**FOR BIS USE ONLY**

**CHEMICAL DEPARTMENT**

**AIR QUALITY SECTIONAL COMMITTEE, CHD 35**

**AGENDA OF 20TH MEETING**



Date/Day/Time: 02nd December 2024, Monday, 10:30 AM

Venue: Hybrid Meeting (Green room, BIS Headquarter, New Delhi)

Chairperson: Dr. Gauri Pandit, In Personal capacity

Member Secretary: Ms. Preeti Prabha, Sc.D, Member Secretary

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

1. **URL:**  <https://bismanak.webex.com/bismanak/j.php?MTID=m125cad9ab1b2fc77bb9d7577c62b0a69>
2. **Meeting ID:** 2516 577 2018

**3) Password:**  CHD35@123

**ITEM 0 WELCOME AND INTRODUCTORY REMARKS**

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

ITEM 1 CONFIRMATION OF THE MINUTES OF THE 18th MEETING

The minutes of the 19th meeting of CHD 35 held on 19th September 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** No co-option request has been received since the last Committee Meeting

The Committee may **NOTE**.

**2.6.2** The Co-option request discussed in the last meeting are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno.** | **Name of Organization/ Member** | **Committee Decision** | **Action Taken** |
|  | Mr. Ashish Shah, Ambetronics Engineers Private Limited | The Committee requested Member secretary to write a mail to Mr. Ashish Shah, Ambetronics Engineers Private Limited for his detailed bio data and how they can contribute to Air Quality Sectional Committee. | * A mail has been sent to Mr. Ashish Shah for his detailed bio data and how he can contribute to Air Quality Sectional Committee. * The response is awaited. * The Committee may **NOTE**. |
|  | IOCL, R&D Centre, Faridabad  1) Dr. M Sithanathan, GM(AR)  2) Mr. Sauhard Singh, CRM | The Committee requested Member Secretary to write a mail to Dr. M Sithanathan and Mr. Sauhard Singh, IOCL, R&D Centre, Faridabad for their detailed bio data and how he can contribute to Committee. | * A mail has been sent to Dr. M Sithanathan and Mr. Sauhard Singh for their detailed bio data and how they can contribute to Air Quality Sectional Committee. * The response is awaited. * The Committee may **NOTE**. |
|  | The Voice Society   1. Mr. H Wadhwa | The committee decided to keep the co-option request on hold and Committee also asked Member Secretary to write the letter to the organization for detailed bio – data. | * A mail has been sent to The Voice Society for detailed bio data and how they can contribute to Air Quality Sectional Committee. * The response is awaited. * The Committee may **NOTE**. |
|  | Global Envirosafety Management Private Limited   1. Dr. Umashanker Sain | The Committee discussed on the co-option request from Dr. Umashanker Sain and asked BIS Secretariat to seek the more information from Dr. Umashanker Sain that how his contribution is important for CHD 35, Air Quality Sectional Committee and the information collected will be used to decide his request for membership in the committee | * A mail has been sent to Dr. Umashanker Sain for his detailed bio data and how they can contribute to Air Quality Sectional Committee. * The response is awaited. * The Committee may **NOTE**. |

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 NOTE.

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

The decisions on summary of actions taken on the minutes of the 19th meeting are given below:

