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**CHEMICAL DEPARTMENT**

**AIR QUALITY SECTIONAL COMMITTEE, CHD 35**

**AGENDA OF 18TH MEETING**



Date/Day/Time: 13th June 2024, Thursday, 10:30 AM

Venue: Virtual Meeting

Chairperson: Dr. Gauri Pandit, In personal capacity

Member Secretary: Ms. Preeti Prabha, Sc.C, CHD

**Please find below the details to attend the meeting through Webex.**

1. **URL:**  <https://bismanak.webex.com/bismanak/j.php?MTID=m99f3fe845b5941c9d003278b8abe6195>

**2) Meeting ID:** 2512 293 2635

**3) Password:**  CHD35@123

**ITEM 0 WELCOME AND INTRODUCTORY REMARKS**

* 1. Welcome of Chairman & Members by BIS
  2. Opening Remarks by the Chairman

ITEM 1 CONFIRMATION OF THE MINUTES OF THE 15th MEETING

The minutes of the 17th meeting of CHD 35 held on 21st March 2024 via virtual mode (Webex) was circulated to the members of CHD 35 through BIS portal. No comments were received on the minutes.

The Committee may **CONFIRM** the minutes, as circulated.

**ITEM 2 SCOPE AND COMPOSITION OF CHD 35**

**2.1 SCOPE**

To formulate India Standards for i) Terminology, methods of sampling and characterization of emissions from point and non-point sources, stationery and line sources including industrial emissions, ambient air, indoor air, workplace air, particularly measurement methods for air pollutants (particles, gases, odours, micro-organisms) ii)Terminology, methods of measurement of noise levels iii) Indoor air quality management system iii) Terminology, performance requirements and methods of test for air pollution monitoring devices iv) Terminology, performance requirements and methods of test for air purifier and control devices.

**Liaison:** **ISO TC-146 SC-0 (P):**Air quality **ISO TC-146 SC-1 (P):**Stationary source emissions **ISO TC-146 SC-2 (P):**Workplace atmospheres **ISO TC-146 SC-3 (P):**Ambient atmospheres **ISO TC-146 SC-4 (P):**General aspects **ISO TC-146 SC-6 (P):**Indoor air

**2.2 COMPOSITION OF THE SECTIONAL COMITTEE**

**2.2.1** The present composition of CHD 35, Panel 1, Panel 2, Panel 3 and Panel 4 along with the participation level of member organisation in last three meetings of CHD 35 is given in **Annex I**.



**2.2.2** As per the BIS’ guidelines, committees should represent all interest groups such as organized consumers/users, industry, technologist and regulatory bodies/NGOs etc. However, consumer interests shall as far as possible predominate. Where non-industry interests are less than 2/3, it may be reviewed. Stakeholders such as manufacturers/service providers as well as consumer activists should as far as possible represent industries association and organizations and not individual companies. Also, it may be desirable to induct and involve new people in the work of Sectional Committees with an aim to infuse fresh ideas and it is suggested that member organizations may like to keep this aspect in view while nominating their representations in the technical committees.

Also, the Committee may **IDENTIFY** and **INVOLVE** talent available in the country related to the subject of the Committee and also **suggest methodology** to involve them in the proceedings of the Committee.

Recently towards encouraging the participation of young professionals representing the member organizations on the Committee, it was decided by BIS that an additional member up to the age of 37 years may also be nominated by each organization.

**2.2.3 Gender Responsive Standards Initiative**

Bureau of Indian Standards is a signatory to the UNECE Gender Responsive Standards Declaration. The UNECE Gender Responsive Standards Initiative aims to provide a practical framework for standards bodies seeking to make the standards they develop, and the standards development process they follow, gender responsive. Established in 2016, the Initiative has the objectives of:

(i) strengthening the use of standards and technical regulations as powerful tools to attain SDG 5 (Achieve Gender Equality and Empower all Women and Girls);

(ii) integrating a gender lens in the development of both standards and technical regulations; and

(iii) elaborating gender indicators and criteria that could be used in standards development.

In line with these objectives, BIS aims to work towards:

* gender responsive standards;
* gender balance at all levels in all Committees including leadership positions;
* enhanced expertise to create and deliver gender inclusivity;

The Committee members **ARE REQUESTED** to work in tandem with these aims to create a gender balance environment in all walks of life through standards.

**2.6 Co-option Request**

**2.6.1** As discussed during the last meeting of CHD 35, the Committee decided that the co-option request received for Air Quality Sectional Committee will be reviewed by the Members of Panel 1. The decision of Panel 1 will be put up to the Main Committee during the meeting.

**2.6.2** The following Co-option request has been recieved:

|  |  |  |  |
| --- | --- | --- | --- |
| Sno. | Name of Organization/ Member | CV received | Panel Decision |
|  | Mr. Shekh Tazimul Haque Faridi , Dyson Technology India Pvt Ltd, Gurugram, Haryana. |  | The Co-option request has been circulated to the members of Panel 1 for their review. |

The Committee may DISCUSS and FINALIZE.

**ITEM 3** **PROCESS REFORMS AT BIS**

**3.1 A Presentation on the process reforms by BIS**

Due to growing realisation in the context of the increasing diversification, innovation and complexities in the manufacturing sector and evolution of services and also due to the fast pace of changes in the manufacturing and services landscapes, research & development projects have to be made an integral part of the standardization process. BIS has taken initiative that  standard should be developed with intensive and insightful research work, which is not confined only to the review of the existing literature and focus group discussions on the subject chosen for standardization, but also covers the detailed field level study of the existing processes and practices in product manufacturing and service delivery. This requires a large network of domain area experts to carry out the research & development work.

BIS Secretariat shall make a presentation on the recent process reforms to strengthen and streamline the standardization activity. The presentation is attached herewith for ready reference:





The committee may **CONSIDER** the information.

