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**BUREAU OF INDIAN STANDARDS**

**MINUTES**

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| Name of the Committee | No. of Meeting | Date | Time | Venue |
| Water Purification Systems Sectional Committee, FAD 30 | 10th | **26 July 2024**  **(Fri)** | **10:30 AM** | Through WebEx |

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| **CHAIRPERSON:**  **Dr. S. Sridhar**  Chief Scientist and Professor  Chemical Engineering & Process Technology Dept., Membrane Separations Laboratory,  CSIR- Indian Institute of Chemical Technology (IICT), Hyderabad | **MEMBER SECRETARY:**  **Mrs. Nitasha Doger**  Scientist - E  Food & Agriculture Department,  Bureau of Indian Standards, New Delhi |

**ATTENDANCE SHEET–** Please see ***Annex-A* (Page 6)**

**Item 0 GENERAL**

* 1. **Welcome**

Mrs. Nitasha Doger, Scientist-E, Member Secretary FAD 30, welcomed the members of the Water Purification Systems Sectional Committee, FAD 30, to its 10th meeting and thanked them for sparing their valuable time for support BIS, the National Standards Body of India, in its pursuit of standardization. She apprised the members about the work done by the committee since its last meeting. She expressed gratitude towards the committee members for their efforts and contribution to the committee’s work.

**0.2** **Appointment of New Chairperson of FAD 30**

Mrs. Nitasha informed the Committee about Dr. S. Sridhar, Chief Scientist and Professor, CSIR-IICT, Hyderabad, being appointed the new Chairperson of FAD 30 and extended a warm welcome to him on behalf of the Committee.

The Committee expressed its appreciation for Dr. Pawan Kumar Labhasetwar, the previous Chairman of FAD 30, for his contribution to standardization in the field of water purification systems.

* 1. **Opening Remarks by the Chairman, FAD 30**

Dr. S. Sridhar extended a warm welcome to the committee's members during its 10th meeting. In his opening remarks, the Chairman appreciated the committee for formulating relevant standards in water purification systems and the significant developments being made under it. The Chairman encouraged the members to contribute to the Committee’s work actively and urged them to have fruitful discussions during the meeting.

**ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

The Committee confirmed the minutes of the 9th meeting of the Water Purification Sectional Committee, FAD 30, held on **5 March 2024**,which were circulated via e-mail on **1 April 2024**.

**ITEM 2 SCOPE, ACTIVITIES & COMPOSITION OF THE SECTIONAL COMMITTEE**

**2.1 SCOPE & ACTIVITIES OF THE COMMITTEE**

The Committee noted the information in the agenda regarding the scope and activities of the Water Purification Systems Sectional Committee, FAD 30.

**2.2 COMPOSITION OF THE SECTIONAL COMMITTEE**

**2.2.1** The Committee reviewed the updated composition of FAD 30 along with the attendance record of the last three meetings, including the attendance in the 10th meeting. Considering the lack of participation from the Federation of Indian Chambers of Commerce and Industry, New Delhi, in the Committee meetings, the Committee decided to recommend their withdrawal from the Committee composition.

**2.2.2** The Committee noted the scope and composition of the Panels provided in **Annex III** of the agenda and decided that the existing panels under the committee may be designated as working groups, as all these panels are ADHOC and were constituted for specific tasks.

**ITEM 3 INDIAN STANDARDS DRAFT INDIAN STANDARDS COMPLETED WIDE CIRCULATION**

**3.1** The Committeenoted that the comments received on Doc: FAD 30 (23542) WC, Ultraviolet water disinfection system —Specification (*first revision of IS 14724*) were discussed by Expert Panel for Review of IS 14724: 1999 (FAD 30/ Panel 4) during its meetings held on **15 March 2024, 24 May 2024** and **7 June 2024**. The Committee deliberated upon the expert panel's report provided as **Annex VII** of the agenda and endorsed the recommendation of the expert panel as given in the report. The Committee requested the BIS secretariat to incorporate the changes recommended by the panel in the draft and decided to send the draft into wide circulation (WC) for 30 days as a second WC, considering that there are substantial technical changes suggested in the document.

