BUREAU OF INDIAN STANDARDS

Program of Work

CHD 35 : Air Quality

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 (P):** *Air quality* **ISO TC-146 SC-1 (Secretariat):** *Stationary source emissions* **ISO TC-146 SC-1 (P):** *Revision of ISO 10849 and ISO 7935* **ISO TC-146 SC-2 (P):** *Workplace atmospheres* **ISO TC-146 SC-3 (P):** *Ambient atmospheres* **ISO TC-146 SC-4 (O):** *General aspects* **ISO TC-146 SC-6 (P):** *Indoor air* **ISO TC-146 SC-6 (P):** *Determination of semi-volatile organic compounds (SVOCs) in indoor air* **ISO TC-209 (O):** *Cleanrooms and associated controlled environments*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 11255 (Part 1) : 1985 Reviewed In : 2024	Methods for measurement of emissions from stationary sources: Part 1 particulate matter	July, 2024	-	Indigenous
2	IS 11255 (Part 2) : 1985 Reviewed In : 2024	Methods for measurement of emissions from stationary sources: Part 2 sulphur dioxide	July, 2024	-	Indigenous
3	IS 11255 (Part 3) : 2008 Reviewed In : 2023	Methods for measurement of emissions from stationary sources: Part 3 flow rate (First Revision)	July, 2023	-	Indigenous
4	IS 11255 (Part 3/Sec 2) : 2021 ISO 16911-2 ISO 16911-2 : 2013	METHODS FOR MEASUREMENT OF EMISSIONS FROM STATIONARY SOURCES Part 3 Velocity and Volume Flowrate in Ducts Section 2 Automated Measurement Systems		-	Identical under dual numbering
5	IS 11255 (Part 4) : 2006 Reviewed In : 2022	Method for measurement of emission from stationary sources: Part 4 hydrogen sulphide and carbon disulphide (First Revision)	July, 2022	-	Indigenous
6	IS 11255 (Part 5) : 1990 Reviewed In : 2024	Methods of measurement of emissions from stationary sources: Part 5 total fluoride	July, 2024	-	Indigenous
7	IS 11255 (Part 6) : 1999	Methods of measurement of emissions from stationary sources:	July, 2024	1	Indigenous

	Reviewed In : 2024	Part 6 ammonia			
8	IS 11255 (Part 7) : 2005 Reviewed In : 2022	Methods for measurement of emission from stationary sources: Part 7 oxides of nitrogen	July, 2022	1	Indigenous
9	IS 11255 (Part 10) : 2019 ISO 14385-1 : 2014 Reviewed In : 2024 ISO 14385-1 : 2014	Methods for measurement of emission from stationary sources: Part 10 calibration of automated measuring systems for greenhouse gases	March, 2024	-	Identical under dual numbering
10	IS 11255 (Part 11) : 2019 ISO 14385-2 : 2014 Reviewed In : 2024 ISO 14385-2 : 2014	Methods for measurement of emission from stationary sources: Part 11 ongoing quality control of automated measuring systems of greenhouse gases	March, 2024	-	Identical under dual numbering
11	IS 11255 (Part 12) : 2019 ISO 21258 : 2010 Reviewed In : 2024 ISO 21258 : 2010	Methods for Measurement of Emission from Stationary Sources Part 12 Determination of the Mass Concentration of Dinitrogen Monoxide (N2O) â€” Reference Method : Non-Dispersive Infrared Method	March, 2024	-	Identical under dual numbering
12	IS 11255 (Part 13) : 2019 ISO 25140 : 2010 Reviewed In : 2024 ISO 25140 :2010	Methods for Measurement of Emission from Stationary Sources Part 13 Automatic Method for the Determination of Methane Concentration Using Flame Ionization Detection (FID)	March, 2024	-	Identical under dual numbering
13	IS 11255 (Part 15) : 2019 ISO 25139 : 2011 Reviewed In : 2024 ISO 25139 : 2011	Methods for Measurement of Emission from Stationary Sources Part 15 Determination of the Methane Concentration Using Gas Chromatography	March, 2024	-	Identical under dual numbering
14	IS 13270 : 1992 Reviewed In : 2024	Test for gases by orsat and chromatographic methods - Methods	July, 2024	-	Indigenous
15	IS 15206 : 2002 ISO 8760 Reviewed In : 2024 ISO 8760 : 1990	Work - Place air - Determination of mass concentration of carbon monoxide - Method using detector tubes for short term sampling with direct indication	March, 2024	-	Identical under dual numbering
16	IS 15207 : 2002 ISO 9486 Reviewed In : 2023 ISO 9486 : 1991	Workplace air - Determination of vaporous chlorinated hydrocarbons - Charcol tube/solvent desorption/gas chromatographic method	July, 2023	-	Identical under dual numbering
17	IS 15209 : 2002 ISO 8761 Reviewed In : 2024 ISO 8761 : 1989	Work - Place air - Determination of mass concentration of nitrogen dioxide - Method using detector tubes for shortterm sampling with direct indication	March, 2024	-	Identical under dual numbering
18	IS 15210 : 2002 ISO 8762 Reviewed In : 2023 ISO 8762 : 1988	Workplace air - Determination of vinyl chloride - Charcoal tube/gas chromatographic method	July, 2023	-	Identical under dual numbering
19	IS 15211 : 2002 ISO 9487 Reviewed In : 2023 ISO 9487 : 1991	Workplace air - Determination of vaporous aromatic hydrocarbons - Charcoal tube/solvent resorption/gas chromatographic method	July, 2023	-	Identical under dual numbering