3.2 RESEARCH ACTION PROJECTS

Due to growing realisation in the context of the increasing diversification, innovation and complexities in the manufacturing sector and evolution of services and also due to the fast pace of changes in the manufacturing and services landscapes, research & development projects have to be made an integral part of the standardization process. BIS has taken initiative that  standard should be developed with intensive and insightful research work, which is not confined only to the review of the existing literature and focus group discussions on the subject chosen for standardization, but also covers the detailed field level study of the existing processes and practices in product manufacturing and service delivery. This requires a large network of domain area experts to carry out the research & development work. These R& D work can be taken up by following:

a) Academic institutions & universities having MoU with BIS and faculties and research scholars thereof;

b) Member(s) of Technical Committees of BIS.

The R&D guidelines is attached below:



Committee has identified the following standards as of now which can be given as R&D projects :

|  |  |  |
| --- | --- | --- |
| S No. | IS No. and Title | Term of Reference (ToRs) |
|  | IS 5182 (Part 15): 1974 Methods for measurement of air pollution: Part 15 mass concentration of particulate matter in the atmosphere | The ToR is under preparation. |
|  | IS 5182 (Part 16): 1980 Methods for measurement of air pollution: Part 16 recommended practice for collection by filtration and determination of mass, number and optical sizing of atmospheric particulates | The ToR is under preparation. |
|  | IS 5182 (Part 18): 1974 Methods for measurement of air pollution: Part 18 continuous analysis and automatic recording of the oxidant content of the atmosphere | The ToR is under preparation. |
|  | IS 5182 (Part 20): 1982 Methods for measurement of air pollution: Part carbon disulphide | The ToR is under preparation. |
|  | IS 13270: 1992 Test for gases by orsat and chromatographic methods | The ToR is under preparation. |

The Committee may REVIEW and CONSIDER.

**3.3 The Rolling Annual Action Plan for the year 2024-25**

Annual Action Plan is an important instrument as it helps to plan for the entire year the activities to be undertaken by the committee. It inter-alia includes documents under development, meetings, new subjects to be taken up, etc. However, the action plan should also have agility to accommodate new requirements arising at any point of time. BIS management therefore emphasizes on preparation of the Rolling Annual Action Plan and advises committees to prepare the one for the year 2024-2025.

Considering the current work in hand, the committee may CONSIDER the draft Rolling Annual Action Plan for the year 2024-25.

**3.4 Research Projects to be taken up for inclusion of empirical data and insights**

Quality of a standard depends largely on the research data being considered while developing standards. Further, such data also provides insight on the modification required or incorporation of a specific requirement/ parameter in a standard. It is presume that during the development of a standard the members/ proposer will provide data in support of the proposal/ requirements. In some cases, it is seen that due to lack of such information, the standard does not meet the requirements of the market. BIS management has therefore offered support to committee for taking up research projects to collect empirical data and getting insight for the development of standard.

The committee may **CONSIDER and IDENTIFY** standards for which research project needs to be taken up.

**3.5 Closer examination of the new work item proposals received from ISO/ IEC**

Participation in the development of international standards from an early stage helps to influence the standard as well as to understand why a specific requirement is being considered. It is therefore important that the New Work Item proposal received from ISO/ IEC are examined closely and a national view point is prepared on the subject as early as possible.

It is therefore proposed that in continuation of item **9.6** of the agenda, the committee may also **CONSIDER** how the NWPs could be examined.

**3.6 Measures to ensure effective participation by the Indian experts at ISO/ IEC levels**

The committee is considering various aspects to increase participation in the ISO committees, be it obtaining P-membership, nominating experts in WGs of national interest, voting on the ballots, participation in the meetings, etc. It is however important to measure effectiveness of our participation in international standardization work.

The Committee may **CONSIDER** the measures to ensure effective participation by the Indian experts at ISO level.

**3.7 National and International events to be participated**

Apart from participation in ISO meetings, the participation of BIS in other national or international importance events on the committee subject can facilitate in staying updated with the new and emerging trends in the field of work, networking and collaboration with relevant experts and stakeholders, influencing policy and decision-making, promoting standardization efforts, etc.

The Committee may **IDENTIFY** other national and international events wherein BIS should participate for the benefit of standard’s work.

**3.8 Scientific journals and periodicals to be subscribed**

BIS has been subscribing scientific journals and periodicals to support standards work and maintaining these through our central library.

The Committee may suggest scientific journals and periodicals, which may be useful in standard development especially in the field of paper, based packaging.

**3.9 Creation of pool of experts**

To have the committee manageable and workable, BIS management has suggested optimum size of a committee as 25-30 members. Further, representations of various interest groups in the committee have also to be ensured. Considering the facts, sometime it felt by the committees that it lacks requisite expertise for developing some specific subject standards. It is therefore essential that a pool of experts has to be created through establishment of sub-committees or panels or WC mailing lists or other modes.

The Committee may **SUGGEST** ways to create and maintain a pool of experts in the field of Air Quality.

**ITEM 4 ACTIONS ARISING OUT OF THE MINUTES OF PREVIOUS MEETING**

The decisions on summary of actions taken on the minutes of the 17th meeting are given below:

**4.1** **Revision of A5 and pre -2000 Published Standards**

In order to invigorate the process of review and to update all Indian standards in A5 size and published prior to the year 2000, the review process has been redesigned, guidelines issued and a project of revision of these standards initiated, to be completed over a period of 2-3 years.