# 4.1 Revision of A5 and Pre-2000 Published Standards

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl no.** | **IS No./Title** | **Committee Decision** | **Action Taken** |
| 1. | IS 5182 (Part 3): 1970  Methods for measurement of air pollution: Part 3 Radioactivity (particulate in air) | * The draft was prepared after incorporating the changes suggested by the Committee and was put up before the Committee for finalization for printing. * Mr. Aditya Sharma from CPCB requested the Committee that he would like to review the draft again before finalization. * The Committee further requested Member Secretary to send the draft to Mr. Aditya Sharma for his review. * If no comments received within 10-day of minute circulation, the document will be considered as finalized. * If comments are received, same will be resolved in consultation with Chairperson and then finalized for printing. | * The draft has been sent to Mr. Mr. Aditya Sharma from CPCB for his review and comments. * No Comments has been received from Mr. Aditya Sharma, so the draft will be sent for printing. * The Committee may **NOTE**. |
| 2. | IS 5182 (Part 4): 1999  Methods for measurement of air pollution: Part 4 suspended - Particulate matter (First Revision) | * The Committee decided to keep finalization of this document on hold until the results are announced for the R and D proposal received by BIS on this subject. * The R and D proposal pertaining to this subject has been allocated to Dr Dinesh Bhagavatula, IIT BHU, Varanasi. * The Committee agreed to drop the document no CHD/35/24456 and decided to take a new document no., once the draft through R& D project will be received. | * The document no. CHD/35/24456 of IS 5182 (Part 4) has been dropped. * The new document no. will be taken once the draft through R& D project will be received. * The Committee may **NOTE**. |
| 3. | IS 5182 (Part 8): 1976  Methods for measurement of air pollution: Part 8 Sulphation rate | * The inputs for the revision of the standard are still awaited from Dr. S.K. Tyagi. * The soft copy of IS 5182(Part 8) has been sent to Dr. Tyagi. * The Committee **NOTED** the status of the document and requested Dr. Tyagi to provide the Working document. * The Committee decided to send the document into WC for 60 days for Comments. * If comments are received on the draft, the same will be discussed in the meeting.   If no comments are received, the document will be finalized for printing. | * The revised draft has been received from Dr. S.K Tyagi. * The WC draft is under preparation according to IS 12 and in line with the other standards of 5182 series * 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 ToR approved by the Committee will be put up before Screening Committee. | * The ToR will be approved in the upcoming meeting of 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 ToR approved by the Committee will be put up before Screening Committee. | * The ToR will be approved in the upcoming meeting of 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 ToR approved by the Committee will be put up before Screening Committee. | * The ToR will be approved in the upcoming meeting of 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 | * The ToR pertaining to this subject was hosted on the BIS website. * The Committee **NOTED** the status**.** | * The proposals have been received for the R& D project pertaining to this subject. * The proposals received has been evaluated by Research Evaluation Committee (REC). * The Committee may **NOTE**. |
| 13 | 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 the BIS website. * The Committee **NOTED** the status**.** | * The R and D proposal pertaining to this subject has been allocated to Dr U.K. Arun Kumar, MNIT Jaipur. * The Committee may **NOTE**. |
| 14. | 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 the BIS website. * The Committee **NOTED** the status**.** | * The R and D proposal pertaining to this subject has been allocated to Prof Vitthal L. Gole, MMMUT Gorakhpur. * The Committee may **NOTE**. |
| 15. | IS 11255 (Part 6): 1999  Methods of measurement of emissions from stationary sources: Part 6 ammonia | * The ToR approved by the Committee will be put up before Screening Committee. * The Committee **NOTED** the status**.** | * The ToR will be approved in the upcoming meeting of Screening Committee. * The Committee may **NOTE**. |
| 16. | IS 13270: 1992  Test for gases by orsat and chromatographic 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  Emission of Nitrogen oxides from stationary source emission | * The ToR approved by the Committee will be put up before Screening Committee. * The Committee **NOTED** the status**.** | * The ToR will be approved in the upcoming meeting of 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 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 document has been sent into wide circulation for 2 months. * No comments have been received on the wide circulation draft. * The Committee may **FINALIZE** the draft for printing. | * The document has been sent for 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 of 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 WIDE CIRCULATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee Decision** | **Current Status** |
|  | CHD/35/26461  IS 17148: Part 3: 20XX/  ISO 7935: 2024  Performance Characteristics of Automated Measurement Systems Part 3 Sulfur Dioxides from stationary Sources | * The Committee discussed that IS 17148 (Part 3) is the adoption of ISO 7935: 1992. ISO 7935: 1992 has been revised and published as ISO 7935: 2024. * The Committee after deliberation decided to revise the standard to adopt the latest published ISO 7935: 2024. * The draft will be sent into wide circulation for period of 60 days. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The Committee members are requested to go through the draft and provide their inputs. * The draft is given at **ANNEX II.** * The Committee may **NOTE.** |
|  | IS 17148 (Part 4): 20XX/  ISO 10849: 1996  Performance Characteristics of Automated Measurement Systems Part 4 Nitrogen Oxides from Stationary Sources | * The Committee discussed that IS 17148 (Part 4) is the adoption of ISO 10849: 1996. ISO 10849: 1996 has been revised and published as ISO 10849: 2022. * The Committee after deliberation decided to revise the standard to adopt the latest published ISO 10849: 2022. * The draft will be sent into wide circulation for period of 60 days. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The Committee members are requested to go through the draft and provide their inputs. * The draft is given at **ANNEX III.** * The Committee may **NOTE.** |
|  | IS 5182-25: 2018 Methods for Measurement of Air Pollution Part 25 Ammonia | * The Committee deliberated on the draft received from the task group and after discussion Committee decide to circulate the draft as WC draft for period of two month. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The Committee members are requested to go through the draft and provide their inputs. * The draft is given at **ANNEX IV.** * The Committee may **NOTE.** |