20	IS 15309 : 2003 ISO 8518:2001 Reviewed In : 2024 ISO 8518 : 2001	Workplace air - Determination of particulate lead and lead compounds - Flame or electrothermal atomic absorption spectrometric method	July, 2024	-	Identical under dual numbering
21	IS 16139 (Part 1) : 2014 ISO 17734-1 : 2006 Reviewed In : 2024 ISO 17734-1 : 2006	Workplace air - Determination of organonitrogen compounds in air using liquid chromatography and mass spectrometry: Part 1 isocyanates using dibutylamine derivatives	July, 2024	-	Identical under dual numbering
22	IS 16139 (Part 2) : 2014 ISO 17734-2 : 2006 Reviewed In : 2024 ISO 17734-2 : 2006	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	July, 2024	-	Identical under dual numbering
23	IS 17118 (Part 1) : 2022 ISO 16000-1:2004 ISO 16000-1 : 2004	INDOOR AIR PART 1 GENERAL ASPECTS OF SAMPLING STRATEGY		-	Identical under dual numbering
24	IS 17118 (Part 2) : 2022 ISO 16000-2:2004 ISO 16000-2 : 2004	INDOOR AIR PART: 2 SAMPLING STRATEGY FOR FORMALDEHYDE		-	Identical under dual numbering
25	IS 17118 (Part 3) : 2022 ISO 16000-3: 2011 ISO 16000-3: 2011	INDOOR AIR PART: 3: DETERMINATION OF FORMALDEHYDE AND OTHER CARBONYL COMPOUNDS IN INDOOR AIR AND TEST CHAMBER AIR ACTIVE SAMPLING METHOD		-	Identical under dual numbering
26	IS 17118 (Part 4) : 2022 ISO 16000-4 ISO 16000-4: 2011	INDOOR AIR PART: 4 DETERMINATION OF FORMALDEHYDE DIFFUSIVE SAMPLING METHOD		-	Identical under dual numbering
27	IS 17118 (Part 26) : 2019 ISO 1600-26 : 2012 Reviewed In : 2024 ISO 16000-26:2012	Methods for measurement of indoor air: Part 26 sampling strategy for carbon dioxide (CO2)	March, 2024	-	Identical under dual numbering
28	IS 17118 (Part 37) : 2022 ISO 16000-37 ISO 16000-37 : 2019	INDOOR AIR PART 37: MEASUREMENT OF PM 2.5 MASS CONCENTRATION		-	Identical under dual numbering
29	IS 17133 : 2019 ISO 10396 : 2007 Reviewed In : 2024 ISO 10396 : 2007	Sampling from Stationary Sources for Automated Determination of Gas Emission Concentration Using Permanently Installed Monitoring Systems	March, 2024	-	Identical under dual numbering
30	IS 17148 (Part 1) : 2024 ISO 12039:2019 ISO 12039:2019	Performance Characteristics of Automated Measurement Systems Part 1 Carbon Monoxide, Carbon Dioxide and Oxygen from Stationary Sources (First Revision)		-	Identical under dual numbering
31	IS 17148 (Part 1) : 2019	Performance characteristics of automated measurement systems:	March, 2024	-	Identical under dual numbering

