**BUREAU OF INDIAN STANDARDS**

**MINUTES**

**ALERT PANEL CHD 13:P1 Water Quality related to all types of Boilers**

**Of**

**Water Quality for Industrial Purposes**

**Fifth Meeting**

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| Day & Date | **Wednesday, 10.12.2024** |
| Time | **10:30 AM** |
| Mode of Meeting | **Virtual** |
| **Shri R S Baghel, Convener****Ms. Shubhanjali Umrao, Member Secretary CHD 13** |

**Members Present**

1. Shri R S Baghel, Convener
2. Dr. K Sri Bala Kameswari, CLRI
3. Shri. L. K Nayak, NTPC
4. Shri Ankit Verma NTPC
5. Shri Shailendra Kumar, BHEL

**ITEM 1 OPENING OF THE MEETING**

**1.1** On behalf of the Bureau of Indian Standards (BIS), the Secretariat welcomed Shri R. S. Baghel, Convener of CHD 13:P1, and the panel members to the 5th meeting of CHD 13:P1. The BIS Secretariat appreciated the valuable time and efforts contributed by the members toward the revision of standards. However, the Secretariat requested the panel to review its composition, highlighting that out of 10 members, only 5 are actively participating in the development of new standards and the revision of existing Indian Standards related to boiler water quality.

**ITEM 2 COMPOSITION OF PANEL**

**2.1** The Panel reviewed the composition of CHD 13:P1 given in Annex-I and decided to remove the following experts which have not attended three consecutive meeting:

1. Dr Mritunjay Chaubey, UPL Limited (ICC, Mumbai)

2. Shri T. S. G. Narayannen/ Shri Uday Singh Mina, DPIIT

3. Shri Nazimuddin/ Shri Vishal Gandhi, CPCB

**2.2 Additionally, the Panel has decided to constitute four dedicated Working Groups (WGs) to undertake the systematic revision of existing standards related to water quality for boilers and formulation new standard on** Specification for Condensate Feed Water and Steam once through supercritical boilers**.** Further the BIS Sectt. highlighted that the formation of these Working Groups is aimed at ensuring that the standards are updated in alignment with the latest technological advancements, regulatory requirements, and scientific methodologies. Each Working Group will focus on a specific domain within the broader scope of water quality standards to streamline the revision process and foster targeted expertise.

**2.2.1** The four working group and their Term of Reference (ToR) are as follows:

**2.2.1.1** **CHD 13: WG 01 Revision of IS 14199: 1995 Steam purity - Methods of sampling and test**

The **Terms of Reference** (ToR) for CHD 13/WG 1, **14199: 1995 Steam purity - Methods of sampling and test**', are as follows:

**1.** Conduct a targeted Action Research Project (ARP) to gather data and insights on current steam purity practices, analyze challenges and advancements in sampling and testing methods, and use the findings to review and revision of the standard.

**2.** Prepare a revised draft for **IS 14199** based on findings from the ARP and input from relevant stakeholders incorporating modernized methodologies, technological advancements, and aligning with national and international best practices for steam sampling and testing.

**3.** Systematically review, deliberate, and resolve all comments and feedback received during the circulation of **IS 14199 both when circulated as both the preliminary and wide circulation drafts and** prepare the finalized draft to be put up before CHD 13:P1.

**2.2.1.2 CHD 13 WG 02 IS 8188: 1999 Treatment of water for cooling towers - Code of practice (first revision)**

The **Terms of Reference (ToR) for CHD 13/WG 02**, **IS 8188: 1999 Treatment of water for cooling towers - Code of practice (first revision),** are as follows:

**1.** Conduct a targeted Action Research Project (ARP) to identify areas where the standard may require revision due to technological advancements, regulatory updates, or evolving industry needs in water treatment for cooling towers and use the findings to review and revision of the standard.

**2.** Prepare a revised draft for **IS 8188** based on findings from the ARP and input from relevant stakeholders incorporating modernized methodologies, technological advancements, and aligning with national and international best practices for treatment for water for cooling tower.

