	<b>भारतीय मानक ब्यूरो</b> <b>BUREAU OF INDIAN STANDARDS</b>
	<b>(PETROLEUM, COAL &amp; RELATED PRODUCTS DEPARTMENT)</b>
<b>MINUTES</b>	
<b>22 February 2024, Tuesday, 1430 - 1800 h</b>	
<b>Petroleum and their Related Products of Synthetic or Biological or Natural Origin Sectional Committee</b>	<b>51<sup>st</sup> Meeting</b>
<b>Chairperson: Dr. Harender Singh Bisht, Director, CSIR - IIP</b>	<b>Member Secretary: Ms. Kreeti Das</b>

## ITEM 0 WELCOME AND INTRODUCTORY REMARKS

### 0.1 Welcome by BIS

Smt. Meenal Passi, Head, PCD, welcomed all members to the 51<sup>st</sup> meeting of PCD 03. She congratulated Dr. Harender Singh Bisht for his first meeting as PCD 3 Chair and requested for his continuous guidance related to activities of PCD 03. She stated that this meeting is very important as several important issues will be tabled for discussion and requested everyone to work collaboratively to achieve solutions.

### 0.2 Opening Remarks by the Chairperson

Dr. Harender Singh Bisht, Chairman PCD 03, welcomed all members to the meeting. He informed the committee that this is his first PCD 03 meeting and he is looking forward to a cohesive environment with focus on consumer welfare and improvement of standards. As Chairperson, he will consider views of all members and take decisions targeted towards development of the country and achievement of visions of Govt. of India.

### 0.3 The attendance of the meeting is given in **Annex I**.

## ITEM 1 CONFIRMATION OF THE MINUTES OF THE 50<sup>th</sup> MEETING OF PCD 03

The minutes of the 50<sup>th</sup> meeting of PCD 03, held in hybrid mode on 2 August 2023, was circulated to all members through BIS portal and email on 29 August 2023. Committee **DELIBERATED** on the comments received from Shri Ramaprabhu (M&M) and **DECIDED** as follows:

- Committee **ACCEPTED** the change recommended by M&M on the item "Reference E5, Reference E10 gasoline fuels and Reference B7 diesel" in MoM of 50<sup>th</sup> meeting
- For comment on item 3.3, sl.no. 1, Page 7 of MoM of 50<sup>th</sup> meeting, the Committee **NOTED** that PCD 3:1/P6 has already met and agreed on the wording to be used and **DECIDED** that the wording recommended by PCD 3:1/P6 to be incorporated in PCD 03 (19658)WC2
- For comment on item 3.3, sl.no. 2, Page 7 of MoM of 50<sup>th</sup> meeting, the Committee **NOTED** that SIAM's viewpoint has been recorded in MoM of 38<sup>th</sup> meeting of PCD 3:1 held on 13 Feb 2024 and the same will be discussed in today's meeting.

In view of above, the Committee **DIRECTED** BIS to circulate the revised MoM for 50<sup>th</sup> meeting, after changing as per (a) above, and **CONFIRMED** the rest of the minutes, as circulated.



## ITEM 2 TITLE, SCOPE AND COMPOSITION OF PCD 03

2.1 The Committee **NOTED** item 2.1 of the agenda.

2.2 (a) The Committee **DELIBERATED** on the request received from PCD 01 for inclusion of “e-fuels” in the scope of PCD 03. Chairperson stated that an unambiguous definition of e-fuels is needed if this category of fuels is to be incorporated in scope. Dr. Thallada Bhaskar informed that . The Committee **RECOMMENDED** to revise the scope of PCD 03 as given below and **DIRECTED** PCD 03:1 to work on definition of e-fuel and include the definition in relevant terminology standard under PCD 03:

**SCOPE** – “To formulate Indian Standards for terminology; petroleum, petroleum products, biofuels (liquid and gas), fuels and **e-fuels** produced through synthesis route, specification for natural gas, hydrogen and other renewable fuels, diesel exhaust fluids and codes of practice for storage, handling, transport and application.”

b) The Committee **NOTED** item 2.2 (b) of the agenda about liaison with ISO Committees.

c) The Committee **NOTED** item 2.2 (c) of the agenda about liaison with BIS Technical Committees.

### 2.3 Composition of PCD 03

2.3.1 The Committee **NOTED** item 2.3.1 and 2.3.2 about the composition of PCD 03 and outcome of last review of composition.

2.3.2 The Committee **NOTED** the co-option requests received as given in item 2.3.3 of agenda and **RECOMMENDED** that the panel for review of composition will meet and take up the requests for decision. The panel was re-structured in view of changes in members and the new panel is as given below:

- a) Dr Harender Singh Bisht, Chairperson PCD 03 – Convenor;
- b) Dr Y.P. Rao, Convenor, PCD3:1;
- c) Shri V Nanda Kumar, Convenor, PCD3:2
- d) Dr M.O. Garg, Convenor, PCD3:5

## ITEM 3 R&D PROJECTS TO SUPPORT STANDARDIZATION

3.1 The Committee **NOTED** items 3.1 and 3.2 of the agenda.

## ITEM 4 ACTIVITIES OF PCD 03

4.1 The Committee **NOTED** the program of work of PCD 03 as given in Annex II of the agenda.

4.2 Decision of Committee on recommendations of PCD 3:1 is given in **Annex II**.

4.3 Decision of Committee on recommendations of PCD 3:2 is given in **Annex III**.

4.4 Decision of Committee on recommendations of PCD 3:5 is given in **Annex IV**.

### 4.5 Revision/Reaffirmation of Standards Due for Review

Sl. No.	Indian Standard	Decision of Committee
1.	IS 13833: 2019	• The Committee <b>REAFFIRMED</b> and <b>ARCHIVED</b> the standard.