**ITEM 7 DRAFT COMPLETED WIDE CIRCULATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee Decision** | **Current Status** |
| **1.** | CHD/35/26456  IS 15309: 20XX/  ISO 8518:2022  Workplace Air Determination of Particulate Lead and Lead Compounds Flame or Electrothermal Atomic Absorption Spectrometric Method | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **Annex V** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The comments received on the draft are given at **ANNEX VI**. * The Committee may **DISCUSS** and **DISPOSE OFF** the comments to finalize the draft for printing. |
| **2.** | CHD/35/26441  IS 16139: Part 1: 20XX/  ISO 17734-1: 2013  Workplace Air Determination of Organonitrogen Compounds in Air Using Liquid Chromatography and Mass Spectrometry Part 1 Isocyanates Using Dibutylamine Derivatives | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **ANNEX VII** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The comments received on the draft are given at **ANNEX VIII**. * The Committee may **DISCUSS** and **DISPOSE OFF** the comments to finalize the draft for printing. |
| **3.** | CHD/35/26443  IS 16139: Part 2: 20XX/  ISO 17734-2: 2013  Workplace Air Determination of Organonitrogen Compounds in Air Using Liquid Chromatography and Mass Spectrometry Part 2 Amines and aminoisocyanates using dibutylamine and ethyl chloroformate derivatives | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **Annex-IX** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * No comments have been received on the WC draft. * The Committee may **FINALIZE** the draft for printing. |
| **4.** | CHD/35/25505  IS 5182 (Part 29/Sec 1): 20XX  Methods for Measurement of Air Pollution Part 29 Vapor Phase Mercury in Ambient Air Sec 1 Cold-Vapor Atomic Fluorescence Spectrometer method by Amalgamation Principle | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **Annex X** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * No comments have been received on the WC draft. * The Committee may **FINALIZE** the draft for printing. |
| **5.** | CHD/35/25502  IS 5182 (Part 29/Sec 2): 20XX  Method Measurement of air pollution Part 29 Vapor Phase Mercury in Ambient Air Sec 2 Cold-Vapor Atomic Absorption or Fluorescence Spectroscopy CVAFS Method Using Acidified solution of KMnO4 | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **Annex** **XI** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * No comments have been received on the WC draft. * The Committee may **FINALIZE** the draft for printing. |
| **6.** | CHD/35/26418  IS 5182 (Part 30): 20XX  Methods For Measurement of Air Pollution Part 30 Metals in Particulate Matter in Ambient Air | * The Committee noted the status of the documents and requested to go through the draft and provide their inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The draft under WC is attached at **Annex XII** for reference. | * The document has been sent into wide circulation for period of 60 days to seek public comments. * The comments received on the draft are given at **ANNEX XIII**. * The Committee may **DISCUSS** and **DISPOSE OFF** the comments to finalize the draft for printing. |

