

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

**कार्बन डाइऑक्साइड कैप्चर - सीमेंट उद्योग में कार्बन
डाइऑक्साइड कैप्चर प्रौद्योगिकियों का अवलोकन**

Draft Indian Standard

**CARBON DIOXIDE CAPTURE – OVERVIEW OF CARBON
DIOXIDE CAPTURE TECHNOLOGIES IN THE CEMENT
INDUSTRY**

ICS 13.020.40

Environmental Management Sectional Committee, CHD 34

Last date for Comments: 20 June 2024

NATIONAL FOREWORD

(Formal clause shall be added later)

One way to reduce CO₂ emissions is capturing CO₂ that is released in the production of cement (both direct emissions during the production process and emissions related to local energy production). CO₂ capture is an emerging approach for CO₂ abatement in the cement industry. It means that CO₂ arising from the combustion of fuels and from the treatment of raw materials could be captured and permanently stored or re-used. The integration of CO₂ capture equipment typically increases the specific energy intensity of cement manufacture as additional energy is needed to operate the CO₂ capture plant, followed by drying, purification and compression of the capture CO₂ for transportation, (geological) storage and/or utilization.

This standard provides an overview of technologies that are under development to capture carbon dioxide (CO₂) that is generated during cement manufacture. CO₂ transportation, (geological) storage, and utilization are beyond the scope of this standard.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.

b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

The technical committee responsible for the preparation of this standard has reviewed the provisions of the below mentioned ISO/IEC standards and has decided that they are acceptable for use in conjunction with this standard.

<i>International Standard</i>	<i>Title</i>
ISO 27917	Carbon dioxide capture, transportation and geological storage – Vocabulary – Cross cutting terms