	<b>Microcrystalline Wax Derived from Petroleum — Specification</b>	
2.	<b>IS 4654: 2019 Paraffin Wax — Specification</b>	<ul style="list-style-type: none"> <li>The Committee <b>REAFFIRMED</b> and <b>ARCHIVED</b> the standard.</li> </ul>
3.	<b>IS 17075: 2019 Anhydrous methanol for use as a blending component in fuels - Specification</b>	<ul style="list-style-type: none"> <li>The Committee <b>DECIDED</b> to allot ARP to BIS officer for revision of these standards and <b>RECOMMENDED</b> that the officer to whom the standards are allotted may approach Ashok Leyland, ARAI, and SIAM for inputs as part of the ARP.</li> </ul>
4.	<b>IS 17076: 2019 M15 fuel - Admixture of anhydrous methanol and motor gasoline as fuel for spark ignited engines - Specification</b>	
5.	<b>IS 17081: 2019 Aviation turbine fuel (Kerosene Type, Jet A - 1) containing synthesized hydrocarbons - Specification</b>	<ul style="list-style-type: none"> <li>The Committee <b>REAFFIRMED</b> the standard and <b>DECIDED</b> to take up for amendment.</li> </ul>
6.	<b>IS 16731: 2019 / ISO 8217: 2017 Petroleum products - Fuels (Class F) - Specifications of marine fuels</b>	<ul style="list-style-type: none"> <li>The Committee <b>REAFFIRMED</b> the standard and <b>DECIDED</b> to take up for revision.</li> </ul>
7.	<b>IS 17314: 2019 Hydrogen Enriched Compressed Natural Gas ( HCNG ) for Automotive Purposes - Specification</b>	<ul style="list-style-type: none"> <li>The Committee <b>DECIDED</b> to allot ARP to BIS officer for revision of the standard and <b>RECOMMENDED</b> that the officer to whom the standard is allotted may visit IOCL R&amp;D as part of the ARP.</li> </ul>
8.	<b>IS/ISO/PAS 22263: 2019 Petroleum Products - Fuels ( Class F ) - Considerations for Fuel Suppliers and Users Regarding Marine Fuel Quality in View of the Implementation of</b>	<ul style="list-style-type: none"> <li>The Committee <b>REAFFIRMED</b> and <b>ARCHIVED</b> the standard.</li> </ul>



	<b>Maximum 0.50% Sulphur in 2020</b>	
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#### 4.6 New Subjects for Standardization

##### New Proposals Received

Sl. No.	New Subject	Decision of Committee
1.	<b>Ethanol Blended Automotive Diesel Fuel ED5</b>	<ul style="list-style-type: none"> <li>• Dr. Jhala informed that IOCL R&amp;D and refinery are working on development of new blends of ethanol-diesel fuels in line with guideline from Niti Aayog. Few critical parameters of the ED 5 fuel have been identified by IOCL. For new fuels, BIS standards are required and hence this proposal has been submitted.</li> <li>• Shri Ramaprabhu informed that though India is moving ahead towards biofuels, practical applicability of the fuel has to be examined before taking up for standardization. Joint testing between OMCs, OEMs, and testing agencies (ARAI, ICAT) for the proposed ethanol-diesel blend needs to be carried out and end application needs to be decided beforehand.</li> <li>• The Committee deliberated on the proposal and enquired whether this fuel has been put to use. Shri Ajay Arora (IOCL R&amp;D) informed that Karnataka State transport used 7 % ethanol-diesel blend in its buses in 2017-18. IOCL R&amp;D has submitted samples of ED5 to Ashok Leyland and Tata Motors. Shri Ajay Arora mentioned that simultaneously development of standard on the fuel should take place.</li> <li>• Convenor PCD 3:1 said that for amendment and incorporation of RON 95 in E10 gasoline there were concerns from OMCs with respect to ethanol availability, and on the other hand new ethanol-diesel blends are being proposed. Development of a new standard is a time and resource consuming activity; hence a detailed analysis of a proposal is needed before taking it up. With respect to the ED5 proposal, cost-benefit analysis, feasibility study, merit analysis, and report of comprehensive testing of the fuel in association with SIAM and testing agencies are required before taking a decision on acceptance.</li> <li>• Ashok Leyland and Tata Motors confirmed that they have received ED5 samples but informed that tests are under progress and no conclusion has been reached yet. Considering this Convenor PCD 3:1 recommended that this proposal should not be accepted at this stage.</li> <li>• Shri Ramaprabhu requested the Committee that due process should be followed before proposing a new fuel for automotive sector in the Committee for standardization – OMCs should consult SIAM and seek interest for participation in the study of a new fuel and based on technical, commercial, and</li> </ul>



		<p>environmental merits of the fuel established through such study, subject to be proposed to BIS for standardization.</p> <ul style="list-style-type: none"> <li>Based on the above discussions, the Committee <b>DECIDED</b> not to accept this proposal at present and requested the proposer to approach SIAM and testing agencies for comprehensive testing and provide test report, cost-benefit analysis, feasibility analysis, and merit analysis as supplements to the proposal. Thereafter, the Committee will consider the subject.</li> </ul>
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## ITEM 5 INTERNATIONAL ACTIVITY

### 5.1 P Membership and Participation

The Committee **REVIEWED** item 5.1 of the agenda and **DECIDED** as follows:

