

DEP SPECIFICATION

PIPING CLASSES - CSA Z662

DEP 31.38.01.23-Gen.

February 2019

DESIGN AND ENGINEERING PRACTICE

DEM1



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1. INTRODUCTION

1.1 SCOPE

This DEP specifies requirements and gives recommendations for piping classes which have been developed for use in the oil, multi-phase, water and gas pipeline systems from a wellhead to a plant facility administered primarily to the CSA Z662 standard.

The basis of design of the piping classes is given in DEP 31.38.01.10-Gen.-Part-II.

The general requirements for piping systems are specified in Part II of DEP 31.38.01.24-Gen.

Piping classes are contained in DEP 31.38.01.14-Gen.

This DEP contains mandatory requirements to mitigate process safety risks in accordance with Design Engineering Manual (DEM) 1 – Application of Technical Standards.

This is a revision of the DEP of the same number dated February 2018; see (1.5) regarding the changes.

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

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Energy Resources Conservation Board (ERCB) applies the basic technical requirements applicable to the design, construction, and operation of oil and gas pipelines in Alberta and adopts the most current edition of the Canadian Standards Association CSA Z662. This DEP is intended for use in well sites, Gas satellite or group gas gathering facilities, compressor stations, pump buildings, water collection, injection, and disposal wells, Heavy oil / in situ steam flood facilities and oil battery facilities where the licenced jurisdiction are pertaining to Oil and Gas Conservation Act and pipeline Act. Eleven simplified illustrations of example facilities are indicated in ERCB.

This DEP may also be applied in other similar facilities.

When DEPs are applied, a Management of Change (MOC) process shall be implemented; this is of particular importance when existing facilities are to be modified.

If national and/or local regulations exist in which some of the requirements could be more stringent than in this DEP, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable with regards to the safety, environmental, economic and legal aspects. In all cases the Contractor shall inform the Principal of any deviation from the requirements of this DEP which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned, the objective being to obtain agreement to follow this DEP as closely as possible.

1.3 DEFINITIONS

1.3.1 General definitions

The **Contractor** is the party that carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Principal may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party that manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **Principal** is the party that initiates the project and ultimately pays for it. The Principal may also include an agent or consultant authorised to act for, and on behalf of, the Principal.