**3.2** The Committeenoted that during its 9th meeting held on **5 March 2024**, the committee had referred the comments received on Doc:FAD 30 (22352) WC, Ultrafiltration UF Membrane - Based Point-Of-Use Drinking Water Treatment System — Specification during the WC period to expert panelFAD 30/ Panel 2 and the meeting of the expel to discuss the same was scheduled on **30 July 2024**. The Committee requested the expert panel to consider the comments and submit its recommendation by **30 Sep 2024.**

**ITEM 4 DRAFT INDIAN STANDARD UNDER P-DRAFT STAGE**

The Committee noted the information under agenda item 4 regarding re-circulation of P Draft Doc. No. FAD 30 (24246) on Code of Practice for design installation and operation maintenance of community drinking water treatment plants (CWTPS) for an additional 30-day period as per the committee's decision during its 9th meeting. The Committee noted the comments received from Safe Water Network India (SWNI) and the Department of Drinking Water and Sanitation (DDWS), MoJS, New Delhi, on the draft. The Committee referred these comments to the expert panel for consideration and recommendation by 31 Oct 2024.

**ITEM 5 ACTIONS ARISING OUT OF PREVIOUS MEETING:**

**5.1 R&D Project on ‘Optimization of Recovery Efficiency of Reverse Osmosis-Based Point-Of-Use Water Treatment Systems’**

The Committee noted the information provided under agenda item **5.1** regarding Dr. S. Sridhar and Dr. Noel Jacob's participation in bid opening meetings held by the Research Evaluation Committee (REC) to evaluate the three proposals received against the R&D Project (CSIR-CSMCRI Gujrat, IIT-BHU, Varanasi, and NIT Jalandhar).

**5.2 Review of 12742: 1989, Guide for De-fluoridation of Water for Drinking Purposes**

The Committee noted the information provided under agenda item **5.2** regarding the recommendation of the Working group (WG) on ‘*Review of 12742: 1989, Guide for de-fluoridation of water for drinking purposes*’ to conduct a study on present-day technologies and methodologies for de-fluoridating water for drinking purposes, encompassing various verticals and suggested protocols. The Committee deliberated on the terms of reference (ToR) to take up the R&D project on ‘Study on effective technologies/methodologies available for removal of fluoride from water for drinking purposes’ provided as **Annex V** of the agenda and approved the same for inviting expression of interest for the same.

**5.3 Review of IS 12918: 1990, Guide for Removal of Iron from Water for Rural Water Supply**

The Committee noted the information provided under agenda item **5.3** regarding the recommendation of the WG on ‘*Review of IS 12918: 1990, Guide for removal of iron from water for rural water supply*’ to conduct a study on present-day technologies and methodologies for removal of iron from water for rural drinking water supply encompassing various aspects of best practices and recommended protocols. The Committee deliberated on the terms of reference (ToR) to take up the R&D project on ‘Study on effective technologies/methodologies available for removal of iron from water for rural drinking water supply’ provided as **Annex VI** of the agenda and approved the same for inviting expression of interest for the same.

**5.4 Formulation of New Indian Standard On Microfiltration (Mf) Based Water Purification Systems**

The Committee noted the information provided under agenda item **5.4** and deliberated upon the need to develop Indian standard on ‘Microfiltration (MF) based water purification systems.’ The Committee considered that microfiltration is not a standalone technology for point-of-use water purification systems and therefore decided to drop the subject of ‘Microfiltration (MF) based water purification systems’ for standard development. The committee further deliberated that the standardization of components used in water purification systems has not yet been addressed in Indian standards. The Committee accordingly decided to constitute the following working group to deliberate upon the need and modalities of formulating Indian standards on components used in water purification systems and submit its recommendations to the committee in 3 months:

1. Dr. Noel Jacob Kaleekkal, NITC, Kozhikode- *Convenor*
2. Dr. Vinay M. Bhandari, NCL, Pune
3. Dr. Puyam Singh, CSIR-CSMCRI, Bhavnagar
4. Shri Mukthesh Pathi, WQIA
5. Dr. T. N. V. V. Rao (*In a personal capacity*)

**5.5 Comments received on IS 16240:2023**

**5.5.1** The Committee noted that the comments received from WQIA and LG Electronics India Pvt. Ltd on IS 16240: 2023 were discussed by the expert panel (FAD 30/ Panel 1) during its meeting held on **13 Feb 2024** and **22 July 2024**. The Committee deliberated on the recommendations from the panel provided under **Annex IX** of the agenda (*please refer to the addenda to the agenda)* w.r.t comments from LG Electronics India Pvt. Ltd on IS 16240: 2023 relating to the testing performance of the TDS meter. The Committee endorsed the recommendation of the expert panel to refer IS 3025 (Part 14), Method of Sampling and Test (Physical and Chemical) for Water and Wastewater, Part 14: Specific Conductance (Wheatstone Bridge, Conductance Cell) in place of IS 3025 (Part 16), Methods of Sampling and Test (Physical and Chemical) for Water and Wastewater Part 16 Filterable Residue (Total Dissolved Solids) at 180 °C, for TDS determination *vis-a-vis* TDS value from TDS meter (*please see* 4.3.1 hof IS 16240).