Sl. No.	ISO Technical Committee/Subcommittee/WG	Committee Decision
1.	ISO/TC 28 Petroleum and related products, fuels and lubricants from natural or synthetic sources	The Committee <b>NOTED</b> the registered committee members in ISO/TC 28 and <b>DIRECTED</b> BIS to remove the members who are no longer members of PCD 3, its SCs, and panels/WGs.
2.	ISO/TC 28/SC 4 Classifications and specifications	The Committee <b>NOTED</b> the registered committee members in ISO/TC 28/SC 4 and <b>DIRECTED</b> BIS to remove the members who are no longer members of PCD 3, its SCs, and panels/WGs.
3.	ISO/TC 28/SC 7 Liquid Biofuels	The Committee <b>NOTED</b> the registered committee members in ISO/TC 28/SC 7 and <b>DIRECTED</b> BIS to remove the members who are no longer members of PCD 3, its SCs, and panels/WGs.
4.	ISO/TC 28/SC 7/WG 4 Ethanol Test Methods	<ul style="list-style-type: none"> <li>The Committee <b>CONGRATULATED</b> Dr. Ajay Arora on achieving majority votes for ballot on Convenorship of the WG</li> <li>The Committee <b>RECOMMENDED</b> a call of experts in PCD 3 and PCD 3:1 for a period of 7 days for nomination of experts for the WG</li> <li>The Committee <b>DECIDED</b> to register Dr YS Jhala, IOCL, as an expert in the WG</li> </ul>
5.	ISO/TC 193 Natural gas	<ul style="list-style-type: none"> <li>The Committee <b>NOTED</b> that no nomination has been received from PCD 3:5 and <b>DIRECTED</b> BIS to approach GAIL, Adani Gas (as advised by PCDC) and ONGC seeking interest</li> </ul>
6.	ISO/TC 255 Biogas	<ul style="list-style-type: none"> <li>The Committee <b>APPROVED</b> the registration of Shri Debasis Sarma (Reliance Industries) as Committee</li> </ul>



		<p>member in ISO/TC 255 and as expert in WGs of ISO/TC 255</p> <ul style="list-style-type: none"> <li>The Committee <b>REQUESTED</b> IOCL to provide nominations of experts for ISO/TC 255 and its WGs</li> </ul>
7.	ISO/TC 255/WG 1 Terms, definitions and classification scheme for the production, conditioning and utilization of biogas	<ul style="list-style-type: none"> <li>The Committee <b>DIRECTED</b> BIS to coordinate with Dr. A R Shukla, President, Indian Biogas Association, to nominate a suitable candidate for Convenorship of ISO/TC 255/WG 1. The Committee decided that the nominated candidate may be approved by PCD 3 Chair and PCDC Chair in view of paucity of time (ballot ends on 29 Feb 2024).</li> </ul>

## 5.2 Applying for Liaison to ISO/TC 197 Hydrogen Technologies

The Committee **APPROVED** registration of the following committee members and experts for ISO/TC 197:

ISO/TC 197 "Hydrogen Technologies"	ISO/TC 197/WG 27 – "Hydrogen fuel quality"
Head PCD (Committee Member) Kreeti Das, Sc.C, PCD (Committee Member) Shri S R Udayan, Reliance Industries Ltd. (Committee Member)	Shri S R Udayan, Reliance Industries Ltd. (Expert) Kreeti Das, Sc.C, PCD (Document Monitor)

## 5.3 Meetings of ISO Committees

**5.4.1** The Committee **NOTED** the information about meeting of ISO/TC 28 from 23-27 September 2024 in New Delhi, India and **DIRECTED** BIS to conduct a briefing meeting for all members registered under ISO/TC 28 and its SCs and WGs, preferably by July 2024, for preparation of the meeting.

## ITEM 6 ANY OTHER BUSINESS

Convenor PCD 3:1 mentioned that whenever new work item proposals are received for new fuels under development phase (research fuels), it is difficult to accept such proposals in view of lack of supporting data or any similar international standard. As standard development process follows timelines (Priority I – 9 months, Priority II – 18 months, Priority III – 24 months), accepting such proposals would not make it possible to publish standard within prescribed timeframes.

Hence, he recommended that proposers of such subjects should first try to gather relevant data to support the proposal and engage relevant stakeholders. Provision of BIS R&D projects may be utilized for this purpose.

The Committee **AGREED** with the suggestions of Convenor PCD 3:1.

## ITEM 7 ANNUAL MEETING CALENDAR

The Committee **ACCEPTED** the annual meeting calendar of PCD 03 as proposed.



**ITEM 8 VOTE OF THANKS**

The meeting ended with a vote of thanks from BIS to Chairperson and all members for their participation and contribution.