**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 working document is still awaited. * The committee may **DISCUSS**. |
|  | Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments | * The framework received from Confederation of Indian Industry has been sent to Dr. Shankar Aggarwal for preparation of draft of Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments. * The Committee further decided to discuss the status of draft for Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments which will be provide by Dr. Shankar Aggarwal till end of October. * The Committee also requested Member Secretary that the working draft already available to BIS will be forwarded to Mr. Aditya Sharma. * The framework received from CII is given at **ANNEX XIV and** working draft available with BIS is given at **ANNEX XV.** | * The working draft available with BIS has been sent Mr. Aditya Sharma from CPCB. * The draft from Dr. Shankar Aggarwal for Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments is still awaited. * The Committee may **DISCUSS**. |
|  | EN 15267-1 Certification of automated measuring systems. General principles | * The Committee deliberated on the adoption of the EN standards and decided that to adopt/ rewrite the European Standards and send it as P-draft for comments. Further, Committee requested BIS secretariat to adopt/ rewrite these European Standards and send it to the Committee Members for their Inputs. | * The drafts are under preparation. * The Committee may **NOTE**. |
|  | EN 15267-2 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** **Designation of experts on ISO Documents**

**9.5.1** As per the PNC09/20/2024-PNC-BIS dated 20.08.2024, as directed by the Competent Authority the Sectional Committee, shall determine and specify the Level of Interest for each NWIP or draft standard received from ISO/IEC in the IRD Portal. Followed by designation of one or two members of the Sectional Committee to represent BIS for standards categorized as Level H (High) and M (Medium). These designated experts will act as face and voice of BIS for the project at the ISO/IEC level. The designated expert shall be responsible for providing detailed feedback on drafts and documents from ISO/IEC, assisting the Sectional Committee in developing the rationale for proposing NWIPs, finalizing proposals for leadership positions and secretariats and briefing the Sectional Committee on discussions at the ISO/IEC level.

**9.5.2** Accordingly, as per MS understanding of the structure of Sectional Committee, expertise and importance of the subjects, the Priority (High /Medium/Low) has been decided for the subjects and Proposed Experts has been nominated in the google sheet attached. The documents which have been at the FDIS stage has been given low priority as technical comments cannot be accepted at FDIS stage.   
<https://docs.google.com/spreadsheets/d/1E7YvTKCkMoN65TfNzyPC--7neZ63GZG1IFby6gQmR14/edit?usp=sharing>

