**ITEM 10 ACTIVITIES AT ISO**

International Organization for Standardization (ISO) is the apex standardization body with an exclusive mandate to prepare and propagate International Standards. The standard development is carried through a number of technical committees which has a defined structure including Secretariat (held by a member body of ISO). The Bureau of Indian Standards, the National Standards Body of the country represents India on ISO. The CHD 20, on behalf of BIS holds P membership of ISO/TC 85, ISO/TC 85/SC 2, ISO TC 85/ SC 5, ISO/ TC 85/SC 6, and ISO/TC 147/SC 3.

**10.1 Standards adopted by BIS and are being considered by ISO for revision**

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **Document adopted or under development** | **Remarks** |
|  | IS 16689 : 2018/ISO 6527 : 1982  Nuclear power plants - Reliability data exchange - General guidelines | ISO 6527 : 1982 has been withdrawn. |
|  | IS 16691 : 2018/ISO 8107 : 1993  Nuclear power plants - Maintainability - Terminology | ISO 8107 : 1993 was last reviewed and confirmed in 2020. Therefore this version remains current. |
|  | IS 16693 : 2021/ISO 8769 : 2016  Reference sources - Calibration of surface contamination monitors - Alpha beta and photon emitters (*first revision*) | ISO 8769 : 2016 has been revised by ISO 8769 : 2020 |
|  | IS 16878 : 2018 ISO/ASTM 51818 : 2013  Practice for dosimetry in an electron beam facility for radiation processing at energies between 80 and 300 ke 5 | ISO/ASTM 51818 : 2013 has been revised by ISO/ASTM 51818 : 2020 |
|  | IS 16879 : 2018/ISO/ASTM 51702 : 2013  Practice for Dosimetry in a Gamma Facility for Radiation Processing | ISO/ASTM 51702 : 2013 was last reviewed and confirmed in 2023. Therefore this version remains current. |
|  | IS 16880 : 2018/ISO/ASTM 51431 : 2005  Practice for dosimetry in electron beam and x - Ray (Bremsstrahlung) irradiation facilities for food processing | ISO 51431 : 2005 has been withdrawn. |
|  | IS 16883 : 2022/ISO 7212 :1986  Enclosures for Protection Against Ionizing Radiation -Lead Shielding Units for 50 mm and 100 mm Thick Wall | ISO 7212 :1986 was last reviewed and confirmed in 2022. Therefore this version remains current. |
|  | IS 16884 : 2018/ISO 3999 : 2004  Radiation protection - Apparatus for industrial gamma radiography - Specifications for performance, design and tests | ISO 3999 : 2004 was last reviewed and confirmed in 2019. Therefore this version remains current. |
|  | IS 16885 : 2018/ISO 361 : 1975  Basic ionizing radiation symbol | ISO 361 : 1975 was last reviewed and confirmed in 2020. Therefore this version remains current. |
|  | IS 16902 (Part 1) : 2023/ISO 12749-1 : 2020  Nuclear energy vocabulary Part 1 : General terminology | ISO 12749-1 : 2020 has not taken for review yet. |
|  | IS 16902 (Part 2) : 2023/ISO 12749-2 : 2022  Nuclear energy nuclear technologies and radiological protection vocabulary Part 2 : Radiological protection | ISO 12749-2 : 2022 has not taken for review yet.. |
|  | IS 16902 (Part 4) : 2023/ISO 12749-4 : 2015  Nuclear energy nuclear technologies and radiological protection vocabulary Part 4 : Dosimetry for radiation processing | ISO 12749-4 : 2015 last reviewed and confirmed in 2020. Therefore this version remains current. |