**ANNEX I**  
**Meeting Attendance**  
**(Clause 0.3)**

**Committee Members:**

1. Dr. Harender Singh Bisht, Director, CSIR – IIP, Chairperson PCD 03
2. Shri Senthil Kumar G, Ashok Leyland Limited, Chennai
3. Shri Faustino V, Ashok Leyland Limited, Chennai
4. Shri R R K Kishore, Association of State Road Transport Undertakings, New Delhi
5. Shri Yogesh. R. Mahajan, Bajaj Auto Limited, Pune
6. Dr Anil Kumar Sinha, CSIR – IIP, Dehradun
7. Dr Thallada Bhasker, CSIR – IIP, Dehradun
8. Shri Shekar Kulkarni, Centre for High Technology, New Delhi
9. Ms. Anumita Roychowdhury, Centre for Science and Environment, New Delhi
10. Shri Rakesh Kumar, Directorate General of Civil Aviation, New Delhi
11. Shri Dharmendra Singh Yadav, Directorate General of Civil Aviation, New Delhi
12. Shri A. K. Kanaujia, Directorate General of Quality Assurance, Ministry of Defence, Kanpur
13. Shri Rakesh Sharma, Hero Motocorp Limited, New Delhi
14. Shri Santosh Dhaku Bhogale, Hindustan Petroleum Corporation Limited, Mumbai
15. Shri Shitanshu Pati Tripathi, Hindustan Petroleum Corporation Limited, Mumbai
16. Shri Rohit Kumar Gupta, Hindustan Petroleum Corporation Limited, Mumbai
17. Dr A. R. Shukla, Indian Biogas Association, Gurugram
18. Dr Ajay Kumar Arora, Indian Oil Corporation (R and D Centre), Faridabad
19. Shri R. K. Kaushik Singha, IOCL, New Delhi
20. Dr Y S Jhala, IOCL, New Delhi
21. Shri Manish Malhan, IOCL, New Delhi
22. Shri A. S. Krishnamoorthy, IOCL, New Delhi
23. Shri Ramaprabhu, Mahindra and Mahindra Limited, Mumbai
24. Shri V. Nanda Kumar, MRPL, Mangalore – Convenor PCD 3:2
25. Shri Yogeesh, MRPL, Mangalore
26. Shri Nishant Sarna, Maruti Udyog Limited, Gurugram
27. Shri Rajesh Manocha, Ministry of Petroleum and Natural Gas, New Delhi
28. Shri Pratik Shah, Nayara Energy Limited, Mumbai
29. Shri Milan Vasoya, Nayara Energy Limited, Mumbai
30. Shri Dinesh S R Reddy Kakuturi, Oil and Natural Gas Corporation Limited, New Delhi
31. Shri Balasubramanian K, Reliance Industries Limited, Mumbai
32. Shri Pramod mall, Reliance Industries Limited, Mumbai
33. Shri Prashant Kumar Banerjee, Society of Indian Automobile Manufacturers (SIAM), Delhi
34. Shri Manish Gopal, TVS Motor Company Limited, Hosur
35. Shri Sethuramalingam Tyagarajan, Tata Motors Limited, Pune
36. Shri Gowrishankar P. S., Tata Motors Limited, Pune
37. Dr Y. P. Rao, In personal capacity – Convenor PCD 3:2





**Invitee**


1. Dr Madhukar Garg, In personal capacity – Convenor PCD 3:5

**BIS Secretariat**

1. Smt. Meenal Passi, Sc. F & Head, PCD
2. Ms. Kreeti Das, Sc. C, PCD
3. Shri Hari Mohan Meena, Sc. C, PCD



**ANNEX II**  
**(Clause 4.2)**

	<b>भारतीय मानक ब्यूरो</b> <b>BUREAU OF INDIAN STANDARDS</b>	
	<b>(PETROLEUM, COAL &amp; RELATED PRODUCTS DEPARTMENT)</b>	
<b>MINUTES</b>		
<b>13 February 2024, Tuesday, 1400 - 1730 h</b>		
<b>Automotive, Aviation and Industrial Fuels Subcommittee, PCD 3:1</b>		<b>38<sup>th</sup> Meeting</b>
<b>Convenor: Dr Y.P. Rao, In personal Capacity</b>		<b>Member Secretary: Ms. Kreeti Das</b>

**Item 0 OPENING OF THE MEETING**

**0.1 Welcome address**

Smt. Meenal Passi, Head, PCD, welcomed all members to the 38th meeting of PCD 3:1 and thanked everyone for attending the meeting PCD 3:1. She said that those members who have not logged in BIS portal in 2023-2024 may please login because firstly, all documents (agenda, resolutions, minutes, P-drafts, WC-drafts) are uploaded on portal and members also have to provide comments through portal. She informed that a training session for BIS portal will be conducted by member secretary for benefit of all members.

**0.2 Opening remarks by the Convenor**

Dr. Y.P. Rao, Convenor, welcomed all members to the 38th meeting of PCD 3:1. He requested the subcommittee members to contribute positively towards meeting and keep discussions brief to complete all agenda items and emphasized that members should focus on end consumer interest during the deliberations.

**0.3 Attendance of the meeting is given in Annex I.**

**Item 1 TITLE, SCOPE AND COMPOSITION OF PCD 03:1**

**1.1** The Subcommittee **NOTED** the title, scope, and composition of Automotive, Aviation and Industrial Fuels Subcommittee, PCD 3:1 as given in Annex I of agenda.

**1.2 Panels and Working Groups under PCD 3:1**




The Subcommittee **NOTED** the panels and working groups under PCD 3:1.