<https://docs.google.com/spreadsheets/d/10GRQdR5ZelIETCR1wlUr-jBBZ7rBjFdc9FlJAtYaZ-g/edit?usp=sharing>

# 4.1 Revision of A5 and pre -2000 Published Standards

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| --- | --- | --- | --- |
| **Sl no.** | **IS No./Title** | **Committee decision** | **Current Status** |
| 1. | IS 5182 (Part 3) : 1970  (CHD/35/25082)  Methods for measurement of air pollution : Part 3 Radioactivity (particulate in air): | * The committee **Noted** the status and decided to send the document into wide circulation for 2 months after chairman approval. * If no comments are received on the document, the document will be finalized for printing. * If comments are received on the document, the same will be discussed in the next sectional committee meeting. | * The document has been sent into wide circulation for 2 months. * The following Comments have been received on the WC draft Circulated.        * The Committee may discuss the comments and dispose of the comments received and finalize the document for printing. * The draft after incorporating the comments is attached below : |
| 2. | IS 5182 (Part 4): 1999  Methods for measurement of air pollution: Part 4 suspended - Particulate matter (First  Revision) | * The Committee requested Member Secretary to send the draft that completed WC period to Mr. Aditya Sharma for his comments. * If no comments were received, the draft will be finalized and sent for printing with approval of Chairperson. | * The document has been sent to Mr. Aditya Sharma for his review/comments. * Some technical changes have been suggested by Mr. Aditya Sharma in the WC draft . * The draft consisting the changes is attached below:      * The draft sent into Wide circulation is attached below :      * The Committee may **DISCUSS.** |
| 3. | IS 5182 (Part 8) : 1976  Methods for measurement of air pollution: Part 8 Sulphation rate | * The Committee after discussion requested Dr. S.K. Tyagi to provide his inputs for the revision of the standard in 2-month time duration. * Based on the inputs received the document will be sent into WC for 2 months | * The inputs are still awaited. * The Committee may **NOTE.** |
| 4. | [IS 5182 ( Part 10) : 1999](https://www.services.bis.gov.in:8071/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=MTE5Mzc%3D)  Methods for measurement of air pollution: Part 10 carbon monoxide (First Revision) | * The Committee after discussion requested member secretary to send the Term of reference pertaining to this subject along with the minutes for comments/suggestions. * The Committee decided that if no comments are received on the ToR, then it will be considered as **APPROVED**. | * No Comments have been received on the ToR circulated along with minutes. * The ToR approved by the Committee will be put up before Screening Committee. * The Committee may **NOTE.** |
| 5. | IS 5182 (Part 13): 1991  Methods of measurement of air pollution: Part 13 total  fluorides in ambient air | * The Committee after discussion requested member secretary to send the Term of reference pertaining to this subject along with the minutes for comments/suggestions. * The Committee decided that if no comments are received on the ToR, then it will be considered as **APPROVED**. | * No Comments have been received on the ToR circulated along with minutes. * The ToR approved by the Committee will be put up before Screening Committee. * The Committee may **NOTE.** |
| 6. | IS 5182 ( Part 15) : 1974  Methods for measurement of air pollution: Part 15 mass concentration of particulate matter in the atmosphere | * The Committee after discussion requested member secretary to draft the Terms of Reference (TOR) for R&D project pertaining to this subject. | * The ToR is under preparation. * The Committee may **NOTE.** |
| 7 | IS 5182 ( Part 16) : 1980  Methods for measurement of air pollution: Part 16 recommended practice for collection by filtration and determination of mass, number and optical sizing of  atmospheric particulates | * The Committee after discussion requested member secretary to draft the Terms of Reference (TOR) for R&D project pertaining to this subject. | * The ToR is under preparation. * The Committee may **NOTE.** |
| 8 | IS 5182 ( Part 17) : 1979  Methods for measurement of air pollution: Part 17 C1 to C5 hydrocarbons in air by gas chromatography | * The Committee after discussion requested member secretary to send the Term of reference pertaining to this subject along with the minutes for comments/suggestions. * The Committee decided that if no comments are received on the ToR, then it will be considered as **APPROVED**. | * No Comments have been received on the ToR circulated along with minutes. * The ToR approved by the Committee will be put up before Screening Committee. * The Committee may **NOTE.** |
| 9 | IS 5182 ( Part 18) : 1974  Methods for measurement of air pollution: Part 18 continuous analysis and automatic recording of the oxidant content of the  atmosphere | * The Committee after discussion requested member secretary to draft the Terms of Reference (TOR) for R&D project pertaining to this subject. | * The ToR is under preparation. * The Committee may **NOTE.** |
| 10 | IS 5182 ( Part 20) : 1982  Methods for measurement of air pollution: Part carbon  disulphide | * The Committee after discussion requested member secretary to draft the Terms of Reference (TOR) for R&D project pertaining to this subject. | * The ToR is under preparation. * The Committee may **NOTE.** |
| 12 | IS 11255 ( Part 1) : 1985  Methods for measurement of emissions from stationary sources: Part 1 particulate matter | * Member Secretary presented the draft TOR for Committee review. After deliberate discussion, the Committee approved the Term of References for R&D projects for revision of IS 11255 (Part 1): 1985 | * The ToR approved by the Committee was put up before Screening Committee. * The Screening Committee approved the ToR for hosting it on the BIS website. * The ToR was hosted on the BIS website. * The Committee may **NOTE.** |
| 13 | IS 11255 ( Part 2) : 1985  Methods for measurement of emissions from stationary sources: Part 2 sulphur dioxide | * Member Secretary presented the draft TOR for Committee review. After deliberate discussion, the Committee approved the Term of References for R&D projects for revision of IS 11255 (Part 2): 1985 | * The ToR approved by the Committee was put up before Screening Committee. * The Screening Committee approved the ToR for hosting it on the BIS website. * The ToR was hosted on the BIS website. * The Committee may **NOTE.** |
| 14. | IS 11255 (Part 5): 1990  Methods of measurement of emissions from stationary  sources: Part 5 total fluoride | * Member Secretary presented the draft TOR for Committee review. After deliberate discussion, the Committee approved the Term of References for R&D projects for revision of IS 11255 (Part 5): 1990 | * The ToR approved by the Committee was put up before Screening Committee. * The Screening Committee approved the ToR for hosting it on the BIS website. * The ToR was hosted on the BIS website. * The Committee may **NOTE.** |
| 15 | IS 11255 (Part 6): 1990  Methods of measurement of emissions from stationary  sources: Part 5 total fluoride | * The Committee after discussion requested member secretary to send the Term of reference pertaining to this subject along with the minutes for comments/suggestions. * The Committee decided that if no comments are received on the ToR, then it will be considered as **APPROVED**. | * No Comments have been received on the ToR circulated along with minutes. * The ToR approved by the Committee will be put up before Screening Committee. * The Committee may **NOTE.** |
| 16. | IS 13270: 1992  Test for gases by orsat and chromatographic methods - Methods | * The Committee after discussion requested member secretary to draft the Terms of Reference (TOR) for R&D project pertaining to this subject. | * The ToR is under preparation * The Committee may **NOTE.** |
| 17. | IS 11255 (Part 7): 2005  Methods for measurement of emission from stationary sources: Part 7 oxides of nitrogen | * The Committee after discussion requested member secretary to send the Term of reference pertaining to this subject along with the minutes for comments/suggestions. * The Committee decided that if no comments are received on the ToR, then it will be considered as **APPROVED**. | * No Comments have been received on the ToR circulated along with minutes. * The ToR approved by the Committee will be put up before Screening Committee. * The Committee may **NOTE.** |