|  | IS 16902 (Part 5) : 2023/ISO 12749-5 : 2018  Nuclear energy nuclear technologies and radiological protection vocabulary Part 5: Nuclear reactors | ISO 12749-5 : 2018 will be replaced by ISO/AWI 12749-5 |
|  | IS 16902 (Part 6) : 2023/ISO 12749-6: 2020  Nuclear energy nuclear technologies and radiological protection vocabulary Part 6 : Nuclear medicine | ISO 12749-6: 2020 has not taken for review yet. |
|  | IS 16986 : 2020/ISO/ASTM 51261 : 2013  Practice for Calibration of Routine Dosimetry Systems for Radiation Processing | ISO/ASTM 51261 : 2013 was last reviewed and confirmed in 2023. Therefore this version remains current. |
|  | IS 16995 : 2018/ISO 6980-3 : 2006  Nuclear Energy â€” Reference Beta-Particle Radiation â€” Calibration of Area and Personal Dosemeters and the Determination of their Response as a Function of Beta Radiation Energy and Angle of Incidence | ISO 6980-3 : 2006 has been revised by ISO 6980-3:2022 |
|  | IS 17060 : 2018/ASTM 51939 : 2017  Practice for Blood Irradiation Dosimetry | ISO/ASTM 51939 : 2017 was last reviewed and confirmed in 2022. Therefore this version remains current. |
|  | IS 17061 : 2019/ISO/ ASTM 52628 : 2020  Practice for dosimetry in radiation processing | ISO/ ASTM 52628 : 2020 has not taken for review yet. |
|  | IS 17062 : 2019/ISO/ASTM 52701: 2013  Guide for Performance Characterization of Dosimeters and Dosimetry Systems for Use in Radiation Processing | ISO/ASTM 52701: 2013 was last reviewed and confirmed in 2019. Therefore this version remains current. |
|  | IS 17328 (Part 1) : 2021/ISO 7097-1:2004  Nuclear Fuel Technology Determination of Uranium Part 1 Determination of Uranium in Solutions Uranium Hexafluoride and Solids Iron (II) Reduction potassium Dichromate Oxidation Titrimetric Method | ISO 7097-1:2004 will be replaced by ISO/CD 7097-1 |
|  | IS 17328 (Part 2) : 2021/ISO 7097-2:2004  Nuclear Fuel Technology Determination of Uranium Part 2 Determination of Uranium in Solutions Uranium Hexafluoride and Solids Iron (II) Reduction Cerium (IV) Oxidation Titrimetric Method | ISO 7097-2:2004 has been revised by ISO 7097-2:2022 |
|  | IS 17328 (Part 3) : 2021/ISO 7476 :2003  Nuclear Fuel Technology â€” Determination of Uranium Part 3 Determination of Uranium in Uranyl Nitrate Solutions of Nuclear Grade Quality â€” Gravimetric Method | ISO 7476 :2003 was last reviewed and confirmed in 2023. Therefore this version remains current. |
|  | IS 17328 (Part 4) : 2021/ISO 8299 :2019  Nuclear Fuel Technology â€” Determination of Uranium Part 4 Determination of the Isotopic and Elemental Uranium and Plutonium Concentrations of Nuclear Materials in Nitric Acid Solutions by Thermal-Ionization Mass Spectrometry | ISO 8299 :2019 has not taken for review yet. |
|  | IS 17329 : 2021/ISO 12183 :2016  Nuclear Fuel Technology Controlled-Potential Coulometric Assay of Plutonium | ISO 12183 : 2016 has been revised by ISO 12183 : 2024 |