**Item 2 ACTIVITIES OF AUTOMOTIVE, AVIATION AND INDUSTRIAL FUELS SUBCOMMITTEE, PCD 3:1**


**2.1** The Subcommittee **NOTED** the list of Indian Standards published under PCD 3:1 as given in Annex II of agenda.



## 2.2 Draft Standards/Amendments for Finalization

Sl. No.	Indian Standard/Document Number	Recommendation of Subcommittee
i.	<p><b>PCD 03(24139) WC</b></p> <p><b>First Revision of IS 11489: 1985</b></p> <p><b>Specification for heavy petroleum stock (Hps)</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DELIBERATED</b> on the comments received on WC and decision on comments are attached:    Collated%20Comments_PCD%2003(2413)</li> <li>The Subcommittee <b>RECOMMENDED</b> to finalize the standard for printing after verification of the F-draft by Convenor PCD 3:1 and Chairperson PCD 3.</li> </ul> <p><b>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:1</b></p>
ii.	<p><b>PCD 03(22730)WC</b></p> <p><b>Fourth Revision of IS 1593 : 2018</b></p> <p><b>Fuel Oils - Specification</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DELIBERATED</b> on the comments received on WC document and decision on comments are attached:    Collated%20Comments_PCD%2003(2273)</li> <li>For comment related to sulphur content, the Subcommittee <b>RECOMMENDED</b> BIS to see the mentioned notification and accordingly put up for discussion in next meeting</li> </ul> <p><b>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:1</b></p>
iii.	<p><b>PCD 03 (19658)WC2</b></p> <p><b>Seventh Revision of IS 1460 : 2017</b></p> <p><b>Automotive Diesel Fuel – Specification</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DELIBERATED</b> on the comments received on 2<sup>nd</sup> WC and decision on comments are attached:    Collated%20Comments_PCD%2003(1965)</li> <li>OMCs have requested to reconsider marking clause, the matter needs to be referred to MoPNG for marking guidelines</li> <li>With respect to inclusion of winter grade table for diesel, the Subcommittee <b>RECOMMENDED</b> that the specifications provided by IOCL need further discussion, hence to be drafted as an amendment.</li> <li>The Subcommittee <b>RECOMMENDED</b> to finalize the current document without inclusion of the table for winter grade diesel.</li> <li>Draft amendment with winter grade table and revised marking clause to be circulated into WC for 1 month.</li> </ul> <p><b>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:1</b></p>



iv.	<p><b>PCD 03 (22875)WC</b></p> <p><b>Amendment – 2 to IS 17021 : 2018</b></p> <p><b>E 20 fuel - Admixture of anhydrous ethanol and gasoline - As fuel for spark ignited engine powered vehicles - Specification</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DELIBERATED</b> on the comments received on the document and decision on comments are attached:  Collated%20Comments_PCD%2003(2287)</li> <li>The Subcommittee <b>RECOMMENDED</b> to remove ASTM D5501 and for IS 1448 (Part 181) and ASTM D4815, a note to be given that pre-dilution of sample is required.</li> <li>Amendment to be finalized with above changes.</li> <li>Further, the Subcommittee <b>RECOMMENDED</b>, the test method Working group to take up study on ASTM D5501 and recommend to Subcommittee.</li> <li>As representatives from Mahindra and Ultra Plus Lubricants brought to the attention of the committee that test kits are available for testing of ethanol in gasoline through very simple and accurate method, the Subcommittee <b>REQUESTED</b> test method Working Group to call the representatives from Mahindra and Ultra Plus Lubricants to demonstrate test kit and provide feedback to PCD 3:1.</li> </ul> <p><b>COMMITTEE DECISION: The Committee <i>ENDORSED</i> the recommendation of PCD 3:1</b></p>
v.	<p><b>PCD3(17838)P</b></p> <p><b>Automotive fuels — Paraffinic diesel fuel from synthesis or hydrotreatment — Specification</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>NOTED</b> the minutes of panel meeting and <b>AGREED</b> with publication of the document, aligned with EN 15940, as a provisional standard for a period of 2 years.</li> <li>In that duration, panel to coordinate the validation study of paraffinic diesel involving IIP, OMCs, ICAT, ARAI, and OEMs.</li> </ul> <p><b>COMMITTEE DECISION: The Committee <i>ENDORSED</i> the recommendation of PCD 3:1</b></p>


### 2.3 Draft Standards/Amendments for Approval for Wide Circulation

Sl. No.	Indian Standard/Document Number	Recommendation of Subcommittee
1.	<p><b>PCD 03 (23286)</b></p> <p><b>Amendment – 5 to IS 2796 : 2017</b></p> <p><b>Motor gasoline - Specification</b></p>	<ul style="list-style-type: none"> <li>The Subcommittee <b>REVIEWED</b> the draft amendment attached with agenda and <b>DELIBERATED</b> that having two grades regular and premium with no apparent distinction between these grades except RON (which is anyways being increased to 95), is confusing to consumers. Hence, there should be only two grades – RON 91 and RON 95 for unblended or blended gasoline.</li> <li>It was also <b>DELIBERATED</b> that even though MoPNG has directed BIS to retain RON 91 for E10 EBMG considering constraint of sustainable availability of ethanol across the</li> </ul>