**ITEM 5 DRAFT STANDARD/AMENDMENTS SENT FOR PRINTING**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee Decision** | **Current Status** |
| 1. | IS 18637-1 : 2024  (CHD/35/17328)  Cleanrooms and associated controlled environments Part 1: Classification of air cleanliness by particle concentration | • The Committee discussed the document and as no comments have received on the document, the committee finalized the docuement for printing. | * The document is under printing. * The Committee may **NOTE**. |
| 2. | IS 5182-27 : 20XX  CHD/35/[19220](https://www.services.bis.gov.in/php/BIS_2.0/StandardsFormulationV2/Upload3.php?ID=OTFKdlJmdGVmNzNkTXJWbnZUQnY0UT09)  Methods For Measurement Of Air Pollution Part 27 Vapour-phase organic chemicals vinyl chloride to nC22 hydrocarbons in air and gaseous emissions by diffusive passive sampling onto sorbent tubes or followed by thermal desorption TD | • The Comment received on the WC draft were disposed off by the task group meeting held on 13-03-2024.  •The draft recommended by task group has been finalized by the Committee for printing. | * The document is under printing. * The Committee may **NOTE**. |

**ITEM 6 DRAFT DOCUMENT UNDER /COMPLETED P DRAFT STAGE**

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| --- | --- | --- | --- |
| **Sl No.** | **Document No./Title** | **Committee Decision** | **Current Status** |
| 1. | CHD/35/25505  Methods for Measurement of Air Pollution Part XX Vapor Phase Mercury in Ambient Air Sec 1 Cold-Vapor Atomic Fluorescence Spectrometer method by Amalgamation Principle | * The Committee after detailed discussion decided to circulate the drafts received from Dr. Shankar Aggarwal as P drafts for 1 month. * If comments are received on the P draft, they will be discussed in next committee meeting. * If no comments are received, the document will be circulated as WC draft for 1 month. | * The document has been circulated as P- Draft through portal for period of 1 month on 01-05-2024. * The Committee may **NOTE**. |
| 2. | CHD/35/25502  Method Measurement of air pollution Part X Vapor Phase Mercury in Ambient Air Sec 2 Cold-Vapor Atomic Absorption or Fluorescence Spectroscopy CVAFS Method Using Acidified solution of KMnO4 | * The Committee after detailed discussion decided to circulate the drafts received from Dr. Shankar Aggarwal as P drafts for 1 month. * If comments are received on the P draft, they will be discussed in next committee meeting. * If no comments are received, the document will be circulated as WC draft for 1 month. | * The document has been circulated as P Draft through portal for period of 1 month on 01-05-2024. * The Committee may **NOTE**. |

**ITEM 7 DRAFT DOCUMENT UNDER WIDE CIRCULATION/COMPLETED WIDE CIRCULATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee Decision** | **Current Status** |
| 1 | IS 5182 (Part 28): 20XX (19221) Methods for Measurement of Air Pollution Vapour phase organic chemicals C3 to nC30 hydrocarbons in air and gaseous emissions Sampling by pumped sorbent tubes followed by thermal desorption and capillary gas chromatography analysis. | * The Committee after discussion decided that the document will be sent into Wide Circulation for period of 2 months after incorporating the changes suggested by Dr. S. K Tyagi. * If comments are received on the document, the same will be discussed in the next sectional committee meeting. * If no comments are received on the document, the document will be finalized for printing. | * The document has been sent into wide circulation for 2 months. * The Committee may **NOTE.** |
| 2 | IS 17148 : Part 1: 2019  CHD/35/25059  Performance Characteristics of Automated Measurement Systems Part 1 Carbon Monoxide Carbon Dioxide and Oxygen from Stationary Sources | * The Document has been sent into wide circulation on 14-03-2024 for 2 months. * If comments are received on the WC draft, the same will be discussed in committee meeting. * If no comments are received on the WC draft, the document will be finalized and sent for printing. | * The document has been sent into wide circulation for 2 months. * No Comments have been received on the WC draft. * The Committee may **FINALIZE** the draft. |
| 3. | IS 5182 : Part 3: 1970  CHD/35/25082 | * The committee **Noted** the status and decided to send the document into wide circulation for 2 months after chairman approval. * If no comments are received on the document, the document will be finalized for printing. * If comments are received on the document, the same will be discussed in the next sectional committee meeting. | * The document has been sent into wide circulation for 2 months. * The following Comments have been received on the WC draft Circulated.      * The Committee may discuss the comments and dispose of the comments received and finalize the document for printing. * The draft after incorporating the comments is attached below : |

