SLOVENSKI STANDARD
SIST EN ISO 35103:2019

01-december-2019

Industrija za predelavo nafte in zemeljskega plina - Obratovanje v arktičnem okolju - Okoljsko nadzorovanje (ISO 35103:2017)

Petroleum and natural gas industries - Arctic operations - Environmental monitoring (ISO 35103:2017)

Erdöl- und Erdgasindustrie - Arktisbetrieb - Überwachung der Umgebung (ISO 35103:2017)

Industries du pétrole et du gaz naturel - Opérations en Arctique - Surveillance de l'environnement (ISO 35103:2017)

Ta slovenski standard je istoveten z: **EN ISO 35103:2019**

ICS:

19.040	Preskušanje v zvezi z okoljem	Environmental testing
75.020	Pridobivanje in predelava nafte in zemeljskega plina	Extraction and processing of petroleum and natural gas

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Petroleum and natural gas industries - Arctic operations - Environmental monitoring (ISO 35103:2017)

Industries du pétrole et du gaz naturel - Opérations en Arctique - Surveillance de l'environnement (ISO 35103:2017)

Erdöl- und Erdgasindustrie - Arktisbetrieb - Überwachung der Umgebung (ISO 35103:2017)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of ISO 35103:2017 has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 35103:2019 by Technical Committee CEN/TC 12 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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Endorsement notice

The text of ISO 35103:2017 has been approved by CEN as EN ISO 35103:2019 without any modification.

INTERNATIONAL STANDARD

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 8, *Arctic operations*.

Introduction

General

This document has been developed in order to promote internationally agreed approaches to environmental monitoring of oil and gas operations in Arctic offshore environments. The monitoring of onshore environments is not included in this document, except where relevant to an offshore development.

Environmental monitoring

Environmental monitoring includes:

a) monitoring of environmental aspects for normal, abnormal and emergency conditions:

   The environmental aspects of an organization under all conditions are determined by its environmental management system (EMS) procedures and can include:

   1) emissions to air;

   2) releases to water;

   3) releases to land;

   4) use of raw materials and natural resources, including physical presence of facilities;

   5) use of energy;

   6) energy emitted, including heat, radiation, vibration, noise and light;

   7) generation of waste and/or by-products;

   8) environmental aspects with beneficial impact;

b) monitoring of environmental impacts:

   Environmental impacts can occur at local, regional and global scales, while they can also be direct, indirect or cumulative.

The relationship between environmental aspects and environmental impacts is one of cause and effect.

Within the scope of this document, the environment includes all relevant physical, chemical and biological components of the sea, atmosphere and land, where the latter is potentially impacted by an offshore development. When an organization determines the scope of its environmental impact, the need to protect the following attributes is considered:

— human beings and cultural heritage;

— fauna and flora;

— soil, water, air and climate;

— material assets (such as existing pipelines and cables, shipping routes, seabed resources and resource extraction facilities).

There are no existing internationally agreed standards for environmental monitoring; neither are there such standards for marine environmental monitoring although there is a considerable body of guidance documents.

This document presents sufficient information to guide organizations towards relevant monitoring methods for use in the Arctic.

The special conditions of the Arctic will require organizations to modify their monitoring methods to suit the conditions encountered.

General marine monitoring methods can be adapted by the oil and gas sector to meet the needs of its Arctic maritime locations, its development phases, facility types and operations, their environmental aspects and their impacts upon the marine environment.

Relationship of this document to ISO 14001, ISO 9001 and other standards

The organizations that have implemented ISO 14001 or ISO 9001 already apply the elements of monitoring, measurement, analysis and improvement to their (environmental) monitoring processes.

Additional standards that apply to environmental monitoring include laboratory standards, specific guides on sediment, water and air quality monitoring, and recommended practices for species identification; the use of agreed statistical methods is essential.