DEP SPECIFICATION

INTERLOCKING SYSTEMS FOR PRESSURE RELIEF VALVES

DEP 80.46.30.11-Gen.

February 2011

(DEP Circular 66/11 has been incorporated)

(DEP Circular 66/12 has been incorporated)

ECCN EAR99

DESIGN AND ENGINEERING PRACTICE

DEM1

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The information set forth in these publications is provided to Shell companies for their consideration and decision to implement. This is of particular importance where DEPs may not cover every requirement or diversity of condition at each locality. The system of DEPs is expected to be sufficiently flexible to allow individual Operating Units to adapt the information set forth in DEPs to their own environment and requirements.

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TABLE OF CONTENTS

1. INTRODUCTION 4
1.1 SCOPE 4
1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS 4
1.3 DEFINITIONS 4
1.4 CROSS-REFERENCES 5
1.5 SUMMARY OF MAIN CHANGES 5
1.6 COMMENTS ON THIS DEP 5
1.7 DUAL UNITS 5

2. GENERAL 6

3. INTERLOCKING SYSTEMS 7
3.1 REPLACEMENT OF PRVs 7
3.2 DISCHARGE TO ATMOSPHERE 7
3.3 DISCHARGE TO A CLOSED SYSTEM 8
3.4 REPLACEMENT SPOOL PIECE DETAILS 10

4. REFERENCES 11

Documents
Document Sharing Hub

Full document details: SHELL 80.46.30.11 2011

1. INTRODUCTION

1.1 SCOPE

This DEP specifies requirements and gives recommendations for interlocking systems for fitting to isolating (block) valves installed upstream and/or downstream of pressure relief valves (PRVs).

DEP 80.45.10.10-Gen. provides guidance on the overall design of relief systems that minimise the necessity for such block valves.

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 January 2010; see (1.5) regarding the changes.

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by Shell GSI, the distribution of this DEP is confined to Shell companies and, where necessary, to Contractors and Manufacturers/Suppliers nominated by them. Any authorised access to DEPs does not for that reason constitute an authorization to any documents, data or information to which the DEPs may refer.

This DEP is intended for use in facilities related to oil and gas production, gas handling, oil refining, chemical processing, gasification, distribution and supply/marketing. This DEP may also be applied in other similar facilities.

When DEPs are applied, a Management of Change (MOC) process should 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.

The word **shall** indicates a requirement.

The capitalised term **SHALL [PS]** indicates a process safety requirement.

The word **should** indicates a recommendation.

1.3.2 Specific definitions

For pressure relief valve (PRV) terminology and related terms, refer to API RP 520 and DEP 80.45.10.10-Gen.

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