**ITEM 8 DRAFT UNDER PREPARATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee decision** | **Current status** |
|  | ISO 16911-1:2013 Stationary source emissions -- Manual and automatic determination of velocity and volume flow rate in ducts -- Part 1: Manual reference Method | The Committee noted the status of the document and requested the task group to provide the working document.  The members involved in the task group are as follows:  ➢Dr.Rajendra Prasad  ➢Dr. N Raveendhar  ➢Dr. S K Goyal  ➢Dr.Nandini Kumar  ➢Dr. R S Saini | * The document is still awaited. * The Committee may **NOTE.** |
|  | IS 5182-25 : 2018 Methods for Measurement of Air Pollution Part 25 Ammonia | The Committee noted the status of the document and requested the task group to provide the working document.  The members involved in the task group are as follows:  ➢Dr. R S Saini  ➢Dr. S K Tyagi  ➢ Shri Sanjib Kumar Goswami  ➢Dr.Rajendra Prasad  ➢Dr. S K Goyal | * The document is awaited. * The Committee may **NOTE.** |
|  | Methods for measurement of air pollution: Arsenic | The Committee discussed and decided to circulate the draft provided by Task Group through mail within committee members to seek inputs.  The Committee also requested Task Group to provide the final draft by August 15th for Wide Circulation for 2 months. | * The document is awaited. * The Committee may **NOTE.** |
|  | Metals in Ambient Air | * The document is awaited. * The Committee may **NOTE.** |
|  | Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments | * The Committee deliberated on the subject and Dr. Shankar Aggarwal informed the members that similar work has been already published by USEPA. The research is already available in the USEPA document may be adopted as such or some modification can be done as per the Indian requirements. * Hence, The Committee requested BIS Secretariat to write a letter to USEPA for adoption of Standard on Fine Particulate Matter Air Sensor. | * Confederation of Indian Industry (CII) has provided their framework, which they have taken from two international sets of guidelines (US EPA & AQ-SPEC) for purposes of field testing the performance of PM sensors. * The mail and the document received from CII is attached below:        * The Committee may DISCUSS. |
|  | EN 15267-1:2009 Certification of automated measuring systems. General principles | * The Committee deliberated on the adoption of the EN standards and decided that to rewrite the European Standards and send it as P-darft for comments. Further, Committee requested BIS secretariat to rewrite these European Standards and send it to Committee Members for their Inputs. | * Draft is under preparation * The Committee may NOTE. |
|  | EN 15267-2:2009 Certification of automated measuring systems. Initial assessment of the AMS manufacturer's quality management system and post certification surveillance for the manufacturing process |
|  | EN 15267-3 Certification of automated measuring systems - Performance criteria and test procedures for automated measuring systems for monitoring emissions from stationary sources |

**ITEM 9 INTERNATIONAL ACTIVITY**

**9.1 Membership Status in ISO/TC/146/SC 1**

CHD 35 holds the Secretariat of the following:

i) ISO/TC 146/SC 1 Stationary Source Emission

**9.2 Participation as P Members:**

BIS is a participating member of the following ISO technical committees and CHD 35 is the corresponding National committee dealing with their activities. The updated member/expert for ISO/TC 146, its SC’s and WGs is given below:

|  |  |  |
| --- | --- | --- |
| **Committee** | **Working Group** | **Committee Member/Expert** |
| ISO/TC 146 – Air Quality |  | Head, CHD  Member Secretary, CHD 35 |
| ISO/TC 146/SC 1 – Stationary Source Emissions |  | Head, CHD  Member Secretary, CHD 35  Dr. Gauri G. Pandit, In Personal Capacity |
| WG 30 - GHG energy-intensive industries – Specific sectors | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Dr. S K Tyagi - in personal capacity  Dr.Pinaki Sarkar - CIMFR  Shri Suresh Kumar (Retd. as GM, NTPC) – in personal capacity  Shri CBS Sengar – JSW Steel |
| WG 34 – Revision of ISO 12039 | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Shri Vijay Pandey – UNIPHOS  Dr. A R Supate – Maharashtra Pollution Control Board  Dr. S K Goyal – NEERI  Dr.Rajendra Prasad - Ecotech |
| ISO/TC 146/SC 2 – Workplace Atmospheres |  | Head, CHD  Member Secretary, CHD 35 |
| WG 1 - Particle size-selective sampling and analysis | None |
| WG 2 - Inorganic particulate matter | None |
| WG 3 - Gases | None |
| WG 4 - Organic vapours | None |
| WG 7 - Silica | None |
| WG 8 - Assessment of contamination of skin and surfaces from airborne chemicals | None |
| WG 9 - Sampling pump performance | None |
| WG 10 - Terminology and Quality Control in Workplace Air | None |
| ISO/TC 146/SC 3 – Ambient Atmospheres |  | Head, CHD  Member Secretary, CHD 35  Dr. Gauri G. Pandit, In Personal Capacity |
| WG 1 - Determination of asbestos fibre content | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Dr. S K Goyal, NEERI  Dr. R S Saini, Green Economy Initiatives Pvt. Ltd. |
| WG 22 - Measurement of substances in ambient air from transportation sources |
| ISO/TC 146/SC 4 – General Aspects |  | Head, CHD  Member Secretary, CHD 35 |
| WG 1 - Terminology | None |
| WG 9 - Validation of measurement methods |
| ISO/TC 146/SC 6 – Indoor Air |  | Head, CHD  Member Secretary, CHD 35 |
| WG 3 - Determination of volatile organic compounds (VOCs) in indoor air | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Dr. S K Goyal, NEERI  Dr.Anubha Mandal, DTU  Dr. R S Saini, Green Economy Initiatives |
| WG 10 - Microbial contaminants | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Dr. S K Goyal, NEERI  Dr.Anubha Mandal, DTU  Dr. R S Saini, Green Economy Initiatives  Dr Smita Agarwal, NEERI |
| WG 13 - Joint ISO/TC 146/SC 6 - ISO/TC 22 WG; Determination of volatile organic compounds in car interiors | Head, CHD (register as document monitor)  Member Secretary, CHD 35 (register as document monitor)  Dr. S K Goyal, NEERI  Dr.Anubha Mandal, DTU  Dr. R S Saini, Green Economy Initiatives  Dr Smita Agarwal, NEERI |
| WG 17 - Sensory testing of indoor air | None |
| WG 20 - Determination of phthalates | None |
| WG 21 - Strategies for the measurement of airborne particles | None |
| WG 25 - Testing air cleaners by the assessment of perceived air quality | None |

