference and hyperlink to STD.8008.
Section 12.3	Update	Updated reference and hyperlink to STD.8010.
Section 12.11	Update	Updated reference and hyperlink to STD.8012.
Revision 3.0		Publish Date: 13 Jun 12
Location of Change	Type of Change	Reason for Change
Section 2.0	Addition	Transferred "Introduction" section from STD.8701 to STD.8700.
Section 4.0	Update	Updated reference to current Enterprise surveying standard STD.9002 Surveying and Mapping.
Revision 3.1		Publish Date: 27 Jun 12
Location of Change	Type of Change	Reason for Change
Section 13.11	Deletion	Deleted reference to LP-9.14 Mechanical Hot Taps. LP-9.14 was recently archived.
Revision 3.2		Publish Date: 06 Mar 15
Location of Change	Type of Change	Reason for Change
Section 1.3	Update	Updated references to API standards.

Revision 3.3		Publish Date: 31 Jan 17
Location of Change	Type of Change	Reason for Change
Section 6.0	Addition	Added "and Earthwork" to Section title. Also added "See Enterprise STD.8712 Earthwork" to section.
Revision 3.4		Publish Date: 10 Mar 18
Location of Change	Type of Change	Reason for Change
Section 13.1	Replace	Replaced reference STD.8014 with STD.8008.
Section 13.2	Replace	Replaced reference STD.8013 with STD.8008.
Section 13.3	Replace	Replaced reference STD.8010 with STD.8008.
Section 13.4	Replace	Replaced reference LP-9.5 with STD.8008.
Section 13.8	Replace	Replaced reference LP-9.11 with STD.8008.
Section 13.9	Replace	Replaced reference LP-9.12 with STD.8008.
Section 17.0	Replace	Replaced reference EGS E-2600 with STD.2802.
Section 21.0	Replace	Replaced reference STD.7006 with STD.7000.