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| **(PETROLEUM, COAL & RELATED PRODUCTS DEPARTMENT)** | |
| **AGENDA** | | |
| **3rd December 2024, Tuesday 1400 – 1730 h** | | |
| **Physico-chemical Test Methods for Petroleum and related products of synthetic or biological origin (excluding bitumen, lubricants, greases and gaseous fuels), PCD 1:3** | | **7th Meeting** |
| **Convener:**  **Sh. C Shanmuganathan, BPCL** | | **Member Secretary: Mr. Hari Mohan Meena** |
| **Meeting Information**  **Meeting mode: Virtual**  **Meeting link**: https://bismanak.webex.com/bismanak/j.php?MTID=m926e16652b10fb431f7c65d1467454b2  **Meeting number**: 2516 244 0877  **Password**: Physico | | |

**ITEM 0 WELCOME AND INTRODUCTORY REMARKS**

* 1. Welcome by BIS
  2. Opening Remarks by the Convener

**ITEM 1 CONFIRMATION OF THE MINUTES OF THE 6TH MEETING OF PCD 1:3**

The minutes of the 6th meeting of PCD 1:3, held in virtual mode on 19th December 2023, was circulated to members through BIS portal on 8th February 2024. No comments were received.

*The Subcommittee may* ***CONFIRM*** *the minutes as circulated****.***

**ITEM 2 TITLE, SCOPE AND COMPOSITION OF PCD 1:3**

**2.1** The title of the Subcommittee is given below:

**TITLE** – Physico-chemical Test Methods for Petroleum and related products of synthetic or biological origin (excluding bitumen, lubricants, greases and gaseous fuels)

In compliance to DG BIS directives, proposed rename is “Physico-chemical Test Methods for Petroleum and related products of synthetic or biological origin (excluding bitumen, lubricants, greases and gaseous fuels)”

**2.2** The scope of the Subcommittee is given below:

**SCOPE** –

(i) To formulate Indian Standards for Physico-chemical test methods for petroleum, and related products of synthetic or biological origin (excluding bitumen, lubricants, greases and gaseous fuels),

(ii) To organize Inter-laboratory correlation studies for formulating the relevant Indian standards.

*The Subcommittee may* ***CONSIDER***.

**2.3** The composition cum attendance of last three meetings of PCD 1:3 is given in **Annex I**.



*The Subcommittee may* ***CONSIDER***.