*The Committee may* ***REVIEW.***

**9.3 Scope of ISO/TC 146 and its Sub Committees**

The scope of ISO/TC 146 and the list of standards published by ISO/TC 146 and its SCs can be found at the following links:

[*https://www.iso.org/committee/52702/x/catalogue/p/1/u/0/w/0/d/0*](https://www.iso.org/committee/52702/x/catalogue/p/1/u/0/w/0/d/0)

[*https://www.iso.org/committee/52704/x/catalogue/*](https://www.iso.org/committee/52704/x/catalogue/)

[*https://www.iso.org/committee/52736/x/catalogue/*](https://www.iso.org/committee/52736/x/catalogue/)

[*https://www.iso.org/committee/52750/x/catalogue/*](https://www.iso.org/committee/52750/x/catalogue/)

[*https://www.iso.org/committee/52792/x/catalogue/*](https://www.iso.org/committee/52792/x/catalogue/)

[*https://www.iso.org/committee/52810/x/catalogue/*](https://www.iso.org/committee/52810/x/catalogue/)

[*https://www.iso.org/committee/52822/x/catalogue/*](https://www.iso.org/committee/52822/x/catalogue/)

The Committee may***NOTE***.

**9.4 Standards Adopted by BIS and are being considered by ISO for Revision**

No standard adopted by BIS is under revision in ISO.

The Committee may **ADOPT** the ISO standards in this field as necessary.

**9.5 New standards under development at ISO/TC 146 and its Sub-committees**

**9.5.1** The Committee in the last meeting asked Member Secretary to provide the list of these standards to CPCB who will provide their input for the adoption of the standard.

**9.5.2** The list of standard i.e. ‘new standards under development at ISO/TC 146 and its Sub-committees’ has been sent to CPCB for their Inputs.

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **Document under development** | **Remarks** |
| 1 | ISO/DIS 7935 (Ed 2)  Stationary source emissions - Determination of the mass concentration of sulfur dioxide in flue gases - Performance characteristics of automated measuring systems | * The committee may decide on adoption |
| 2 | ISO 15259:2023  Air quality — Measurement of stationary source emissions — Requirements for measurement sections and sites and for the measurement objective, plan and report | * Adopted Identically |
| 3 | ISO/DIS 5409  Stationary source emissions — Chemical absorption method for sampling and determining mercury species in flue gas | * The committee may decide on adoption |
| 4 | ISO/FDIS 6323-1  Workplace air — Determination of arsenic and arsenic compounds by electrothermal atomic absorption spectrometry — Part 1: Arsenic and arsenic compounds, except arsine by ET-AAS | * The committee may decide on adoption |
| 5 | ISO 14382:2012 (vers 2)  Workplace atmospheres — Determination of toluene diisocyanate vapours using 1-(2-pyridyl)piperazine-coated glass fibre filters and analysis by high performance liquid chromatography with ultraviolet and fluorescence detectors | * The committee may decide on adoption |
| 6 | ISO/CD 6868  Workplace Air — Quantitative determination of quartz and cristobalite in bulk materials by X-ray powder diffraction methods | * The committee may decide on adoption |
| 7 | N1305 PWI request to develop an ISO TR  Workplace air – Quality control in workplace exposure measurements – Part 1: Analyses performed in the laboratory | * The committee may decide on adoption |
| 8 | ISO 4219:1979 (vers 6)  Air quality — Determination of gaseous sulphur compounds in ambient air — Sampling equipment | * The committee may decide on adoption |
| 9 | ISO 4220:1983 (vers 7)  Ambient air — Determination of a gaseous acid air pollution index — Titrimetric method with indicator or potentiometric end-point detection | * The committee may decide on adoption |
| 10 | ISO 4221:1980 (vers 6)  Air quality — Determination of mass concentration of sulphur dioxide in ambient air — Thorin spectrophotometric method | * The committee may decide on adoption |
| 11 | ISO 6767:1990 (vers 6)  Ambient air — Determination of the mass concentration of sulfur dioxide — Tetrachloromercurate (TCM)/pararosaniline method | * The committee may decide on adoption |
| 12 | ISO 7996:1985 (vers 6)  Ambient air — Determination of the mass concentration of nitrogen oxides — Chemiluminescence method | * The committee may decide on adoption |
| 13 | ISO 8186:1989 (vers 6)  Ambient air — Determination of the mass concentration of carbon monoxide — Gas chromatographic method | * The committee may decide on adoption |
| 14 | ISO 13752:1998 (vers 4)  Air quality — Assessment of uncertainty of a measurement method under field conditions using a second method as reference | * The committee may decide on adoption |
| 15 | ISO/FDIS 16000-9 (Ed 2)  Indoor air — Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method | * The committee may decide on adoption |
| 16 | ISO/FDIS 16000-11 (Ed 2)  Indoor air — Part 11: Determination of the emission of volatile organic compounds from building products and furnishing — Sampling, storage of samples and preparation of test specimens | * The committee may decide on adoption |
| 17 | ISO 16000-41: 2023  Indoor air — Part 41: Assessment and classification | * The committee may decide on adoption |
| 18 | ISO 16000-42 : 2023  Indoor air — Part 42: Measurement of the particle number concentration by condensation particle counters | * The committee may decide on adoption |

The Committee may***NOTE***.