	ISO 12039 : 2001 Reviewed In : 2024 ISO 12039:2019	Part 1 carbon monoxide, carbon dioxide and oxygen from stationary sources			
32	IS 17148 (Part 2) : 2019 ISO 10155 : 1995 Reviewed In : 2024 ISO 10155 : 1995	Performance Characteristics of Automated Measurement Systems Part 2 Particulate Matter from Stationary Sources	March, 2024	-	Identical under dual numbering
33	IS 17148 (Part 3) : 2020 ISO 7935 : 1992 ISO 7935 : 1992	Performance Characteristics of Automated Measurement Systems Part 3 Sulfur Dioxide from Stationary Sources		-	Modified/Technically Equivalent
34	IS 17148 (Part 4) : 2020 ISO 10849 : 1996 ISO 10849 : 1996	Performance Characteristics of Automated Measurement Systems Part 4 Nitrogen Oxides from Stationary Sources		-	Modified/Technically Equivalent
35	IS 17148 (Part 5) : 2022 ISO 17179 ISO 17179 : 2016	Performance characteristics of automated measuring systems Part 5: Determination of the mass concentration of ammonia in flue gas from Stationary Sources		-	Identical under dual numbering
36	IS 17531 : 2021	PORTABLE ELECTRIC INDOOR AIR PURIFIER - SPECIFICATION		-	Indigenous
37	IS 18386 : 2023 ISO/FDIS 20181 ISO 20181 : 2023	STATIONARY SOURCE EMISSIONS QUALITY ASSURANCE OF AUTOMATED MEASURING SYSTEMS		-	Identical under dual numbering
38	IS 18388 : 2023 ISO 15259: 2023 ISO 15259: 2023	AIR QUALITYMEASUREMENT OF STATIONARY SOURCE EMISSIONS REQUIRMENTS FOR MEASUREMENT SECTIONS AND SITES FOR THE MEASUREMNT OBJECTIVE PLAN AND REPORT		-	Identical under dual numbering
39	IS 18637 (Part 1) : 2024 ISO 14644-1	Cleanrooms and associated controlled environments Part 1: Classification of air cleanliness by particle concentration		-	Modified/Technically Equivalent
40	IS 4167 : 2020 Reviewed In : 2024	Glossary of Terms Relating to Air Pollution (Second Revision)	July, 2024	-	Indigenous
41	IS 5182 (Part 1) : 2006 Reviewed In : 2023	Methods for measurement of air pollution Part 1 dust fall (First Revision)	July, 2023	-	Indigenous
42	IS 5182 (Part 2/Sec 1) : 2023	METHODS FOR MEASUREMENT OF AIR POLLUTION Part 2 Sulphur Dioxide Section 1 Tetrachloromercurate Pararosaniline method		-	Indigenous
43	IS 5182 (Part 2/Sec 2) : 2018 ISO 10498 : 2004 Reviewed In : 2023 ISO 10498 : 2004	Methods for measurement of air pollution: Part 2 sulphur dioxide: Sec 2 ultraviolet fluorescence method	July, 2023	-	Identical under dual numbering
44	IS 5182 (Part 3) : 1970	Methods for measurement of air pollution : Part 3 Radioactivity	July, 2024	-	Indigenous