**ITEM 3 ACTIVITIES OF THE SUBCOMMITTEE PCD 1:3**

**3.1** The program of work and list of standards published under PCD 1:3 is given in **Annex II**.



*The Subcommittee may* ***NOTE***

**3.2** **Details of the Working Groups Meetings**

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| Sr. No. | Details of Working Group | Date of the meeting | Status |
| 1 | PCD 01:3: P1  WG for revision of IS 1448 (Part 87): 1979  Methods of test for petroleum and its products - Auto ignition temperature  (Convenor – Shri H. Ramakrishnan, CPCL) | NA | During the last meeting, the committee decided to retain the working group till the finalization of the document. The Doc is under wide circulation.  The existing composition of the panel is given below:   1. Shri Ramakrishnan, CPCL (Convener) 2. Shri Vivek Kumar, PESO 3. Dr Raj K Singh, IIP 4. Shri Santosh Bhogle, HPCL, and 5. Dr Ram Janam Singh, IOC   Convener of the Working Group Shri H. Ramakrishnan, CPCL has been superannuated.  The Subcommittee may **CONSIDER** to appoint an expert from the existing working group. |
| 2 | PCD 01 : WG07-PCD 1-3Review of IS 1448 (Part 18) : 2020 Methods of test for petroleum and its products Part 18 distillation of petroleum products (Third Revision) | The meeting has been scheduled for the 22nd November 2024 | The Composition of the Working Group is given below:   1. Shri C Shanmuganathan, BPCL, (**Convenor**) 2. Shri Raja Kishor Barik, HPCL   The working group has been requested to provide the recommendation by 20th November 2024. |
| 3 | PCD 01 : **WG08**-PCD 1-3  Review ofIS 1448 (Part 155) : 2020  Methods of Test for Petroleum and its Products [ P : 155 ] Determination of Trace Nitrogen in Liquid Petroleum Hydrocarbons by Oxidative Combustion with Chemiluminescence Detector | The Meeting is yet to be scheduled by the Convener. | The Composition of the Working Group is given below:   1. Shri Adalazhagan K, BPCL Bina Refinery (**Convenor**) 2. Shri A. S. Krishnamoorthy, Indian Oil Corporation (MKTG)   The working group has been requested to provide the recommendation by 20th November 2024. |
| 4 | PCD 01 : **WG09**-PCD 1-3  Review ofIS 1448 (Part 175): 2020/ ISO 6296:2000  Methods of Test for Petroleum and its Products Part 175 Petroleum Products - Determination of Water - Potentiometric Karl Fischer Titration Method | The Meeting is yet to be scheduled by the Convener. | The Composition of the Working Group is given below:   1. Dr Ram Janam Singh, IOCL Refineries and Pipelines Division (**Convenor**) 2. Ms. Reena Kuril, Lubrizol India Limited, Mumbai   The working group has been requested to provide the recommendation by 20th November 2024. |
| 5 | PCD 01 : **WG10**-PCD 1-3  Review of IS 1448 (Part 176): 2020/ ISO 7537:1997  Methods of Test for Petroleum and its Products Part 176 Petroleum Products - Determination of Acid Number - Semi-micro Colour-indicator Titration Method | Meeting has been scheduled for the 21st November 2024 | The Composition of the Working Group is given below:   1. Dr. Hemant Tyagi, HPCL Mittal Energy Limited (**Convenor**) 2. Shri Avinash Chandra, RDSO   The working group has been requested to provide the recommendation by 20th November 2024. |
| 6 | PCD 01 : **WG011**-PCD 1-3  Review of IS 1448 (Part 177): 2020/ ISO 3648:1994  Methods of Test for Petroleum and its Products Part 177 Aviation Fuels - Estimation of Net Specific Energy | The Meeting is yet to be scheduled by the Convener. | The Composition of the Working Group is given below:   1. Shri Narhar Deshpande, Nayara Energy Limited (**Convenor**) 2. Shri Uday. B, MRPL   The working group has been requested to provide the recommendation by 20th November 2024. |
| 7 | PCD 01 : **WG012**-PCD 1-3  Review ofIS 1448 (Part 178): 2020/ ISO 6271:2015  Methods of Test for Petroleum and its Products Part 178 Clear Liquids - Estimation of Colour by the platinum Cobalt Colour Scale | The Meeting is yet to be scheduled by the Convener. | The Composition of the Working Group is given below:   1. Shri Abdul Kareem, CPCL (**Convenor**) 2. Shri Rakesh Kumar, Directorate General of Civil Aviation   The working group has been requested to provide the recommendation by 20th November 2024. |
| 8 | PCD 01 : **WG013**-PCD 1-3  Review ofIS 1448 (Part 182): 2020/ ISO 12937:2000  Methods of Test for Petroleum and its Products Part 182 Petroleum Products - Determination of Water - Coulometric Karl Fischer Titration Method | The Meeting is yet to be scheduled by the Convener. | The Composition of the Working Group is given below:   1. Shri CT Chidambaram, Gulf Oil Lubricants India Limited (**Convenor**) 2. Shri Partha Jyoti Sharma, Numaligarh Refinery Limited   The working group has been requested to provide the recommendation by 20th November 2024. |

*The Subcommittee may* ***CONSIDER****.*

**3.3 Documents Published / Under Publication**

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| SI No. | Doc No./ Title | Current Status |
|  | IS 1448 (Part 20) : 2024 / ISO 13736: 2021 — PETROLEUM AND ITS PRODUCTS - TEST METHODS PART 20 DETERMINATION OF FLASH POINT - ABEL CLOSED - CUP METHOD (Fourth Revision)  Doc. No. PCD 01 (24187) | Published |
|  | IS 1448 (Part 79): 2024 — PETROLEUM AND ITS PRODUCTS - METHODS OF TEST PART 79 DETERMINATION OF VANADIUM AND NICKEL IN FURNACE OIL, CRUDE OIL AND THEIR RESIDUES - SPECTROPHOTOMETRIC METHOD (Second Revision)  Doc. No. PCD 01 (22023) | Published |
|  | IS 1448: Part 154: 2012 Methods of test for petroleum and its products (Part 154) determination of the oxidation stability of middle - Distillate fuels  Amendment No 1 September 2024  Doc. No. PCD 01 (24451) | Published |
|  | IS 1448: Part 5: 2024 — PETROLEUM AND ITS PRODUCTS METHODS OF TEST PART 5 DETERMINATION OF KEROSENE BURNING CHARACTERISTICS 24 HOUR METHOD (Second Revision)  Doc. No. PCD 01 (22005) | Under publication |
|  | IS 1448 (Part 25/Sec 2): 2024 / ISO 3105: 1994 — PETROLEUM AND ITS PRODUCTS - TEST METHODS PART 25 GLASS CAPILLARY KINEMATIC VISCOMETERS - SECTION 2 SPECIFICATIONS AND OPERATING INSTRUCTIONS  Doc. No. PCD 01 (24191) | Under publication |
|  | IS 1448: Part 34: 2024 — PETROLEUM AND ITS PRODUCTS TEST METHODS PART 34 DETERMINATION OF SULPHUR IN PETROLEUM PRODUCTS (LAMP METHOD) (Third Revision)  Doc. No. PCD 01 (22406) | Under publication |
|  | IS 1448 (Part 55: Sec 1: 2024) — PETROLEUM AND ITS PRODUCTS - METHODS OF TEST PARTS 55 / SEC 1 DETERMINATION OF SAPONIFICATION VALUE OF PETROLEUM PRODUCTS (Second Revision)  Doc No. PCD 01 (20185) | Under publication |