**9.6** **Proposal of New Subject in ISO/TC 146/SC 3 'Ambient Air'**

In the last meeting the Committee decided to provide the NWIP on IS 5182 (Part 15) for new standard in ISO under ISO/TC 146/SC 3 after revision of Indian Standard.

The Committee may***NOTE***.

**9.7 Ballots circulated within Committee Members**

India has, since the last meeting voted on the following international drafts/committee internal ballots/systematic review (list enclosed) of **ISO/TC 146, SC1, SC2, SC3, SC 4 and SC 6:**

****The Committee may **NOTE.**

**ITEM 10 COMMENTS ON PUBLISHED STANDARDS**

The following comments have been received on the published Indian Standards:

|  |  |  |  |
| --- | --- | --- | --- |
| **S No.** | **Standard no. and tittle** | **Comments** | **Current Status** |
|  | IS 15206:2002/  ISO 8760:1990  Work - Place air - Determination of mass concentration of carbon monoxide - Method using detector tubes for short-term sampling with direct indication | The amendment has been published to ISO 8760: 1990, so the Indian standard IS 15206: 2002 need to be revised accordingly.  The Committee after discussion asked Member Secretary to send the amendment to Committee Members for their inputs. | * The Amendment has been circulated to the members for their inputs. * Some Committee members have suggested for the adoption of the published amendment. However, few Comments have been received from Mr. Vinayak Valsangkarp. The comments are attached below :      * The Amendment is attached below:      * The Committee may **DISCUSS.** |
|  | IS 15209 : 2002 /  ISO 8761 : 1989  Work - Place air - Determination of mass concentration of nitrogen dioxide - Method using detector tubes for shortterm sampling with direct indication | The amendment has been published to ISO 8761: 1989, so the Indian standard IS 15206: 2002 need to be revised accordingly.  The Committee after discussion asked Member Secretary to send the amendment to Committee Members for their inputs. | * The Amendment has been circulated to the members for their inputs. * Some Committee members have suggested for the adoption of the published amendment. However, few Comments have been received from Mr. Vinayak Valsangkarp. * The comments are attached below :      * The Amendment is attached below :      * The Committee may **DISCUSS** |
|  | IS 15210 : 2002/  ISO 8762 : 1988  Workplace air - Determination of vinyl chloride - Charcoal tube/gas chromatographic method | IS 15210 : 2002 is the adoption of  ISO 8762: 1988. ISO 8762: 1988 has been withdrawn and no new standard has been published by ISO for this subject. However Committee may review the ISO 9486 : 1991 for the adoption purpose . | * The copy of ISO 9486 : 1991 is attached below :      * The Committee may **Review**. |

**ITEM 11 PROGRAMME OF WORK**

**11.1** The present position of work programme under the Committee CHD 35 is given at **Annex II.**

|  |  |
| --- | --- |
| **Annex II** | |
| PDF |  |
| Excel |  |

The Committee may **NOTE.**

**11.2 Standards Due For Review under 5 Year Criteria**

The Standards due for review by March 2024 was reviewed and reaffirmed by the Committee during 15th meeting of CHD 35.The standards given in table below are due for periodic review by **March 2025** in line with the BIS Rules, i.e., published standards are to be reviewed at least once every five years with a view to reaffirm, revise, declare obsolescence or withdraw the same. Committee may critically review the standards due for review and any other standard felt necessary so as to ascertain the need for revision/updation/withdrawal/ declaring obsolescence of these standards in light of emerging technologies, experience in use, feedback received, etc