|  | IS 17330 : 2021/ISO 18557 :2017  Characterization Principles for Soils Buildings and Infrastructures Contaminated by Radionuclides for Remediation Purposes | ISO 18557 :2017 was last reviewed and confirmed in 2023. Therefore this version remains current. |
|  | IS 17986 (Part 1) : 2023/ISO 4037-1 : 2019  Radiological Protection -X and Gamma reference radiation for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy- Part 1 : Radiation characteristics and production methods | ISO 4037-1 : 2019 has not taken for review yet. |
|  | IS 17986 (Part 2) : 2022/ISO 4037-2 : 2019  Radiological Protection ----X and Gamma reference radiation for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy- Part 2 : Dosimetry for radiation protection over the energy ranges from 8 keV to 1.3 MeV and 4 MeV to 9 MeV | ISO 4037-2 : 2019 has not taken for review yet. |
|  | IS 17986 (Part 3) : 2022/ISO 4037-3 : 2019  Radiological Protection ----X and Gamma reference radiation for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy- Part 3 : Calibration of area and personal dosemeters and the measurement of their response as a function of energy and angle of incidence. | ISO 4037-3 : 2019 has not taken for review yet. |
|  | IS 17986 (Part 4) : 2023/ISO 4037-4 :2019  Radiological Protection ----X and Gamma reference radiation for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy- Part 4 : Calibration of area and personal dosemeters in low energy X reference radiation fields. | ISO 4037-4 :2019 has not taken for review yet. |
|  | IS 17994 (Part 1) : 2023/ISO 6980-1 : 2022  Nuclear energy reference beta-particle radiation Part 1 : Methods of production (First Revision) | ISO 6980-1 : 2022 has been revised by ISO 6980-1:2023 |
|  | IS 17994 (Part 2) : 2023/ISO 6980-2 : 2022  Nuclear energy reference beta-particle radiation Part 2 : Calibration fundamentals related to basic quantities characterizing the radiation field | ISO 6980-2 : 2022 has been revised by ISO 6980-2:2023 |
|  | IS 17994 (Part 3) : 2023/ISO 6980-3 : 2022  Nuclear energy Reference beta-particle radiation Part 3: Calibration of area and personal dosemeters and the determination of their response as a function of beta radiation energy and angle of incidence | ISO 6980-3 : 2022 has been revised by ISO 6980-3:2023 |
|  | IS 17997 : 2022/ISO 15382 :2015  Radiological protection-Procedures for monitoring the dose to the lens of the eye the skin and the extremities | ISO 15382 :2015 will be replaced by ISO/CD 15382 |
|  | IS 18066 (Part 1) : 2022/ISO 11665-1 : 2019  Measurement of radioactivity in the environment-Air : radon- 222-Part 1 : Origins of radon and its short-lived decay products and associated measurement methods | ISO 11665-1 : 2019 has not taken for review yet. |
|  | IS 18066 (Part 3) : 2022/ISO 11665-3 : 2020  Measurement of radioactivity in the environment- Air : radon- 222-Part 3 : Spot measurement method of the potential alpha energy concentration of its short-lived decay products | ISO 11665-3 : 2020 has not taken for review yet. |
|  | IS 18066 (Part 8) : 2022/ISO 11665-8 : 2019  Measurement of radioactivity in the environment- Air : radon- 222-Part 8 : Methodologies for initial and additional investigations in buildings | ISO 11665-8 : 2019 has not taken for review yet. |