**3.** Systematically review, deliberate, and resolve all comments and feedback received during the circulation of **IS 8188 both when circulated as both the preliminary and wide circulation drafts and** prepare the finalized draft to be put up before CHD 13:P1.

**2.2.1.3 CHD 13 WG 03 Formulation of new standard on Specification for Condensate Feed Water and Steam once through supercritical boilers**

The **Terms of Reference (ToR) for CHD 13/WG 03**, **Formulation of new standard on Specification for Condensate Feed Water and Steam once through supercritical boilers,** are as follows:

**1.** Conduct a thorough review of existing national and international standards for water and steam quality in supercritical boilers, with a focus on condensate feed water treatment and steam specifications.

**2.** Engage with experts in the field of boiler operations, condensate treatment, and steam quality, as well as relevant industry stakeholders such as power generation plants, manufacturers, and regulatory bodies.

**3.** Prepare working document on Specification for Condensate Feed Water and Steam once through supercritical boilers.

**4.** Review, deliberate, and resolve comments and concerns raised during the circulation process, refining the draft as needed to ensure broad acceptance and technical accuracy, **and** prepare the finalized draft to be put up before CHD 13:P1.

**2.2.1.4 CHD 13 WG 04 Revision of IS 10391: 1982 Code of Practice for Chemical Cleaning of Boilers**

The **Terms of Reference (ToR) for CHD 13/WG 04**, **Revision of IS 10391: 1982 Code of Practice for Chemical Cleaning of Boilers,** are as follows:

**1.** Conduct a comprehensive Action Research Project (ARP) to review the cleaning methodologies, operational guidelines, and chemical dosages outlined in the standard to ensure they are up-to-date and aligned with current best practices in boiler maintenance.

**2.** Prepare a revised draft of **IS 10391** incorporating findings from the ARP and feedback from relevant stakeholders, ensuring the inclusion of updated methodologies, technological advancements, and alignment with national and international best practices for the chemical cleaning of boilers.

**3.** Review, deliberate, and resolve comments and concerns raised during the circulation process, refining the draft as needed to ensure broad acceptance and technical accuracy, **and** prepare the finalized draft to be put up before CHD 13:P1.