**5.5.2** The Committee also noted that in its 9th meeting, the committee agreed to the recommendation by the panel regarding some changes in IS 16240: 2023, which essentially aims to bring more clarity to the standard. The Committee requested the BIS secretariat to prepare a draft amendment to IS 16240: 2023 incorporating the changes recommended by the panel and endorsed by the committee in its present meeting (10th) as well as the previous meeting (9th). The committee further decided to send the draft amendment into wide circulation with 60 days commenting period.

**ITEM 6 REVIEW OF INDIAN STANDARDS**

The Committee noted the information given under **item 6** of the agenda that no Indian Standard is due for review during 2024-25 under the five-yearly review criteria.

**ITEM 7 TIME AND PLACE FOR THE NEXT MEETING**

The Committee noted that its next meeting is scheduled for 20 December 2024, as per the annual meeting calendar, and decided to hold the meeting according to the established schedule on a best endeavor basis.

**ITEM 8 ANY OTHER BUSINESS**

There being no other business, the meeting ended with a hearty vote of thanks to the Chair & the members*.*

***Annex A***

Attendance for the 10th meeting of the Water Purification Systems Sectional Committee, FAD 30 held on 26th July 2024

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| **Sl. No.** | **ORGANISATION** | **REPRESENTED BY** |
|  | **Dr. S. Sridhar (Chairperson)**  CSIR - Indian Institute of Chemical Technology, Hyderabad | |
|  | Bhabha Atomic Research Centre, Mumbai | Dr. A. K. Ghosh |
|  | Bhavan's Research Centre (Microbiology), Mumbai | Dr. Sandhya Shrivastava  Dr. Nishith Desai |
|  | CSIR - Central Food Technological Research Institute, Mysore | Dr. Sandeep Narayan Mudliar  Smt. V. Vanajakshi |
|  | CSIR - Central Salt and Marine Chemicals Research Institute, Bhavnagar | Dr. Puyam Singh |
|  | CSIR - Institute of Minerals and Materials Technology, Bhubaneswar | Dr. Jayant Kumar Pothal |
|  | CSIR - National Environmental Engineering Research Institute, Nagpur | Dr. Noor Afshan Khan |
|  | CSIR - Indian Institute of Chemical Technology, Hyderabad | Dr. Nivedita Sahu |
|  | Christian Medical College, Vellore | Dr. Dilip Abraham |
|  | Confederation of Indian Industry (CII), New Delhi | Ms. Mamta Arora Budhiraja |
|  | Consumer Education and Research Centre, Ahmedabad | Shri Bijal Chauhan |
|  | Consumer Electronics and Appliances Manufacturers Association, Noida | Shri Aditya Anil |
|  | Department of Science and Technology, New Mehrauli Road, New Delhi | Dr. Sanjai Kumar |
|  | Indian Institute of Technology, Kharagpur | Dr. Brajesh Kr Dubey |
|  | Indian Plumbing Association, New Delhi | Shri Mukesh Asija |
|  | Ministry of Environment Forest and Climate Change, New Delhi | Dr. Sonu Singh |
|  | DDWS, Ministry of Jal Shakti, New Delhi | Shri Parth Sarthi |
|  | National Chemical Laboratory, Pune | Dr. Vinay M. Bhandari |
|  | National Institute of Technology Calicut, Kozhikode | Dr. Noel Jacob Kaleekkal |
|  | National Institute of Virology, Pune | Dr. Shailesh Pawar |
|  | Safe Water Network India | Dr. Shveta Mahajan |
|  | Water Quality India Association, Mumbai | Dr. Neeraj Gupta  Shri Mukthesh Pathi |
|  | In Personal Capacity | Dr. T. N. V. V. Rao |
|  | In Personal Capacity | Dr. S. Muralidhara Rao |
|  | In Personal Capacity | Dr. Dinesh Mohan |
|  | Food & Agriculture Department, BIS, New Delhi | Smt. Nitasha Doger, Scientist-E  & Member Secretary, FAD 30 |