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **IS Number** | **IS Title** | **Proposed Decision** |
|  | IS 11255 (Part 1): 1985 | Methods for measurement of emissions from stationary sources: Part 1 particulate matter | * The ToR pertaining to this subject was hosted on BIS portal. * The Committee may **Reaffirm and Revise.** |
|  | IS 11255 (Part 2): 1985 | Methods for measurement of emissions from stationary sources: Part 2 sulphur dioxide | * The ToR pertaining to this subject was hosted on BIS portal. * The Committee may **Reaffirm and Revise.** |
|  | IS 11255 (Part 5): 1990 | Methods of measurement of emissions from stationary sources: Part 5 total fluoride | * The ToR pertaining to this subject was hosted on BIS portal. * The Committee may **Reaffirm and Revise.** |
|  | IS 11255 (Part 6): 1999 | Methods of measurement of emissions from stationary sources: Part 6 ammonia | * The Committee has approved the ToR pertaining to this subject. * The Committee may **Reaffirm and Revise.** |
|  | IS 13270: 1992 | Test for gases by orsat and chromatographic methods - Methods | * The Committee may **Reaffirm and Revise.** |
|  | IS 15309: 2003/  ISO 8518: 2001 | Workplace air - Determination of particulate lead and lead compounds - Flame or electrothermal atomic absorption spectrometric method | * IS 15309: 2003 is the adoption of ISO 8518: 2001. ISO 8518: 2001 has been revised and published as ISO 8518: 2022. * The Committee may adopt the revised version i.e. ISO 8518: 2022. * The revised ISO 8518: 2022 is attached below for your reference:      * The Committee may **Reaffirm and Revise.** |
|  | IS 4167: 2020 | Glossary of Terms Relating to Air Pollution (Second Revision) | * The Committee may **Reaffirm.** |
|  | IS 5182 (Part 10): 1999 | Methods for measurement of air pollution: Part 10 carbon monoxide (First Revision) | * The Committee has approved the ToR pertaining to this subject. * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 12): 2004 | Method for measurement of air pollution: Part 12 polynuclear aromatic hydrocarbons (PAHs) in air particulate matter (First Revision) | * The Committee may **Reaffirm.** |
|  | IS 5182 (Part 13): 1991 | Methods of measurement of air pollution: Part 13 total fluorides in ambient air | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 14): 2000 | Methods for measurement of air pollution: Part 14 guidelines for planning the sampling of atmosphere (Second Revision) | * The Committee may **Reaffirm.** |
|  | IS 5182 (Part 15): 1974 | Methods for measurement of air pollution: Part 15 mass concentration of particulate matter in the atmosphere | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 18): 1974 | Methods for measurement of air pollution: Part 18 continuous analysis and automatic recording of the oxidant content of the atmosphere | * The Committee may **Reaffirm.** |
|  | IS 5182 (Part 20): 1982 | Methods for measurement of air pollution: Part carbon disulphide | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 22): 2004 | Methods for measurement of air pollution: Part 22 lead | * The Committee may **Reaffirm.** |
|  | IS 5182 (Part 3): 1970 | Methods for measurement of air pollution: Part 3 Radioactivity (particulate in air) | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 4): 1999 | Methods for measurement of air pollution: Part 4 suspended - Particulate matter (First Revision) | * The draft is under finalization. * The Committee may **Note.** |
|  | IS 5182 (Part 8): 1976 | Methods for measurement of air pollution: Part 8 sulphation rate | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 9): 1974 | Methods for measurement of air pollution: Part 9 oxidants | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 16): 1980 | Methods for measurement of air pollution: Part 16 recommended practice for collection by filtration and determination of mass, number and optical sizing of atmospheric particulates | * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 17): 1979 | Methods for measurement of air pollution: Part 17 C1 to C2 hydrocarbons in air by gas chromatography | * The Committee has approved the ToR pertaining to this subject. * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 5): 2020 | Methods for Measurement of Air Pollution Part 5 Sampling of Gaseous Pollutants (First Revision) | * The Committee may **Reaffirm.** |
|  | IS 16139 (Part 1):2014/  ISO 17734-1: 2006 | Workplace air - Determination of organonitrogen compounds in air using liquid chromatography and mass spectrometry: Part 1 isocyanates using dibutyl amine derivatives | * IS 16139 (Part 1):2014 is the adoption of ISO 17734-1: 2006. ISO 17734-1: 2006 has been revised and published as ISO 17734-1: 2013. * The Committee may adopt the revised version i.e. ISO 17734-1: 2013. * The revised ISO 17734-1: 2013 is attached below for your reference :      * The Committee may **Reaffirm and Revise.** |
|  | IS 16139 (Part 2):2014/  ISO 17734-2: 2006 | Workplace air - Determination of organonitrogen compounds in air using liquid chromatography and mass spectrometry: Part 2 amines and amino isocyanates using dibutyl amine and ethyl chloroformate derivatives | * IS 16139 (Part 2):2014 is the adoption of ISO 17734-2: 2006. ISO 17734-2: 2006 has been revised and published as ISO 17734-2: 2013. * The Committee may adopt the revised version i.e. ISO 17734-2: 2013. * The revised ISO 17734-2 : 2013 is attached below for your reference :      * The Committee may **Reaffirm and Revise.** |
|  | IS 5182 (Part 26): 2020 | Method For Measurement of Air Pollution Part 26 Nickel | * The Committee may **Reaffirm.** |
|  | IS 17148 (Part 3): 2020/  ISO 7935 : 1992 | Performance Characteristics of Automated Measurement Systems Part 3 Sulphur Dioxide from Stationary Sources | * IS 17148 (Part 3) is the adoption of ISO ISO 7935: 1992. ISO 7935: 1992 has been revised and published as ISO 7935: 2024. * The Committee may adopt the revised version i.e. ISO 7935: 2024. * The revised ISO 7935 : 2024 is attached below for your reference :      * The Committee may **Reaffirm and Revise.** |
|  | IS 17148 (Part 4): 2020/ISO 10849 : 1996 | Performance Characteristics of Automated Measurement Systems Part 4 Nitrogen Oxides from Stationary Sources | * IS 17148 (Part 4): 2020 is the adoption of ISO 10849: 1996. ISO 10849: 1996 has been revised and published as ISO 10849: 2022. * The Committee may adopt the revised version i.e. ISO 10849: 2022. * The revised ISO 10849 : 2022 is attached below for your reference :      * The Committee may **Reaffirm and Revise.** |

The Committee may kindly **REVIEW**.

**11.3** The Committee may also **DECIDE** on **future work plan** and **strategies** to be adopted say in the next 5 years aiming at contribution in related standardization activity both at national and international level (if available, ISO).

**ITEM 12 ANNUAL CALENDAR OF TECHNICAL COMMITTEE MEETINGS**

The item on date and place for the next meeting of the committee may be replaced with the title “Annual Calendar of Technical Committee meetings’.

The Committee in the last meeting discussed and finalize the tentative dates and place for the quarterly meetings of CHD 35 for the financial year 2024-2025.

The tentative dates for the Upcoming meeting of CHD 35 are as follows:

18th Meeting 10-14 June 2024

19th Meeting 16-20 September 2024

20th Meeting 09-13 December 2024

21st Meeting 10-14 March 2025

**ITEM 13 ANY OTHER BUSINESS**

**ITEM 14 VOTE OF THANKS**