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Carbon dioxide capture, transportation and geological storage — Geological storage

National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Foreword

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This document was prepared by Technical Committee ISO/TC 265, *Carbon dioxide capture, transportation, and geological storage*.

Introduction

Geological storage of carbon dioxide (CO_2) is recognized as a key technology for abatement of CO_2 emissions to the atmosphere or ocean and is an essential component in the process of carbon dioxide capture and storage (CCS)[1]. The objective of this document is to provide recommendations for the safe and effective storage of CO_2 in subsurface geologic formations through all phases of a storage project life cycle (see Figure 1). While CCS is a nascent industry, this document is supported by a wide range of operational experiences in pilot to commercial scale carbon dioxide storage projects that have used methods and technologies mostly developed and widely deployed by the oil and gas industry including CO_2-enhanced oil recovery (EOR). This document applies to injection of CO_2 into geologic units for the sole purpose of storage and does not apply to CO_2 injection for hydrocarbon recovery, or storage of CO_2 that occurs in association with carbon dioxide enhanced hydrocarbon recovery. [ISO 29716 is in development to address carbon dioxide storage using enhanced oil recovery (CO_2-EOR)]. This document is supplemented by recommended practice manuals for CO_2 storage and numerous standards and technical recommendations developed for the oil and gas industry. [See Bibliography for selected references (References [1] to [12])].