		<p>country, provision of RON 91 for E0/E5 is already available in IS 2796. Hence, RON 91 grade should not be retained for E10.</p> <ul style="list-style-type: none"> <li>• Convenor, PCD 3:1, referred the matter to PCD 3 to take a decision, with due consideration to view points as mentioned below:</li> <li>• <b>OMCs:</b> OMCs stated that ethanol production in the country is not stabilized yet, there may be situations of ethanol shortage and difficulty of ethanol transportation. Hence, both RON 91 and RON 95 grade for E10 EBMG should be retained in IS 2796. They also stated that the terminology “regular” and “premium” should be retained as they are marketing premium fuel separately.</li> <li>• <b>MoPNG:</b> Shri Rajesh Manocha representing MoPNG agreed for removal of “regular” and “premium” categorization of the fuel. However, he stated that both RON 91 and RON 95 should be retained for E10 EBMG as directed by MoPNG in its OM dated 14 December 2023.</li> <li>• <b>SIAM:</b> E20 rollout is to be done by 2025, for which OEMs have started upgrading automobile engines to run on higher RON fuel. 2 crore E20 compatible vehicles have already been manufactured and more are in pipeline. OEMs cannot move ahead with engine upgradation if lower RON fuel is dispensed. Report on “Feasibility of Production and Marketing of Ethanol Blended Gasoline – RON 95” already found that refineries are capable of supplying base gasoline with minimum 91.5 RON, which blended with 9-11% ethanol can produce E10 EBMG with RON 95. Hence, there is no need to retain E10 EBMG with RON 91 in IS 2796. For instances of ethanol shortage, provision of RON 91 for E0/E5 is already available in IS 2796. Retaining RON 91 for E10 EBMG will severely impact OEMs’ efforts for engine upgradation. SIAM also supported removal of “regular” and “premium” categories to avoid confusion.</li> <li>• <b>Convenor:</b> Convenor supported the removal of categories “regular” and “premium” from IS 2796 because there is no distinction between these two categories in IS 2796. The only distinction is RON 91 and RON 95, and hence categorization should be done on the basis of RON. He was also of the opinion that considering constraint of sustainable availability of ethanol across the country, provision of RON 91 for E0/E5 is already available in IS 2796. Hence, RON 91 grade should not be retained for E10 as it leads to confusion since one grade of E10 has 95 RON and other grade of E10 has 91 RON and it is not logical. OEMs are end consumers of fuel and end consumer interest should be kept in mind while drafting standards.</li> <li>• Additionally, IOCL recommended to include slider scale including RON 89 in amendment, to which BIS informed that RON 89 is outside the scope of the standard because IS 2796</li> </ul>
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		<p>covers up to E10 only. Hence, only RON 91.5 can be mentioned. RON of 91.4, 90.1, and 89 for E12, E15, and E20, respectively have to be incorporated in the respective standards IS 17586 and 17021.</p> <ul style="list-style-type: none"> <li>• After carefully considering the views of different stakeholders, Convenor, PCD 3:1, modified the draft amendment prepared by BIS, which is attached, and <b>REQUESTED</b> PCD 03 to take final call on the matter related to removal of categories “regular” and “premium” and retention/removal of RON 91 for E10 EBMG considering that RON 91 for E0/E5 is already retained to meet the market requirements in case of non-availability of ethanol.</li> </ul> <p> Draft%20Amendme nt%205%20to%20IS'</p> <p><b>COMMITTEE DECISION:</b> Chair PCD 03 took note of the views of OMCs, MoPNG, SIAM, and Convenor PCD 03:1 as given above and also the OM received from MoPNG. Convenor PCD 3:1 also briefed the Chair on the background of the proposed amendment. Govt of India’s vision is to rollout E20 by 2025, however E20 is reported to have 3-5% loss in fuel economy. To reduce this loss, automobile OEMs are redesigning the engines to increase compression ratio. These new engines cannot operate on RON 91 fuel. Hence, OEMs require increase of RON of E10 fuel to RON 95 to be able to make more E20 compatible vehicles.</p> <p>A committee was formed by MoPNG under Dr. S S V Ramakumar to study the feasibility of supplying RON 95 ethanol-gasoline fuel. The report on “Feasibility of Production and Marketing of Ethanol Blended Gasoline – RON 95” found that refineries are capable of supplying base gasoline with minimum 91.5 RON, which blended with 9-11% ethanol can produce E10 EBMG with RON 95.</p> <p>Hence, in the draft amendment BIS proposed that only RON 95 be retained for E10 EBMG and a letter was sent to Secretary MoPNG by DG, BIS inviting suggestions. MoPNG sent an OM on 14 Dec 2023 stating that both RON 91 and RON 95 should be retained in view of availability of ethanol in the country.</p> <p>After listening to the background of the subject, Chair PCD 03 invited members to give their inputs. OMCs, MoPNG, and SIAM reiterated their points as explained above.</p> <p>Chair PCD 03 supported the views expressed by OEMs and Convenor PCD 3:1, that for situations of ethanol shortage, provision of RON 91 for E0/E5 is already available in the standard. He enquired from OMCs that if both RON 91 and RON 95 grades are dispensed for E10, how will they make differentiation in retail outlets and ensure that a consumer with</p>
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		<p>E20 compatible vehicle does not end up filling the RON 91 grade in his automobile, to which there was no satisfactory reply. Chair PCD 03 stated that having two grades RON 91 and RON 95 is not in the benefit of the country which is moving towards E20, nor it is in the interest of consumers who will eventually make a shift to E20 compatible engines.</p> <p>BIS also informed the Committee that Head, PCD, had a call with JS, MoPNG, and the matter of removal of categories “regular” and “premium” was discussed and it was agreed. OMCs also confirmed their agreement for the same.</p> <p>Based on discussions in PCD 3:1 meeting and detailed deliberations in this meeting, the Committee <b>DECIDED</b> to remove RON 91 grade for E10 EBMG and to remove categorization “regular” and “premium”; the Committee <b>APPROVED</b> the two-tier certification clause added in draft amendment, and directed BIS to issue the draft amendment into WC for 1 month. The Committee, while noting objection from OMCs and MoPNG representatives, also <b>DIRECTED</b> BIS to reply to MoPNG OM dated 14 Dec 2023 explaining justification for removal of RON 91 grade for E10 EBMG.</p>
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#### 2.4 New Subjects for Standardization

Sl. No.	New Subject	Recommendation of Subcommittee
1.	<b>Methanol/Ethanol Fuel for Cooking / Heating</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>NOTED</b> the minutes of the panel meeting.</li> </ul> <p><b>COMMITTEE DECISION: The Committee NOTED.</b></p>
2.	<b>Pyrolysis Oil</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>NOTED</b> that Terms of Reference (ToR) for R&amp;D project on the subject is submitted to SCMD.</li> </ul> <p><b>COMMITTEE DECISION: The Committee NOTED.</b></p>

#### Item 3 VOTE OF THANKS

Due to shortage of time, other agenda items could not be discussed in this meeting and Convenor **DIRECTED** BIS to call full day meetings to complete all agenda items in the future.