|  | IS 18066 (Part 12) : 2023/ISO 11665-12 : 2018  Measurement of radioactivity in the environment- Air : radon- 222-Part 12 : Determination of the diffusion coefficient in waterproof materials: membrane one-side activity concentration measurement method | ISO 11665-12 : 2018 was last reviewed and confirmed in 2022. Therefore this version remains current. |
|  | IS 18066 (Part 13) : 2023/ISO 11665-13 : 2017  Measurement of radioactivity in the environment- Air : radon- 222-Part 13 : Determination of the diffusion coefficient in waterproof materials: membrane two-side activity concentration test method | ISO 11665-13 : 2017 was last reviewed and confirmed in 2021. Therefore this version remains current. |
|  | IS 18067 : 2023/ISO 2919 : 2012  Radiological protection Sealed radioactive sources General requirements and classification | ISO 2919 : 2012 was last reviewed and confirmed in 2023. Therefore this version remains current. |
|  | IS 18068 : 2023/ISO 9978 : 2020  Radiation protection Sealed sources Leakage test methods | ISO 9978 : 2020 has not taken for review yet. |
|  | IS 18069 (Part 1) : 2023/ISO 8529-1 : 2021  Reference neutron radiations- Part 1 : Characteristics and methods of production | ISO 8529-1 : 2021 has not taken for review yet. |
|  | IS 18069 (Part 2) : 2023/ISO 8529-2 : 2000  Reference neutron radiations Part 2: Calibration fundamentals of radiation protection devices related to the basic quantities characterizing the radiation field | ISO 8529-2 : 2000 was last reviewed and confirmed in 2021. Therefore this version remains current. |
|  | IS 18070 : 2023/ISO 29661 : 2012  Reference radiation fields for radiation protection Definitions and fundamental concepts | ISO 29661 : 2012 was last reviewed and confirmed in 2024. Therefore this version remains current. |
|  | IS 18111 : 2023/ISO 14146 : 2018  Radiological protection-Criteria and performance limits for the periodic evaluation of dosimetry services | ISO 14146 : 2018 will be replaced by ISO/FDIS 14146 |
|  | IS 18251 : 2023/ISO 22127 : 2019  Dosimetry With Radiophotoluminescent Glass Dosimeters for Dosimetry Audit In Mv X-Ray Radiotherapy | ISO 22127 : 2019 has not taken for review yet. |
|  | IS 18282 (Part 1) : 2023/ISO 21909-1 : 2021  Passive Neutron Dosimetry SystemsPart 1: Performance and Test Requirements for Personal Dosimetry | ISO 21909-1 : 2021 has not taken for review yet. |
|  | IS 18282 (Part 2) : 2023/ISO 21909-2 : 2021  Passive Neutron Dosimetry Systems Part 2: Methodology and Criteria for the Qualification of Personal Dosimetry Systems in Workplaces | ISO 21909-2 : 2021 has not taken for review yet. |
|  | IS 18533 (Part 1) : 2024/ISO 13304-1 : 2020  Radiological Protection Minimum Criteria For Electron Paramagnetic Resonance Epr Spectroscopy For Retrospective Dosimetry Of Ionizing Radiation Part 1 : General Principles | ISO 13304-1 : 2020 has not taken for review yet. |
|  | IS 18535 : 2024/ISO 21439: 2009  Clinical Dosimetry Beta Radiation Sources for Brachytherapy | ISO 21439: 2009 was last reviewed and confirmed in 2019. Therefore this version remains current. |