	Reviewed In : 2024	(particulate in air)			
45	IS 5182 (Part 4) : 1999 Reviewed In : 2024	Methods for measurement of air pollution: Part 4 suspended Particulate matter (First Revision)	July, 2024	-	Indigenous
46	IS 5182 (Part 5) : 2020 Reviewed In : 2024	Methods for Measurement of Air Pollution Part 5 Sampling of Gaseous Pollutants (First Revision)	July, 2024	-	Indigenous
47	IS 5182 (Part 6) : 2006 Reviewed In : 2022	Method for measurement of air pollution: Part 6 oxides of nitrogen (First Revision)	July, 2022	1	Indigenous
48	IS 5182 (Part 6/Sec 2) : 2018 ISO 7996 : 1985 Reviewed In : 2023 ISO 7996 : 1985	Methods for measurement of air pollution: Part 6 oxides of nitrogen: Sec 2 chemiluminescence method	July, 2023	-	Identical under dual numbering
49	IS 5182 (Part 7) : 2021	METHODS FOR MEASUREMENT OF AIR POLLUTION Part 7 Hydrogen Sulphide (First Revision)		-	Indigenous
50	IS 5182 (Part 8) : 1976 Reviewed In : 2024	Methods for measurement of air pollution: Part 8 sulphation rate	July, 2024	1	Indigenous
51	IS 5182 (Part 9) : 1974 Reviewed In : 2024	Methods for measurement of air pollution: Part 9 oxidants	July, 2024	-	Indigenous
52	IS 5182 (Part 10) : 1999 Reviewed In : 2024	Methods for measurement of air pollution: Part 10 carbon monoxide (First Revision)	July, 2024	-	Indigenous
53	IS 5182 (Part 11) : 2006 Reviewed In : 2022	Methods for measurement of air pollution: Part 11 benzene, toluene and xylene (BTX) (Second Revision)	July, 2022	-	Indigenous
54	IS 5182 (Part 12) : 2004 Reviewed In : 2024	Method for measurement of air pollution: Part 12 polynuclear aromatic hydrocarbons (PAHs) in air particulate matter (First Revision)	July, 2024	-	Indigenous
55	IS 5182 (Part 13) : 1991 Reviewed In : 2024	Methods of measurement of air pollution: Part 13 total fluorides in ambient air	July, 2024	1	Indigenous
56	IS 5182 (Part 14) : 2000 Reviewed In : 2024	Methods for measurement of air pollution: Part 14 guidelines for planning the sampling ofatmosphere (Second Revision)	July, 2024	-	Indigenous
57	IS 5182 (Part 15) : 1974 Reviewed In : 2024	Methods for measurement of air pollution: Part 15 mass concentration of particulate matter in the atmosphere	July, 2024	1	Indigenous
58	IS 5182 (Part 15/Sec 2) : 2018 ISO 10473 : 2000 Reviewed In : 2023 ISO 10473 : 2000	Methods for Measurement of Air Pollution Part 15 Mass Concentration of Particulate Matter Section 2 Beta-ray absorption method	June, 2023	-	Identical under dual numbering
59	IS 5182 (Part 16) : 1980 Reviewed In : 2024	Methods for measurement of air pollution: Part 16 recommended practice for collection by filtration and determination of mass, number and optical sizing of atmospheric	July, 2024	-	Indigenous

		particulates			
60	IS 5182 (Part 17) : 1979 Reviewed In : 2024	Methods for measurement of air pollution: Part 17 C1 to C2 hydrocarbons in air by gas chromatography	July, 2024	-	Indigenous
61	IS 5182 (Part 18) : 1974 Reviewed In : 2024	Methods for measurement of air pollution: Part 18 continuous analysis and automatic recording of the oxidant content of the atmosphere	July, 2024	-	Indigenous
62	IS 5182 (Part 19) : 2022	METHODS FOR MEASUREMENT OF AIR POLLUTION PART 19 CHLORINE First Revision		-	Indigenous
63	IS 5182 (Part 20) : 1982 Reviewed In : 2024	Methods for measurement of air pollution: Part carbon disulphide	July, 2024	-	Indigenous
64	IS 5182 (Part 21) : 2001 Reviewed In : 2022	Methods for measurement of air pollution: Part 21 non methane hydrocarbons in air by gas chromatography	July, 2022	-	Indigenous
65	IS 5182 (Part 22) : 2004 Reviewed In : 2024	Methods for measurement of air pollution: Part 22 lead	July, 2024	1	Indigenous
66	IS 5182 (Part 23) : 2006 Reviewed In : 2022	Methods for measurement of air pollution: Part 23 respirable suspended particulate maiter (PM 10), cyclonic flow technique	July, 2022	-	Indigenous
67	IS 5182 (Part 24) : 2019 Reviewed In : 2024	Methods for Measurement of Air Pollution Part 24 Fine Particulate Matter (PM2.5)	March, 2024	-	Indigenous
68	IS 5182 (Part 25) : 2018 Reviewed In : 2023	Methods for measurement of air pollution: Part 25 ammonia	May, 2023	-	Indigenous
69	IS 5182 (Part 26) : 2020	Method For Measurement of Air Pollution Part 26 Nickel		-	Indigenous
70	IS 9620 : 2024	GUIDE FOR UNITS USED IN AIR QUALITY MEASUREMENTS		-	Indigenous