The list of the standards is enclosed below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl No.** | **National Mirror Committee** | **ISO Committee** | **ISO No. and ISO Title** | **Stage** | **Priority (High /Medium/Low)** | **Proposed Experts by Member Secretary** |
| 1 | CHD 35 | ISO/TC 146  Air Quality | ISO/AWI 16017-1  Indoor, ambient and workplace air — Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography — Part 1: Pumped sampling | New project approved  10.99 | Medium | Dr. S.K Tyagi,In Personal capacity |
| 2 | CHD 35 | ISO/TC 146  Air Quality | ISO/AWI 16017-2  Indoor, ambient and workplace air — Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography — Part 2: Diffusive sampling | New project approved  10.99 | Medium | Dr. S.K Tyagi,In Personal capacity |
| 3 | CHD 35 | ISO/TC 146/SC 1  Stationary source emissions | ISO 13271:2012/DAmd 1  Stationary source emissions — Determination of PM10/PM2,5 mass concentration in flue gas — Measurement at higher concentrations by use of virtual impactors — Amendment 1 | DIS ballot initiated for 12 weeks  40.20  (Document attached at **ANNEX XXXIII**) | Medium | Dr. Shankar Aggarwal,NPL  Dr Aditya Sharma,CPCB |
| 4 | CHD 35 | ISO/TC 146/SC 1 | ISO/CD 16911-1  Stationary source emissions — Manual and automatic determination of velocity and volume flow rate in ducts — Part 1: Manual reference method | CD approved for registration as DIS  30.99 | Medium | Mr Aditya Sharma,CPCB |
| 5 | CHD 35 | ISO/TC 146/SC 2  Workplace atmospheres | ISO/CD 6868  Workplace Air — Quantitative determination of quartz and cristobalite in bulk materials by X-ray powder diffraction methods | CD referred back to Working Group  30.92  (Document attached at **ANNEX XXXIV**) | Low | NA |
| 6 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/CD 13977-1  Workplace atmospheres – Assessment of dermal exposure — Part 1: Framework for Dermal exposure assessment | CD consultation initiated  30.20  (Document attached at **ANNEX XXXV**) | Low | NA |
| 7 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/AWI 16200-1  Workplace air quality — Sampling and analysis of volatile organic compounds by solvent desorption/gas chromatography — Part 1: Pumped sampling method | New project registered in TC/SC work programme  20.00 | Medium | Shri Vinayak Valsangkar,UNIPHOS Envirotronic Pvt. Ltd |
| 8 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/AWI 16200-2  Workplace air quality — Sampling and analysis of volatile organic compounds by solvent desorption/gas chromatography — Part 2: Diffusive sampling method | New project registered in TC/SC work programme  20.00 | Medium | Shri Vinayak Valsangkar,UNIPHOS Envirotronic Pvt. Ltd |
| 9 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/CD 16702  Workplace air quality — Determination of total organic isocyanate groups in air using 1-(2-methoxyphenyl) piperazine and liquid chromatography | CD approved for registration as DIS  30.99 | Medium | Dr. R.S Saini, Green Economy Initiatives Pvt Ltd. |
| 10 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/CD 17734-1  Determination of organonitrogen compounds in air using liquid chromatography and mass spectrometry — Part 1: Isocyanates using dibutylamine derivatives | Close of comment period of CD  30.60  (Document attached at **ANNEX XXXVI**) | Medium | Dr. S. K Tyagi,In personal capacity Ms.Preeti Prabha,MS |
| 11 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/AWI 19087  Workplace air — Analysis of respirable crystalline silica by Fourier-Transform Infrared spectroscopy | New project registered in TC/SC work programme  20.00 | Low | NA |
| 12 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/CD 21438-3  Workplace atmospheres — Determination of inorganic acids by ion chromatography — Part 3: Hydrofluoric acid and particulate fluorides | DIS registered  40.00  (Document attached at **ANNEX XXXVII**) | Medium | Dr. R.S Saini, Green Economy Initiatives Pvt Ltd. |
| 13 | CHD 35 | ISO/TC 146/SC 2 Workplace atmospheres | ISO/DIS 30011  Workplace air — Determination of metals and metalloids in airborne particulate matter by inductively coupled plasma mass spectrometry | DIS ballot initiated for  12 weeks  40.20  (Document attached at **ANNEX XXXVIII**) | Medium | Dr. Rajendra Prasad, Ecotech Instruments |
| 14 | CHD 35 | ISO/TC 146/SC 3  Ambient atmospheres | ISO/DIS 22262-2  Air quality — Bulk materials — Part 2: Quantitative determination of asbestos by gravimetric and microscopical methods | DIS registered  40.00  (Document attached at **ANNEX XXXIX**) | Low | NA |
| 15 | CHD 35 | ISO/TC 146/SC 6  Indoor air | ISO/FDIS 12219-11  Interior air of road vehicles — Part 11: Thermal desorption analysis of organic emissions for the characterization on non-metallic materials for vehicles | Final text received or FDIS registered for formal approval  50.00 | Low | NA |
| 16 | CHD 35 | ISO/TC 146/SC 6 Indoor air | ISO/DIS 12219-12  Interior air of road vehicles — Part 12: Artificial leather made from PVC or Polyurethane— Specification and methods for the determination of fogging characteristics of trim materials in the interior of automobiles | Close of voting  40.60  (Document attached at **ANNEX XL**) | Low | NA |
| 17 | CHD 35 | ISO/TC 146/SC 6 Indoor air | ISO/CD 16000-3  Indoor air — Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air — Active sampling method | CD approved for registration as DIS  30.99 | Low | NA |
| 18 | CHD 35 | ISO/TC 146/SC 6 Indoor air | ISO/AWI 16000-10  Indoor air — Part 10: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test cell method | New project approved  10.99 | Low | NA |
| 19 | CHD 35 | ISO/TC 146/SC 6 Indoor air | ISO/FDIS 16000-22  Indoor air — Part 22: Detection and quantification of fungal biomass by fungal β-N-acetylhexosaminidase enzyme activity | Final text received or FDIS registered for formal approval  50.00 | Low | NA |
| 20 | CHD 35 | ISO/TC 146/SC 6 Indoor air | ISO/DIS 16000-43  Indoor air — Part 43: Standard method for assessing the reduction rate of culturable airborne fungi by air purifiers using a test chamber | Final text received or FDIS registered for formal approval  50.00  (Document attached at **ANNEX XLI**) | Low | NA |