**ITEM 3 DRAFT STANDARDS/AMENDMENTS FOR PREPARTION OF WORKING DRAFT**

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| **Sl. No.** | **IS No. and Title, Document No.** | **Decision of the Committee in Meeting** |
| **3.1** | **IS 14199 : 1995 Steam purity - Methods of sampling and test** |  The Panel noted that comments on IS 14199 were received from Shri Ankit Verma, NTPC, and Shri K. Anand Babu, BHEL. The Panel further deliberated on the comments and decided to constitute Working Group CHD WG 01 to prepare the revised draft, with the aim of involving experts from state utilities and boiler manufacturers to ensure the preparation of a comprehensive and detailed document. The Panel also drafted the Terms of Reference for CHD 13 WG 01. BIS Sectt. requested Shri Ankit Verma, NTPC, Shri Shailendra Kumar, BHEL, and Shri R.S. Baghel to share the contact details of designated experts from NTPC, BHEL, L&T, and Thermax, so that the working group may be constituted and the preparation of the revised draft may proceed.* The Panel also authorized Shri K.P. Bhattacharya, Chairperson, to approve the composition of Working Group CHD 13 WG 01 once it is constituted.
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| **3.2** | **IS 8188 : 1999** **Treatment of water for cooling towers - Code of practice (first revision)** |  The Panel noted that comments on IS 8199 were received from Shri Anil Khera. The Panel further deliberated on the comments and decided to constitute Working Group CHD WG 02 to prepare the revised draft, with the aim of involving experts from state utilities and boiler manufacturers to ensure the preparation of a comprehensive and detailed document. The Panel also drafted the Terms of Reference for CHD 13 WG 02. BIS Sectt. requested Shri Ankit Verma, NTPC, Shri Shailendra Kumar, BHEL, and Shri R.S. Baghel to share the contact details of designated experts from Paharpur Cooling Towers, Nalco Water, Adani power, Reliance Power, Telangana Power Generation Corporation Limited Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (RVUNL), Tamil Nadu Generation and Distribution Corporation, Gujarat State Electricity Corporation Limited, Uttar Pradesh Rajya Vidyut Utpadan Nigam, and Tata Power so that the working group may be constituted and the preparation of the revised draft may proceed. The Panel also authorized Shri K.P. Bhattacharya, Chairperson, to approve the composition of Working Group CHD 13 WG 02 once it is constituted. |
| **3.3** | **Specification for Condensate Feed Water and Steam once through supercritical boilers** |  The Panel noted that working draft has been received from Shri Ankit Verma, NTPC. The Panel decided to constitute Working Group CHD WG 03 to prepare the detailed and comprehensive draft, with the aim of involving experts from state utilities and boiler manufacturers to ensure the preparation of a comprehensive and detailed document. The Panel also drafted the Terms of Reference for CHD 13 WG 03. BIS Sectt. requested Shri Ankit Verma, NTPC, Shri Shailendra Kumar, BHEL, and Shri R.S. Baghel to share the contact details of designated experts from NTPC, BHEL, Adani power, Reliance Power, Telangana Power Generation Corporation Limited Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (RVUNL), and Tata Power so that the working group may be constituted and the preparation of the working draft may proceed. The Panel also authorized Shri K.P. Bhattacharya, Chairperson, to approve the composition of Working Group CHD 13 WG 03 once it is constituted. |
|  | **IS 10391: 1982****Code of Practice for Chemical Cleaning of Boilers** |  The Panel noted that comments on IS 10391 were received from Shri Ankit Verma, NTPC, and Shri K. Anand Babu, BHEL. The Panel decided to constitute Working Group CHD WG 04 to prepare the revised draft, with the aim of involving experts from state utilities and boiler manufacturers to ensure the preparation of a comprehensive and detailed document. The Panel also drafted the Terms of Reference for CHD 13 WG 04. BIS Sectt. requested Shri Ankit Verma, NTPC, Shri Shailendra Kumar, BHEL, and Shri R.S. Baghel to share the contact details of designated experts from NTPC, BHEL, L&T, and Thermax, Toshiba and other chemical vendors so that the working group may be constituted and the preparation of the revised draft may proceed. The Panel also authorized Shri K.P. Bhattacharya, Chairperson, to approve the composition of Working Group CHD 13 WG 04 once it is constituted. |

**Item 4 ANY OTHER BUSINESS**

**4.1** BIS Sectt. informed about SCMD Circular SCMD/G-32 dated 05.12.2024 regarding revised guidelines for Recognition of Contributions of Technical Committees and its members to present ‘**BIS COMMITTEE OF THE YEAR AWARDS’** and **‘LETTER OF APPRECIATION’** to Committee members to recognize significant contribution of members of technical committees in developing standard(s) that can be considered to be a major development in the subject area and in national/international standardization, and **‘CERTIFICATE OF EXCELLENCE’** to Committee members to recognize members of technical committees for their long association with BIS and their outstanding technical contribution to National Standardization work.

A copy of guideline is enclosed for reference.

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**4.2** BIS Sectt. requested member to provide the designated expert details in the following google sheet.

<https://docs.google.com/spreadsheets/d/1QGoZ77Jcm2HzKWYoWFkuahDmPb1Q8Dv_6ree-Eo6NYc/edit?usp=sharing>

**Item 5 VOTE OF THANKS**

On behalf of BIS, BIS Sectt. expressed heartfelt thanks toShri R. S. Baghel, Convener of CHD 13:P1, and the panel members for taking out valuable time for actively engaging in revision of Indian Standards.