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**CHEMICAL DEPARTMENT**

**AIR QUALITY SECTIONAL COMMITTEE, CHD 35**

**AGENDA OF 19TH MEETING**



Date/Day/Time: 19th September 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=me7df3f8766fade23c782e49e7974e771>
2. **Meeting ID:** 2510 433 2434

**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 18th meeting of CHD 35 held on 13th June 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 17th 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 received:

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno.** | **Name of Organization/ Member** | **CV received** | **Panel Decision** |
|  | Mr. Ashish Shah, Ambetronics Engineers Private Limited |  | The Co-option request has been circulated to the members of Panel 1 for their review. |
|  | Mr. Manan Shah, Ambetronics Engineers Private Limited |  | The Co-option request has been circulated to the members of Panel 1 for their review. |
|  | IOCL, R&D Centre, Faridabad  1) Dr. M Sithanathan, GM(AR)  2) Mr. Sauhard Singh, CRM | No proforma received from the organization. | The Co-option request has been circulated to the members of Panel 1 for their review. |

The Committee may **DISCUSS**.

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.

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

The decisions on summary of actions taken on the minutes of the 18th 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 document was sent into wide circulation for 2 months. * The Comments received on the WC draft were disposed of by the Committee during the meeting. * The Committee after suggesting some changes in the draft requested Member Secretary to draft/format the clauses of the standard as per the new format adopted by Committee. * Further, the Committee decided to finalize the draft for printing after making the corrections suggested and with approval of Chairperson. | * The draft was prepared after incorporating the changes suggested by the Committee. * The draft will be sent to Chairperson for approval. * After the approval of Chairperson, 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 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 Committee **NOTED** the status of the document and requested Dr. Tyagi to provide the Working document. | * The document is still awaited from Dr. S.K Tyagi. * The Committee may **DISCUSS**. |
| 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 Committee **NOTED** the status. | * 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 Committee **NOTED** the status. | * 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 Committee **NOTED** the status of the ToR. | * 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 will be 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 - 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): 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**

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| --- | --- | --- | --- |
| **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 document for printing. | * The document has been printed. * 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**. |
| 3. | [IS 17148 : Part 1: 20XX/  ISO 12039:2019](https://www.services.bis.gov.in/php/BIS_2.0/StandardsFormulationV2/Upload3.php?ID=MVhkQktEMHZHWkR6WDFMRTlqRDFwUT09)  CHD/35/25059 | * The document has been sent into wide circulation for 2 months. * No Comments have been received on the WC draft, so the Committee finalized the draft and sent it 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/35/26456  IS 15309: 20XX/  ISO 8518:2022  Workplace Air Determination of Particulate Lead and Lead Compounds Flame or Electrothermal Atomic Absorption Spectrometric Method | * The Committee discussed that IS 15309: 2003 is the adoption of ISO 8518: 2001. ISO 8518: 2001 has been revised and published as ISO 8518: 2022. * The Committee after deliberation decided to revise the standard to adopt the latest published ISO 8518: 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 Committee may **NOTE.** |
|  | 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 discussed that 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 after deliberation decided to revise the standard to adopt the latest published 17734-1: 2013. * 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 Committee may **NOTE.** |
|  | 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 1 Isocyanates Using Dibutylamine Derivatives | * The Committee discussed that 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 after deliberation decided to revise the standard to adopt the latest published ISO 17734-2: 2013. * 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 Committee may **NOTE.** |
|  | 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 document has been circulated as P- Draft through portal for period of 1 month on 01-05-2024. * No Comments have been received on the draft, so the Committee decided to send the draft for wide circulation for period of 2 months. * 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 Committee may **NOTE.** |
|  | 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 document has been circulated as P- Draft through portal for period of 1 month on 01-05-2024. * No Comments have been received on the draft, so the Committee decided to send the draft for wide circulation for period of 2 months. * 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 Committee may **NOTE.** |
|  | 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 deliberated on the draft received from the task group and after discussion Committee decide to circulate the draft as P draft for period of one month. | * 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 Committee may **NOTE.** |
|  | 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 (CHD/35/26461) is being sent into wide circulation for period of 60 days to seek public comments. * 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 is being sent into wide circulation for period of 60 days to seek public comments. * The Committee may **NOTE.** |

**ITEM 7 DRAFT 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. * No comments have been received on the wide circulation draft. * The Committee may **FINALIZE** the draft for printing. |