The Committee may **DISCUSS**

**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 international drafts/committee internal ballots/systematic review (list enclosed) of **ISO/TC 146, SC 1, SC 2, SC 3, SC 4 and SC 6 that is given at ANNEX XVI :**

The Committee may **NOTE.**

**9.8 Debriefing Meeting**

**9.8.1** The meeting of ISO/TC 146/SC 1 ‘Stationary source emissions’ held on **25th September 2024** in Virtual Mode was attended by Dr. Tuhin Kumar Mandal, Chairperson of ISO/TC 146/SC 1 and Mr. Ajay K Lal and Ms. Preeti Prabha. The minutes of the meeting are placed at **ANNEX XVII**.

**9.8.2** The meeting of ISO/TC 146 ‘Air Quality’ held on **27th September 2024** in Virtual Mode was attended by Dr. Tuhin Kumar Mandal, Chairperson of ISO/TC 146/SC 1 and Mr. Ajay K Lal through virtual mode. The minutes of the meeting are placed at **ANNEX XVIII**.

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 Committee deliberated on the Comments received from Mr. Vinayak Valsangkar on the amendment has been circulated to members for their inputs. * The Committee after discussion requested member secretary to send the amendment published to the following ISO standard along with the comments received from Mr. Vinayak Valsangkar to the Committee members for their inputs. * The amendment published to ISO 8760: 1990 is attached at **Annex- XIX.** The comments received from Mr. Vinayak Valsangkar us attached at **Annex-XX**. * The Amendment published to the ISO standard along with the comments received from Mr. Vinayak Valsangkar has been circulated to the Committee members for their inputs. * The inputs received from Dr. A.Vinod Kumar is attached at **Annex-XXI**. * The Committee after deliberation decided to send the comments and amendments to Dr. Rajendra Prasad for his inputs. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be sent into wide circulation for 60 days. | * The amendment along with the comments received from Mr. Vinayak Valsangkar and Dr. A. Vinod Kumar has been sent to Dr. Rajendra Prasad for his inputs. * 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 Committee deliberated on the Comments received and decided to adopt the modified amendment as per the comments agreed by Committee. The Committee decision on the comments is attached at **Annex-XXII.** * The amendment document will be sent into wide Circulation for 60 days. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. | * The amendment document has been sent into wide circulation for period of 60 days. * The WC draft is attached at **ANNEX XXIII.** * The Committee may **NOTE.** |
|  | IS 15210: 2002/  ISO 8762: 1988  Workplace air - Determination of vinyl chloride - Charcoal tube/gas chromatographic method | * The Committee discussed that IS 15210: 2002 is the adoption of ISO 8762: 1988. However, ISO 8762: 1988 has been withdrawn and no new standard has been published by ISO for this subject. Therefore, the member secretary suggested ISO 9486: 1991 for revision of this standard. * The Committee after deliberation requested member secretary to follow up with Mr. Vinayak Valsangkar for his inputs whether ISO 9486:1991 can be adopted identically or need to be modified as per Indian requirements, for revision of IS 15210: 2002/ISO 8762: 1988. * The Committee after deliberation decided to adopt ISO 9486:1991 identically as revision of IS 15210:2002/ISO 8762:1988. * The document will be sent into wide Circulation for 60 days. * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. * The copy of ISO 9486: 1991 is attached at **Annex-XXIV**. | * The revised draft of IS 15210 has been sent into Wide circulation for period of 60 days. * The WC draft is attached at **ANNEX XXV.** * The Committee may **NOTE.** |