*The Subcommittee may* ***NOTE****.*

**3.4 Documents completed wide circulation stage/ under wide circulation stage**

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| Sl No. | Doc No./Tittle | Decision of the Committee | Action taken/ Current Status |
|  | Doc. No. PCD 01 (24193)  IS 1448 (Part 25/Sec 1) : 2018 / ISO 3104: 1994  Methods of test for petroleum and its products [Part 25] transparent and opaque liquids section 1 determination of kinematic viscosity and calculation of dynamic viscosity (*Second Revision*) | The Subcommittee **NOTED** that the document is under wide circulation.  Further, the Subcommittee **RECOMMENDED** to finalize the document for printing with approval of the Chairman of PCD 01, if no comments received during the wide circulation period. | The Document was issued into wide circulation on 22.11.2023.  The end date for comments was 20.01.2024.  Comments received from Shri Milan Vasoya, Nayara Energy Limited, Mumbai are given below:    *The Subcommittee may* ***CONSIDER*** *finalizing the document.* |
|  | Doc. No. PCD 01 (26673)  IS 1447 (Part 4): 1989  Methods of test for petroleum and its products part 4 sampling of petroleum coke for laboratory analysis | The Subcommittee **REQUESTED** BIS Sectt. to issue the draft into wide circulation for a period of two months. | The draft was received from CIMFR.  The Document was issued into wide circulation on 10th October 2024.  The end date for comments is 02 December 2024  *The Committee may* ***CONSIDER*** |
|  | Doc. No. PCD 01 (26564)  IS 1448: Part 87: 1979 Methods of test for petroleum and its products: Part 87 Auto ignition temperature of liquid petroleum products | The Subcommittee **REQUESTED** BIS Sectt. to issue the draft into wide circulation for a period of two months. | The draft was received from WG.  The document was issued into wide circulation on 13th September 2024.  The end date for comments is 12 November 2024.  No comments received on the document.  *The Subcommittee may* ***CONSIDER*** *finalizing the document.* |
|  | Doc. No. PCD 01 (26887)  IS 1448: Part 1: Sec 2: 2002  Methods of Test for Petroleum and its Products: Part 1 / Sec 2 : Determination of Base Number of Petroleum Products by Potentiometric Titration (second revision) | The Subcommittee **REQUESTED** BIS Sectt. to issue the draft into wide circulation for a period of two months. | The draft was received from Smt. H Jyothi, MRPL  The draft was issued into wide circulation on 6th November 2024.  The end date for comments is 5th January 2025.  *The Subcommittee may* ***CONSIDER*** |
|  | IS 1448 (Part 6): 1984  Methods of test for petroleum and its products part 6: Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter Method (first revision) | The Subcommittee **REQUESTED** BIS Sectt. to issue the draft into wide circulation for a period of two months. | The draft was received from Smt. Anitha Shetty, MRPL.  The document is under editing for wide circulation |
|  | Doc No. PCD 01 (26941)  IS 1448 (Part 147): 1998  Methods of test for petroleum and its products Part 147 Determination of potential gum in motor gasoline | The Subcommittee **REQUESTED** BIS Sectt. to issue the draft into wide circulation for a period of two months. | The draft was received from Shri Santosh Bhogale, HPCL.  The document issued into wide circulation on 14th November 2024.  The end date for comments is 13th January 2025.  *The Subcommittee may* ***CONSIDER*** |
|  | IS 1448 (Part 113): 1983  Methods of test for petroleum and its products Part 113 Determination of total acidity of ATF aviation turbine fuel | The Subcommittee **NOTED** that the draft is awaited from CPCL.  Shri Ramakrishnan, CPCL agree to provide the draft within a month. | The draft has been received from Shri Ramakrishnan, CPCL  The document is under editing for wide circulation |
|  | Doc PCD 01 (20191)  petroleum and its products test methods part xxx determination of mercaptan sulphur | During the 22nd meeting held on 10th February 2023, Comments received on the WC document Doc PCD 01 (20191) were deliberated and finalized the document for printing as given below:  Put a note under Clause 3.2 stating that “Methyl or Ethyl Alcohol shall be free from aldehydes” and treatment procedure of methyl alcohol to be included before the procedure clause 5. The Committee further DECIDED to send the draft for printing after review of revised draft by Dr S Thorat and approval of Chairman PCD1. | After the meeting, comments on the documents to drop the subject were received from IOCL. BPCL also agreed to the same.  Details are given below:    *The Subcommittee may* ***RE-CONSIDER.*** |