**10.2 New Documents under development at ISO/TC 85, ISO/TC 85/SC 2, ISO TC 85/ SC 5, ISO/ TC 85/SC 6, and ISO/TC 147/SC 3.**

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **Document under development** | **Remarks** |
|  | ISO/CD 16659-2  Ventilation systems for nuclear facilities  In-situ efficiency test methods for iodine traps with solid sorbent  Part 2: Radioactive CH3I method  (Closed) | ISO 16659 series provide different test methods aiming at assessing the efficiency of radioactive iodine traps in ventilation systems of nuclear facilities. This series deals with iodine traps with solid sorbent, mainly activated and impregnated charcoal, the most usual solid sorbent used in ventilation systems of nuclear facilities, as well as other sorbent submitted to special conditions (e.g. high temperature zeolites).  The scope of this document is to provide general and common requirements for the test method using radioactive methyl iodide (CH3131I) as a tracer to determine the decontamination factor of iodine trap. This reproductible method can support nuclear operators to compare the result to reference values (e.g. safety criteria, national legislation, etc.).  Due to the use of a radioactive tracer, this document is not used to determine the decontamination factor of iodine traps used in ventilation systems with air release in rooms with potential presence of workers (e.g. control room). A non-radioactive method is preferred.  Due to the use of a radioactive tracer, this method is usually used for ventilation systems with monitoring of iodine gaseous releases in accordance with the national regulations.  This document can apply to installations with low inventory of radioiodine equipped with iodine traps (e.g. small laboratories). In this case, some provisions can be adapted but always in accordance with the national regulations. |
|  | ISO/CD 19361  Measurement of radioactivity — Determination of beta emitters activities — Test method using liquid scintillation counting  End Date : 11-04-2024 | This document applies to liquid scintillation counters and requires the preparation of a scintillation source obtained by mixing the test sample and a scintillation cocktail. The test sample can be liquid (aqueous or organic), or solid (particles or filter or planchet).  This document describes the conditions for measuring the activity of beta emitter radionuclides by liquid scintillation counting.  The choice of the test method using liquid scintillation counting involves the consideration of the potential presence of other beta emitter radionuclides in the test sample. In this case, a specific sample treatment by separation or extraction is implemented to isolate the radionuclide of interest in order to avoid any interference with other beta-, alpha- and gamma-emitting radionuclides during the counting phase.  This document is applicable to all types of liquid samples having an activity concentration ranging from a few Bq·l−1 to 106 Bq·l−1. For a liquid test sample, it is possible to dilute liquid test samples in order to obtain a solution having an activity compatible with the measuring instrument. For solid samples, the activity of the prepared scintillation source shall be compatible with the measuring instrument.  The measurement range is related to the test method used: nature of test portion, preparation of the scintillator - test portion mixture, measuring assembly as well as to the presence of the co-existing activities due to interfering radionuclides.  Test portion preparations (such as distillation for 3H measurement, or benzene synthesis for 14C measurement, etc.) are outside the scope of this document and are described in specific test methods using liquid scintillation |
|  | ISO/CD 19581  Measurement of radioactivity — Gamma emitting radionuclides — Rapid screening method using scintillation detector gamma-ray spectrometry  End Date : 29-04-2024 | This document specifies a screening test method to quantify rapidly the activity concentration of gamma-emitting radionuclides, such as 131I, 132Te, 134Cs and 137Cs, in solid or liquid test samples using gamma-ray spectrometry with lower resolution scintillation detectors as compared with the HPGe detectors (see IEC 61563).  This test method can be used for the measurement of any potentially contaminated environmental matrices (including soil), food and feed samples as well as industrial materials or products that have been properly conditioned. Sample preparation techniques used in the screening method are not specified in this document, since special sample preparation techniques other than simple machining (cutting, grinding, etc.) should not be required. Although the sampling procedure is of utmost importance in the case of the measurement of radioactivity in samples, it is out of scope of this document; other international standards for sampling procedures that can be used in combination with this document are available  The test method applies to the measurement of gamma-emitting radionuclides such as 131I, 134Cs and 137Cs. Using sample sizes of 0,5 l to 1,0 l in a Marinelli beaker and a counting time of 5 min to 20 min, decision threshold of 10 Bq·kg−1 can be achievable using a commercially available scintillation spectrometer [e.g. thallium activated sodium iodine (NaI(Tl)) spectrometer 2” ϕ × 2” detector size, 7 % resolution (FWHM) at 662 keV, 30 mm lead shield thickness].  This test method also can be performed in a “makeshift” laboratory or even outside a testing laboratory on samples directly measured in the field where they were collected.  