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

SI. No.	Doc No.	Title
No Records Found		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
1	CHD 35 (26461) Revision of: IS 17148:2020	Performance Characteristics of Automated Measurement Systems Part 3 Sulfur Dioxides from stationary Sources
2	CHD 35 (26728) Revision of: IS 17148:2020	Performance Characteristics of Automated Measurement Systems Part 4 Nitrogen Oxides from Stationary Sources First Revision
3	CHD 35 (26782) Revision of: IS 5182:2018	Air Pollution Methods for Measurement Part 25 Ammonia First Revision
4	CHD 35 (26918) Revision of: IS 15210:2002	Workplace Air Determination of vaporous chlorinated hydrocarbons Charcoal tube solvent desorption gas chromatographic method
5	CHD 35 (26920)	Stationary Source Emissions Chemical Absorption Method for Sampling and Determining Mercury Species in Flue Gas
6	CHD 35 (26939)	Work - Place air - Determination of mass concentration of nitrogen dioxide - Method using detector tubes for shortterm sampling with direct indication Amendment - 1
7	CHD 35 (26956) Revision of: IS 5182:1976	Air Pollution Methods for Measurement Part 8 Sulphation Rate

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	CHD 35 (25082) Revision of: IS 5182:1976	Method for Measurement of Air Pollution Part 3 Radioactivity Particulate in Air
2	CHD 35 (25502)	Method Measurement of air pollution Part X Vapor Phase Mercury in Ambient Air Sec 2 Cold-Vapor Atomic Absorption or Fluorescence Spectroscopy CVAFS Method Using Acidified solution of KMnO4
3	CHD 35 (25505)	Methods for Measurement of Air Pollution Part XX Vapor Phase Mercury in Ambient Air Sec 1 Cold-Vapor Atomic Fluorescence Spectrometer method by Amalgamation Principle
4	CHD 35 (26418)	Methods For Measurement of Air Pollution Part 30 Metals in Particulate Matter in Ambient Air
5	CHD 35 (26441) Revision of: IS 5182:1976	Workplace Air Determination of Organonitrogen Compounds in Air Using Liquid Chromatography and Mass Spectrometry Part 1 Isocyanates Using Dibutylamine Derivatives
6	CHD 35 (26443) Revision of: IS 5182:1976	Workplace Air Determination of Organonitrogen Compounds in Air Using Liquid Chromatography and Mass Spectrometry Part 1 Isocyanates Using Dibutylamine Derivatives
7	CHD 35 (26456) Revision of: IS 5182:1976	Workplace Air Determination of Particulate Lead and Lead Compounds Flame or Electrothermal Atomic Absorption Spectrometric Method

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	CHD 35 (19220)	Air Pollution - Methods for Measurement Part 27 Vapour-Phase Organic Chemicals Vinyl Chloride to nC22 Hydrocarbons in Air and Gaseous Emissions by Diffusive Passive Sampling onto Sorbent Tubes or Cartridges Followed by Thermal Desorption TD and Capillary Gas Chromatography GC Analysis
2	CHD 35 (19221)	Air Pollution Methods for Measurement Part 28 Vapour-Phase Organic Chemicals C3 to nC30 Hydrocarbons in Air and Gaseous Emissions Sampling by Pumped Sorbent Tubes Followed by Thermal Desorption TD and Capillary gas Chromatography GC Analysis

Total Published Standards:66 Total Standards Under development:16

Aspect Wise Report

Product : 4
Code of Practices : 5
Methods of Test : 58
Terminology : 1

Dimensions : 0
System Standard : 1
Safety Standard : 0
Others : 0
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 5182 (Part 2) : 2001 Reviewed In : 2022	Methods for measurement of air pollution Part 2 sulphur dioxide First Revision

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 17148 (Part 2) : 2019 ISO 10155 : 1995 Reviewed In : 2024 ISO 10155 : 1995	Performance Characteristics of Automated Measurement Systems Part 2 Particulate Matter from Stationary Sources
2	IS 17148 (Part 3) : 2020 ISO 7935 : 1992 ISO 7935 : 1992	Performance Characteristics of Automated Measurement Systems Part 3 Sulfur Dioxide from Stationary Sources
3	IS 17148 (Part 4) : 2020 ISO 10849 : 1996 ISO 10849 : 1996	Performance Characteristics of Automated Measurement Systems Part 4 Nitrogen Oxides from Stationary Sources
4	IS 17531 : 2021 ISO 23305 : 2020	PORTABLE ELECTRIC INDOOR AIR PURIFIER - SPECIFICATION