Convenor thanked all members for participating and contributing in the meeting.

#### ANNEX I Meeting Attendance – PCD 3:1



**(Clause 0.3)**

**Subcommittee Members:**


1. Dr. Y P Rao, In Personal capacity (Convenor)
2. Shri Faustino V, [Ashok Leyland Limited, Chennai](#)
3. Shri M I Jamadar, Automotive Research Association of India, Pune
4. Shri Debjyoti Bandyopadhyay, Automotive Research Association of India, Pune
5. Shri Yogesh. R. Mahajan, Bajaj Auto Limited, Pune
6. Shri Ramesh Goykar, Bajaj Auto Limited, Pune
7. Shri Adalazhagan K, Bharat Oman Refineries Limited, Bina
8. Shri C Shanmuganathan, Bharat Petroleum Corporation Limited, Mumbai
9. Shri Mella Lokesh Kumar, Bharat Petroleum Corporation Limited, Mumbai
10. Shri Saleem A. Farooqui, CSIR - Indian Institute of Petroleum, Dehradun
11. Shri Shekar Kulkarni, Centre for High Technology, New Delhi
12. Shri H. Ramakrishnan, Chennai Petroleum Corporation Limited, Chennai
13. Shri A K Kanaujia, Directorate General Quality Assurance, Ministry of Defence, Kanpur
14. Shri Dharmendra Singh Yadav, Directorate General of Civil Aviation, New Delhi
15. Shri Jencen Mathai Arivannoor, Gulf Oil Lubricants India Limited, Mumbai
16. Shri K. Raghava Krishna, HP Green Research and Development Centre, Bengaluru
17. Shri Rakesh Sharma, Hero Motocorp Limited, New Delhi
18. Shri. Elecheran Kumar, Hindustan Petroleum Corporation Limited, Mumbai
19. Shri Santosh Dhaku Bhogale, Hindustan Petroleum Corporation Limited, Mumbai
20. Shri Shitanshu Pati Tripathi, Hindustan Petroleum Corporation Limited, Mumbai
21. Shri Rohit Kumar Gupta, Hindustan Petroleum Corporation Limited, Mumbai
22. Shri Manish Malhan, Indian Oil Corporation (MKTG), Mumbai
23. Shri A. S. Krishnamoorthy, Indian Oil Corporation (MKTG), Mumbai
24. Dr. Ajay Kumar Arora, Indian Oil Corporation (R and D Centre), Faridabad
25. Shrimati Soma Chattopadhyaya, Indian Oil Corporation Limited - Refineries and Pipelines Division, New Delhi
26. Dr. Y S Jhala, Indian Oil Corporation Limited - Refineries and Pipelines Division, New Delhi
27. Shri Adalazhagan K, Kochi - BPCL Refineries Limited, Kochi
28. Shri Anand Redkar, Lubrizol India Limited, Mumbai
29. Shri R. Ramaprabhu, Mahindra and Mahindra Limited, Mumbai
30. Shri Yogeasha, Mangalore Refinery and Petro Chemical Limited, Mangalore
31. Shrimati Jyothi Prashanth, Mangalore Refinery and Petro Chemical Limited, Mangalore
32. Shri V.Nanda Kumar, Mangalore Refinery and Petro Chemical Limited, Mangalore
33. Shri Nishant Sarna, Maruti Udyog Limited, Gurugram
34. Shri Rajesh Manocha, Ministry of Petroleum and Natural Gas, New Delhi
35. Shri Pratik Shah, Nayara Energy Limited, Mumbai
36. Shri Milan Vasoya, Nayara Energy Limited, Mumbai
37. Shri Bimlesh Kumar Gupta, Numaligarh Refinery Limited, Golaghat
38. Shri Dinesh S R Reddy Kakuturi, Oil and Natural Gas Corporation Limited, New Delhi
39. Shri Shri Ravishankar V Desai, Reliance BP Mobility Limited, New Delhi
40. Shri Balasubramanian K, Reliance India Limited, Mumbai
41. Shri Sanjai Tiwari, Reliance Industries Limited, Mumbai
42. Shri Shrikant Shingte, Reliance Industries Limited, Mumbai





43. Shri Gnanasekaran K, Renault Nissan Technology and Business Centre India Private Limited, Chennai
44. Shri Prashant Kumar Banerjee, Society of Indian Automobile Manufacturers (SIAM), Delhi
45. Dr. Sandeep Garg, Society of Indian Automobile Manufacturers (SIAM), Delhi
46. Shri M S Anand Kumar, TVS Motor Company Limited, Hosur
47. Shri Siddesh N. Savant, Ultra Plus Lubes Private Limited, Panvel
48. Shri N.C. Sekharan, Ultra Plus Lubes Private Limited, Panvel
49. Shri Mathew Abraham, IN PERSONAL CAPACITY

**ANNEX III  
(Clause 4.3)**

	<p><b>भारतीय मानक ब्यूरो</b> <b>BUREAU OF INDIAN STANDARDS</b></p>
<p><b>(PETROLEUM, COAL &amp; RELATED PRODUCTS DEPARTMENT)</b></p>	
<p><b>MINUTES</b></p>	
<p><b>24 January 2024, Wednesday, 1500 - 1630 h</b></p>	
<p><b>Aromatic Hydrocarbons, Petroleum Solvents and Preservatives Subcommittee, PCD 3:2</b></p>	<p><b>22<sup>nd</sup> Meeting</b></p>
<p><b>Convenor: Shri V Nandakumar, MRPL</b></p>	<p><b>Member Secretary: Ms. Kreeti Das</b></p>

**Item 0 OPENING OF THE MEETING**

**0.1 Welcome address**

On behalf of BIS, Ms. Kreeti Das, Sc.C, PCD welcomed all members to the 22<sup>nd</sup> meeting of PCD 03:2.