During a nuclear or radiological emergency, this test method enables a rapid measurement of the sample activity concentration of potentially contaminated samples to check against operational intervention levels (OILs) set up by decision makers that would trigger a predetermined emergency response to reduce existing radiation risks[[12](https://www.iso.org/obp/ui/en/#iso:std:iso:19581:ed-1:v1:en:ref:16)].  Due to the uncertainty associated with the results obtained with this test method, test samples requiring more accurate test results can be measured using high-purity germanium (HPGe) detectors gamma-ray spectrometry in a testing laboratory, following appropriate preparation of the test samples[[7](https://www.iso.org/obp/ui/en/#iso:std:iso:19581:ed-1:v1:en:ref:11)][[8](https://www.iso.org/obp/ui/en/#iso:std:iso:19581:ed-1:v1:en:ref:12)].  This document does not contain criteria to establish the activity concentration of OILs. |
|  | ISO/CD 16659-3  Ventilation systems for nuclear facilities — In-situ efficiency test methods for iodine traps with solid sorbent — Part 3: Cyclohexane gas leakage rate method  End Date : 14-05-2024 | The scope of this document is to provide general and generic requirements for the test method using cyclohexane (C6H12) as a tracer to determine the mechanical leakage rate of iodine trap. This reproductible method can support nuclear operators to compare the result with reference values given in safety reports.  Unlike the method for radioactive methyl iodide described in ISO 16659-2, the cyclohexane field test method covered in this document does not directly give a decontamination factor for the iodine trap, but only an integrity test of the iodine trap performance information, and the interpretation of whether the performance of the iodine trap meets the requirements needs to be combined with the results of the radioiodine efficiency test of the adsorbent in the iodine trap.  Due to the use of low-toxicity and environmentally friendly test reagents in the field tests, the method is mainly suitable for iodine traps used in ventilation systems with air release in rooms with potential presence of workers (e.g. main control room), and performance test of a single iodine adsorber before its delivery and acceptance. In addition, the method can also be used for iodine traps with activated carbon sampling canister (e.g. Deep Bed Iodine Adsorber Type III and Drawer Iodine Adsorber Type II). |
|  | ISO/CD 18990  Measurement of radioactivity in urine-238Pu, 239Pu and 240Pu-Test method using alpha spectrometry and ICP-MS  End Date : 30-05-2024 | This document specifies approaches for the determination of plutonium isotopes (238Pu, 239Pu and 240Pu) in urine using alpha spectrometry and inductively coupled plasma mass spectrometry (ICP-MS).  It is applicable to the measurement of these isotopes at levels which are appropriate to:  workers handling plutonium in occupational settings, where detection limits should be sufficient to determine compliance with dose limits  workers, members of the public and emergency responders in accident situations, where required detection limits may be much higher and results should be reported in a short timescale.  This document does not provide information on when monitoring should be carried out or the interpretation of the results in terms of dose or biological effects.  This document specifies methods used to the analysis of plutonium (238Pu 239Pu, 240Pu) content in urine samples of occupational and rescue workers under accident emergencies. The concentrations obtained can be converted into activity concentrations of the different isotopes.  The limit of quantification depends on the efficiency of chemical separation and the performance of the measurement device.  This method covers the measurement of 239Pu and 240Pu higher than 1×10-5 Bq/l, and 238Pu higher than  69 1×10-3 Bq/l. |
|  | ISO/CD 8345-1  Guidelines for managing knowledge to support radioactive waste management — Part 1: Purpose and Overview of ISO 8345 and Introduction to Knowledge Management  End Date : 06-04-2024 | This document provides guidance for the management of knowledge associated with managing radioactive waste. |
|  | ISO/CD 7097-1  Nuclear fuel technology — Determination of uranium in solutions, uranium hexafluoride and solids — Part 1: Iron(II) reduction/potassium dichromate oxidation titrimetric method  End Date : 20-04-2024 | This part of [ISO 7097](https://www.iso.org/obp/ui/en/#iso:std:iso:7097:en) describes an analytical method for the determination of uranium in pure product material samples such as U metal, UO2, UO3, uranyl nitrate hexahydrate, uranium hexafluoride and U3O8 from the nuclear fuel cycle. This procedure is sufficiently accurate and precise to be used for nuclear materials accountability. This method can be used directly for the analysis of most uranium and uranium oxide nuclear reactor fuels, either irradiated or unirradiated, and of uranium nitrate product solutions. Fission products equivalent to up to 10 % burn-up of heavy atoms do not interfere, and other elements which could cause interference are not normally present in sufficient quantity to affect the result significantly. The method recommends that an aliquot of sample is weighed and that a mass titration is used, in order to obtain improved precision and accuracy. This does not preclude the use of any alternative technique which could give equivalent performance. As the performance of some steps of the method is critical, the use of some automatic device has some advantages, mainly in the case of routine analysis. |