**ITEM 11 PROGRAMME OF WORK**

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

The Committee may **NOTE.**

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

**11.2.1** 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.

**11.2.2** The Committee in the 18th meeting reviewed all the standards that are **Due for Review Under 5 Year Criteria.**

**11.3 FUTURE WORK PLAN AND STRATEGIES**

The Committee in the previous meetings deliberated 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) and decided following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno.** | **Subject** | **Committee Decision** | **Current Status** |
| 1. | ISO 5409: 2024 Stationary source emissions — Chemical absorption method for sampling and determining mercury species in flue gas | * The Committee decided for adoption of ISO/FDIS 5409. * The document will be sent into wide Circulation for 60 days. * The copy of ISO 5409: 2024 is attached at **ANNEX XXVII.** * If comments are received on the draft, the same will be discussed in the meeting. * If no comments are received, the document will be finalized for printing. | * The document has been sent into wide circulation for period of 60 days. * The WC draft is attached at **ANNEX XXVIII**. * The Committee may **NOTE**. |
| 2. | Adoption of standards related to Indoor Air under ISO/TC 146/SC 6 in ISO 16000 series | * The Committee deliberated that all the standards related to Indoor Air under ISO/TC 146/SC 6 in ISO 16000 series will be reviewed by Committee in phase of 5 standards at once and the standards whichever are relevant to Indian need will be adopted by the Committee. * ISO16000-1, ISO 16000-2, 1. ISO 16000-3, and ISO 16000-4 have been already adopted by India. * The next 5 standards recommended for adoption in the series is as follows:   i) ISO 16000-5  ii) ISO16000-6  iii) ISO 16000-7  iv) ISO 16000-8  v) ISO 16000-10 | * The standards were sent along with the minutes to Committee members and are also given at **ANNEX XXIX.** * The Committee may **DISCUSS.** |

**11.3.2 Proposed the following two subjects for NWIP:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sno.** | **Subject** | **Proposer** | **Committee Decision** | **Current Status** |
| 1. | Standard on Micro Plastics | Dr. Tuhin Kumar Mandal, NPL | The Committee requested Dr. Tuhin Kumar Mandal, NPL to provide the New Work Item Proposal on this subject along with the working draft through BIS portal. | * The working draft is awaited. * The Committee may **DISCUSS**. |
| 2. | Standard on Multi Channel sampler | Dr. Rajendra Prasad, Ecotech Instruments | The Committee requested Dr. Rajendra Prasad, Ecotech Instruments to provide the New Work Item Proposal on this subject along with the working draft through BIS portal. | * The working draft is awaited. * The Committee may **DISCUSS**. |

**11.3.3 The following NWIP has been received through portal:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno.** | **Subject** | **Proposer** | **Proposal** |
| 1. | Plasma Electrolytic Oxidation Air Sterilizer (Product Specification) | Mr. Piyush Sharma | * The details provided by proposer is given at **Annex XXX**. * The write up of the product provided by proposer is given at **ANNEX XXXI** and the Synopsis are given at **ANNEX XXXII**. * The Committee may **DISCUSS**. |

**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:

20th Meeting 09-13 December 2024

21st Meeting 10-14 March 2025

**ITEM 13 ANY OTHER BUSINESS**

**ITEM 14 VOTE OF THANKS**