**3.5 ISSUES ARISING OUT OF THE PREVIOUS MEETINGS:**

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| S.N. | IS No. / Title | Decision of the Committee | Action taken/Current Status |
|  | IS 1448 (Part 7): 2004  Methods of Test for Petroleum and its Products Part 7 Determination of calorific value by calculation | During the earlier meeting, The Subcommittee **NOTED** CPCL and HPCL is working jointly for preparation of the draft.  CPCL commented on making the following changes in the standard for revision:  1) As this standard is based on ASTM D4868 and calorific values are expressed in British Thermal Unit (BTU) and in calories. In all the Indian standards, SI units are used. Hence it is to be revised to SI units.  2) Specific gravity at 15.56 °C is used for calculation of calorific value. As in ASTM D4868:2017 Density at 15 degrees C is used. Hence the method needs to be revised to calculate the calorific value from the density at 15 °C  3) Precision limit needs to be revised in line with ASTM D4868:2017. | The working draft is yet to be received from CPCL & HPCL. |

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| 2 | IS 1448 (Part 84) : 2017  Methods of test for petroleum and its products [Part: 84] determination of trace elements in petroleum products - Arsenic (*First Revision*) | During the earlier meeting, the Subcommittee/ Sectional Committee decidedto reaffirm and revise under the R&D scheme of BIS as no inputs were received for the revision of the standard. | Recommended to create a working group of experts to prepare ToRs for R&D. |
| 3 | IS 1448 (Part 128) : 2018  Methods of test for petroleum and its products [Part: 128] determination of nickel in calcined petroleum coke (*First* *Revision*) |
| 4 | IS 1448 (Part 132) : 2018  Methods of test for petroleum and its products [Part: 132] Determination of Moisture Content in Raw and Calcined Petroleum Coke |
| 5 | IS 1448 (Part 133) : 2018  Methods of test for petroleum and its products [Part: 133] determination of real density of calcined petroleum coke (*First Revision*) |
| 6 | IS 1448 (Part 134) : 2018  Methods of test for petroleum and its products [Part: 134 ] determination of volatile matter in raw and calcined petroleum coke (*First Revision*) |
| 7 | IS 1448 (Part 139) : 2018  Methods of test for petroleum and its products [Part: 139] determination of real density of calcined petroleum coke using butanol or toluene (*First Revision*) |
| 8 | IS 1448 (Part 140) : 1992  Methods of test for petroleum and its products [Part: 140] determination of apparent density of petroleum coke by mercury pyknometer method |

*The Subcommittee may* ***CONSIDER****.*

**3.6 COMMENTS ON PUBLISHED STANDARDS**

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| **S.N.** | **Doc No. / Title** | **Action taken/Current Status** |
|  | IS 1447 (Part 1): 2021 Methods of Sampling of Petroleum and its Products Part 1 Manual Sampling (Second Revision) | Comments received from Dr. Y S Jhala, IOCL    *The Committee may* ***CONSIDER.*** |
|  | IS 1448: Part 182: 2020/ ISO 12937: 2000 Methods of Test for Petroleum and its Products Part 182 Petroleum Products Determination of Water — Coulometric Karl Fischer Titration Method | Comments received from Ms. Kreeti Das, BIS    *The Committee may* ***CONSIDER.*** |

**3.7 Revision/Reaffirmation of Standards**

As per BIS Rules, all published Indian Standards have to be reviewed periodically once in five years to determine the need for revision/reaffirmation/withdrawal. The present directives indicate that the standards fall under the above category shall be reviewed thoroughly and while reviewing following points should be considered:

i) Does the standard meet the present demand of the industry and the consumers?

ii) Is it compatible with the available international standards?

iii) Whether these standards are required to be continued or not?

iv) Prospective implementation of the standard.

Accordingly, ARPs of 07 Indian Standards formulated by PCD 01/ PCD 1:3 published/reaffirmed during or before 2018-2019 were circulated to the committee members for soliciting their comments as given in Annex III.

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*The Subcommittee may* ***CONSIDER****.*

**ITEM 4 DATE AND PLACE FOR THE NEXT MEETING**

**ITEM 5 ANY OTHER BUSINESS**

**ITEM 6 VOTE OF THANKS**