**10.3 New proposals under consideration at ISO/TC 85, ISO TC 147/SC 3 and its Subcommittees/Working groups for standard formulation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **New Work Item Proposal** | **Remarks** | **Purpose** |
|  | ISO/PWI 22280  Principles of determination of groundwater remediation targets for in-situ leaching uranium mining  (Closed) | This document sets the basic principles for determination of groundwater remediation target value for uranium in-situ leaching, the environmental investigation requirements for uranium in-situ leaching, groundwater remediation technology and economic-benefit analysis, and the procedure for determination of groundwater remediation target value This document is applicable to control and remediation of groundwater impact of uranium in-situ leaching. | It provides the principles of determination of groundwater remediation target value for in-situ leaching for authorities, operating institutions, technical supporting departments, investors and other stakeholders from various countries, and provides reference indicators for groundwater remediation and health protection of surrounding people. Uranium in-situ leaching is a new type of uranium mining and metallurgy technology, including acid in-situ leaching and alkali in-situ leaching. Compared with the conventional mining, uranium in situ leaching has many unique advantages, such as low investment, short construction period, low production cost, low energy consumption, low labour intensity, high production efficiency, no tailings and waste rock, no destruction of natural landscape, minor ground pollution, easily realization of large-scale production automation, advantageous to environmental protection and safety production. Therefore, in-situ uranium leaching technology experience fast development in the world |
|  | ISO/NP 24389-2  Management of radioactive waste from nuclear facilities — Part 2: Pre-disposal  End Date : 01-05-2024 | This document provides guidance on specific requirements for each stage of the low and intermediatelevel radioactive waste management life cycle (prior to disposal), activities and services to implement these requirements, and outcomes (e.g., data, records, reports). | This standard provides guidance on data standardization and quality for the collection, notation and use of all data, metadata (technical, personnel, resource, etc.) and context data generated during the pre-disposal process, and guidance on various dismantling and decontamination tasks that will continue to be performed in the specific pre-disposal processes.  Through radioactive waste data consistently accumulated in this standardized manner, effective radioactive waste management is possible using functions such as data analysis, prediction, and visualization of results for similar streams, which is able to provide a data-based infrastructure supporting realistic waste management policies by ensuring safety and predicting required resources (manpower, expenses, schedule, etc.) to waste management for cost-benefit. |
|  | ISO/PWI 19696.2  Reactor technology — Magnetic confinement fusion — Test methods for low temperature mechanical properties of electrical insulation materials of superconducting devices  End date- 21.05.2024 | This International Standard specifies a test method for mechanical properties of electrical insulation material of superconducting magnet, the main electrical insulation material is polymer matrix composites with fibre glass reinforced. The composite materials include glass fiber and resin, or sometimes include polyimide tape. This test method is including tensile strength, short beam shear strength, compression shear strength, push-out strength, etc. | The insulation layer of large superconducting magnet is usually insulated by polymer composite material. The working conditions are high voltage, strong current and low temperature environment, so the insulation layer bears complex loads such as thermal stress and electromagnetic force during operation. According to the test methods of tensile strength, residual tensile strength, short beam shear strength, compressive shear strength and push-out strength stipulated in this standard, the properties of materials at low temperature can be obtained by these methods:  1) tensile and shear properties;  2) Degradation of tensile strength after mechanical stress fatigue;  3) The mechanical strength of the insulation layer itself and the bond strength between the insulation layer and the metal matrix under the combined action of normal stress and tangential stress;  4) Bonding strength between insulation material and conductor in real structure and the size sample. These indexes can effectively evaluate the insulation material and technological level of superconducting magnet. |
|  | ISO/NP 25190  Monitoring and internal dose assessment for radiation workers handling plutonium  (Last date- 02/07/2024)  **Proposed by India** | This standard specifies the monitoring requirements, and methodologies for intake and assessment of internal dose to individuals occupationally exposed to plutonium.  This Standard specifies the minimum requirements for the design of monitoring programmes using direct and indirect methods, criteria for selection of radiation workers, interpretation of monitoring data, quality assurance and requirements for recording and reporting of internal doses.  This standard is not applicable to members of the public | Individuals working in plutonium facility viz fuel fabrication, fuel reprocessing and waste management may get internally contaminated during the course of their employment. Though, engineered containment and administrative controls are used to minimize the intake, there is a probability of internal contamination in these facilities during normal operations and / or during accidental releases.  Assessment of internal radiation doses to these workers is an integral part of the radiation protection programme and can be divided into two phases, namely determination of the amount of radioactive material in the human body, in body organs or in wounds either by direct measurements and/or by indirect methods such as excretion analysis or air monitoring. While implementing the individual monitoring programme, it is essential to make decisions regarding which methods, techniques, frequencies, etc. to measure and assess internal dose. The criteria for designing the programme, i.e. its requirements, methods and frequency etc depends on the purpose of the overall radiation protection programme, the probabilities of potential radionuclide intakes and the characteristics of the radioactive  materials handled. Use of ICRP biokinetic and dosimetric models, however, requires assumptions to be made regarding the circumstances of an intake incident (either known or assumed), information regarding the chemical and physical characteristics of the radioactive material to which the individual was exposed and the time of intake. Experiences gained during the various international  intercomparison exercises indicate that for a given set of bioassay data, though ICRP recommended models were applied, assessed dose differed by orders of magnitude for various assessors. Thus, there is a necessity to lay down standard procedures for assessing internal doses following Pu intake (s) using body activities or excretion rates, in order to achieve consistency and reliability in the internal dose assessment.  The Standard is expected to address the specific issues of monitoring and internal dose assessment following internal contamination due to plutonium compounds. The standard will improve the reproducibility and reliability in internal dose assessments and contribute towards harmonizing of the practices in the monitoring of occupationally exposed individuals. It shall also form the basis for certification, accreditation or approval in this field. |

