



DRAFT INDIAN STANDARD IN WIDE CIRCULATION

Reference : CHD 30 (25257)WC

Date : 22 May 2024

TECHNICAL COMMITTEE : Nuclear Energy for Peaceful Applications , CHD 30

To,

All concerned

Dear Madam/Sir,

The following document has been prepared by the Nuclear Energy for Peaceful Applications Sectional Committee, CHD 30. Please [click here](#) to view the document.

Document Number : CHD 30 (25257) WC

Title of the document : Measurement of Environmental Tritium in Natural Water for Hydrological Studies

Document Type : New Indian Standard

This document has following salient features which may require specific attention for your valuable comments:

1) Tritium is one of the naturally occurring isotopes of hydrogen and is radioactive. There are 18 isotopologues of water one of which is HTO. Thus, making tritium an integral part of water molecule. Tritium is produced in stratosphere by spallation reaction of nitrogen with cosmic ray neutrons. The steady state inventory of tritium is about 11g/day. The produced tritium is oxidised and leads to formation of tritiated water which reaches troposphere through the mixing layer between stratosphere and troposphere. This process is specially enhanced during the spring season and is known as spring leak. The time taken by the tritium from its production to enter the hydrological cycle is about 30 days. The environmental input of tritium is very low, hence, for measurement of tritium in natural waters preconcentration of tritium is essential. Environmental tritium plays an important role in estimating the residence time of water and evaluating the groundwater dynamics. The half-life of tritium is

Please examine the document and share your comments regarding further improvement in the document.

Last date for sharing the comments is : 23 July 2024

The comments should be shared in the prescribed template through this portal only; and the comments so received shall be taken up by the Sectional Committee for necessary action. For any other query, please write an email at chd@bis.gov.in to the undersigned at Bureau of Indian Standard, Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi.

In case no comments are received, we would presume your approval of the documents. However, in case we receive any comments on the document, the same shall be put up to the Sectional Committee for necessary action.

Thanking You,

Yours faithfully,
(AJAY KUMAR LAL)
Head (Chemical Department)
Email: chd@bis.gov.in



व्यापक परिचालन में मसौदा(दे)

हमारा सन्दर्भ : CHD 30 (25257)WC

दिनांक : 22-05-2024

तकनीकी समिति : Nuclear Energy for Peaceful Applications Sectional Committee, CHD 30

प्राप्तकर्ता : रूचि रखने वाले सभी निकाय

महोदय/या,

निम्नलिखित मसौदा तैयार किया गया है :

प्रलेख संख्या : CHD 30 (25257) WC

शीर्षक :

कृपया इस/इन मानक(को)/संशोधन(नो) के मसौदे(दो) का अवलोकन करें और अपनी सम्मतियाँ यह बताते हुए भेजें कि यदि ये मानक(को) के संशोधन(नो) के रूप में प्रकाशित हो तो इन पर अमल करने में आपके व्यवसाय अथवा कारोबार में क्या कठिनाइयां आ सकती हैं।

सम्मतियाँ भेजने की अंतिम तिथि : 23 July 2024

सम्मतियाँ, यदि कोई हों तो, कृपया यहाँ क्लिक करके ऑनलाइन पोर्टल के माध्यम से ऊपर दी गयी अंतिम तिथि तक दर्ज कराएं।

यह/ये प्रलेख भारतीय मानक ब्यूरो की वेबसाइट www.bis.gov.in पर भी उपलब्ध है/हैं।

धन्यवाद।

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