**ITEM 8 DRAFT UNDER PREPARATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **IS No./Title** | **Committee Decision** |  |
|  | 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**. |
|  | 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 P draft for period of one month. * The draft prepared by task group is attached below: | * The document will be sent into wide circulation for period of 60 days to seek public comments. * The Committee may **NOTE** |
|  | Specification for Sensor Based Particulate Matter (PM 10 & PM2.5) Instruments | * The Committee deliberated on the framework received from Confederation of Indian Industry. * The Committee requested BIS Secretariat to send the framework received from Confederation of Indian Industry to Dr. Shankar Aggarwal, so that Dr. Shankar Aggarwal can prepare and provide the draft for 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 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 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 15267-2:2009 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 | * Suggestions/amendments are as follows:   1.       Under point 3.2 AMS  “or intermittently” may be omitted.  2.       Under section 8.1  “-Heating condensation” may also be included  3.       Point 9.2 Table 2  Zero drift  Once in the period of unattended/uninterrupted operation or period specified by national standard  4.       Interference section may also be included |
| 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 | * Inputs awaited |
| 3 | ISO/DIS 5409  Stationary source emissions — Chemical absorption method for sampling and determining mercury species in flue gas | * May be Adopted Identically |
| 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 | * Inputs awaited |
| 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 | * Inputs awaited |
| 6 | ISO/CD 6868  Workplace Air — Quantitative determination of quartz and cristobalite in bulk materials by X-ray powder diffraction methods | * Suggestions are as follows:   Standard Reference materials for respirable quartz and respirable cristobalite with certified phase purity are available. The XRPD peak positions of cristobalite are given in Annexure-A; however, the phase of cristobalite, whether α or β, is not mentioned. |
| 7 | N1305 PWI request to develop an ISO TR  Workplace air – Quality control in workplace exposure measurements – Part 1: Analyses performed in the laboratory | * Inputs awaited |
| 8 | ISO 4219:1979 (vers 6)  Air quality — Determination of gaseous sulphur compounds in ambient air — Sampling equipment | * Inputs awaited |
| 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 | * Inputs awaited |
| 10 | ISO 4221:1980 (vers 6)  Air quality — Determination of mass concentration of sulphur dioxide in ambient air — Thorin spectrophotometric method | * Inputs awaited |
| 11 | ISO 6767:1990 (vers 6)  Ambient air — Determination of the mass concentration of sulfur dioxide — Tetrachloromercurate (TCM)/pararosaniline method | * Inputs awaited |
| 12 | ISO 7996:1985 (vers 6)  Ambient air — Determination of the mass concentration of nitrogen oxides — Chemiluminescence method | * Inputs awaited |
| 13 | ISO 8186:1989 (vers 6)  Ambient air — Determination of the mass concentration of carbon monoxide — Gas chromatographic method | * Inputs awaited |
| 14 | ISO 13752:1998 (vers 4)  Air quality — Assessment of uncertainty of a measurement method under field conditions using a second method as reference | * Inputs awaited |
| 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 | * Inputs awaited |
| 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 | * Inputs awaited |
| 17 | ISO 16000-41: 2023  Indoor air — Part 41: Assessment and classification | * May be Adopted Identically |
| 18 | ISO 16000-42: 2023  Indoor air — Part 42: Measurement of the particle number concentration by condensation particle counters | * Inputs awaited |

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.**

**9.8 Upcoming Meetings**

**Participation of India (BIS) in the meeting of ISO/TC 146. As you are aware, India (BIS) is 'P (Participating)' Member of ISO/TC 146' Air Quality’, it’s Sub committees and it’s Working Groups. ISO Secretariat has announced the following upcoming Meetings:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sno.** | **Meeting** | **Date & Mode** | **Notice/agenda** |
|  | ISO/TC 146 | 27th September 2024 in Virtual Mode |  |
|  | ISO/TC 146/SC 1 | 25th September 2024 in Virtual Mode |  |
|  | ISO/TC 146/SC 1/WG 36 | 18th September 2024 in Virtual Mode |  |
|  | ISO/TC 146/SC 2 | 13th September 2024 in Virtual Mode |  |
|  | ISO/TC 146/SC 3 | 23rd September 2024 in Virtual Mode |  |
|  | ISO/TC 146/SC 3/WG 1 | 05th September 2024 in Virtual Mode |  |

The Committee may **Review** the Experts registered and nominate experts for participation in the meeting.

**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 below along with the comments received from Mr. Mr. Vinayak Valsangkar : | * 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 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 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 8761 : 1989 is attached below along with the comments received from Mr. Mr. Vinayak Valsangkar : | * 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 Committee may **DISCUSS.** |
|  | 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 copy of ISO 9486 : 1991 is attached below : | * Mail has been sent to 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 may **DISCUSS.** |

**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**

**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 last 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 last meeting 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:

1. To adopt International standards related to Indoor Air and Ambient Air
2. The Committee discussed on the International standards related to Indoor Air and Ambient Air and requested Member Secretary to prepare list of the subject/standards on which ISO standards can be adopted.

The proposed list of standards to be adopted is as follows:

1. ISO 16000-41: 2023 - Indoor air — Part 41: Assessment and classification
2. ISO 16000-33:2024 Indoor air — Part 33: Determination of phthalates with gas chromatography/mass spectrometry (GC/MS)
3. ISO 16000-39:2019 Indoor air — Part 39: Determination of amines — Analysis of amines by (ultra-) high-performance liquid chromatography coupled to high resolution or tandem mass spectrometry
4. Proposed the following two subjects for NWIP:
5. Standard on **Micro Plastics** proposed by Dr. Tuhin Kumar Mandal

* The following manuscript entitled "The emergence of microplastics: charting the path from research to regulations" has been received from Dr. Tuhin Kumar Mandal.



The Committee may **DISCUSS.**

1. Standard on **Multi Channel sampler** proposed by Dr. Rajendra Prasad

* No proposal has been received from Dr. Rajendra Prasad

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:

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**