**10.4 Ballots received from ISO/TC 85, ISO TC 147/SC 3 and its Subcommittees**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ISO Committee** | **NP Ballots** | **CD Ballots** | **DIS Ballots** | **SR Ballots** | **CIB Ballots** | **Any other Ballots** | **No. of Comments received** |
| **ISO/TC 85** | 0 | 0 | 0 | 3 | 3 | 1-FDIS | 1 |
| **ISO/TC 85 SC 2** | 0 | 5 | 0 | 12 | 1 | 2- FDIS | 0 |
| **ISO/TC 85 SC 5** | 2 | 2 | 2 | 7 | 1 | 0 | 0 |
| **ISO/TC 85 SC 6** | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| **ISO/TC 147 SC 3** | 0 | 0 | 0 | 6 | 5 | 0 | 0 |
| **Total** | 3 | 7 | 5 | 28 | 11 | 3 | 1 |

**10.5 Members Nominated In ISO/TC 85, ISO TC 147/SC 3 and its Subcommittees**

The list of members currently nominated in ISO/TC 85, ISO TC 147/SC 3 and its Subcommittees is listed below.

****

The Committee may **NOTE**

**ITEM 11 PROGRAMMEE OF WORK**

The present scope and list of Indian standards including documents under development in CHD 30 is can be accessed through he below given link.

<https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/pow_new>

The Committee may **NOTE**

**ITEM 12 DATE AND PLACE OF NEXT MEETING**

**ITEM 13 ANY OTHER BUSINESS**