**0.2 Opening remarks by the Convenor**

Convenor welcomed all members to the meeting and reiterated the earlier action points that will be taken up. He requested members to contribute actively in the discussion of comments.

**0.3 Attendance of the meeting is given in Annex I.**

**Item 1 TITLE, SCOPE AND COMPOSITION OF PCD 03:2**

**1.1** The Subcommittee **NOTED** the title and scope of the Subcommittee as given in Annex I of the agenda.

**1.2** The Subcommittee **REVIEWED** the composition of the Subcommittee as given in Annex I of agenda and **RECOMMENDED** the following:

- a) Seek updated nomination from Centre for High Technology urgently as this is an important organization and some nominated members have superannuated.
- b) Withdraw the organizations – Goa Carbon Limited, Indian Paints Association, FIPI, and The Solvent Extractors' Association of India – due to continued non-participation and no response to letters sent from BIS




**COMMITTEE DECISION:** The Committee **DECIDED** to retain Goa Carbon as nominations have been received from them; Committee **DECIDED** to retain the The Solvent Extractors' Association of India, being an important organization for this subject; Committee **DECIDED** to retain FIPI as nominations have been received and **DECIDED** to withdraw Indian Paints Association.

**Item 2 ACTIVITIES OF AROMATIC HYDROCARBONS, PETROLEUM SOLVENTS AND PRESERVATIVES SUBCOMMITTEE, PCD 3:2**

**2.1** The Subcommittee **NOTED** the list of Indian Standards published under PCD 3:2 as given in Annex II of agenda.

**2.2 Revision/Amendment of Indian Standards**

Sl. No.	Indian Standard	Recommendation of Subcommittee
vi.	PCD 03(19709)WC2  <b>Third revision of IS 537 : 2011 Toluene – Specification</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DELIBERATED</b> on the comments received on 2<sup>nd</sup> WC and decision on comments are attached:  PCD%203_2%20decision%20on%20PCD%2003(19709)WC2</li> <li>As no major changes have been made to the document as a result of the comments received on 2<sup>nd</sup> WC, the Subcommittee <b>RECOMMENDED</b> to finalize the standard for printing after verification of the F-draft by Convenor PCD 3:2 and Chair PCD 3.</li> </ul> <p><b>COMMITTEE DECISION:</b> The Committee <b>ENDORSED</b> the recommendation of PCD 3:2</p>
vii.	IS 1745 : 2018  <b>Petroleum hydrocarbon solvents - Specification Third Revision</b>	<ul style="list-style-type: none"> <li>Dr. Jhala informed that the panel has met twice to discuss on factors that may be used as indicators to differentiate between the various fractions (MTO, PCK, SKO) of petroleum solvent and some ideas, like colour and aromatic content, have been suggested.</li> <li>Convenor remarked that the problem statement of differentiation between various fractions of petroleum solvent was brought to BIS by customs department to enable them to differentiate imports. As PCK is not imported and handled between OMCs, the panel needs to come up with factors that essentially differentiate MTO and SKO.</li> <li>Dr. Jhala noted the remarks of Convenor and confirmed that the panel will provide their observations by 10 Feb 2024.</li> </ul> <p><b>COMMITTEE DECISION:</b> Dr. Jhala (IOCL) informed that the panel has started getting data on 95% recover and aromatic content but data is differing between IOCL, BPCL, and HPCL. The Committee <b>DECIDED</b> to give an extension in timeline for the study to differentiate between the various fractions (MTO, PCK, SKO) of petroleum solvent, till end of March 2024, and <b>REQUESTED</b> Chair PCD 03 to check if IIP can contribute in the study.</p>



viii.	<b>IS 8502 : 2018</b>  <b>Petroleum coke - Specification Second Revision</b>	<ul style="list-style-type: none"> <li>The Subcommittee again <i>REQUESTED</i> Shri Venkatesh Krishnan and Shri Harshad Pandit from Hindalco and Dr. Y S Jhala, IOCL Refinery, to coordinate and provide the revised draft at the earliest possible.</li> <li>The experts assured that the revised draft will be provided by end of Feb 2024.</li> </ul> <p><b>COMMITTEE DECISION: The Committee <i>NOTED</i>.</b></p>
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### 2.3 New Standards under Development

Sl. No.	New Subject	Recommendation of Subcommittee
2.	<b>PCD 03 (19475)P</b> Ethane for use as feedstock for petrochemical - Specification	<ul style="list-style-type: none"> <li>The Subcommittee <i>NOTED</i> that the document is published as IS 18465 : 2023.</li> </ul> <p><b>COMMITTEE DECISION: The Committee <i>NOTED</i>.</b></p>
3.	<b>Hexane, Industrial Grade – Specification</b>	<ul style="list-style-type: none"> <li>The Subcommittee thanked Shri Pramod Mall for the working document.</li> <li>The Subcommittee <i>RECOMMENDED</i> BIS to circulate the document as P-draft for a period of 30 days and <i>REQUESTED</i> all members to go through the document thoroughly and provide comments.</li> </ul> <p><b>COMMITTEE DECISION: The Committee <i>ENDORSED</i> the recommendation of PCD 3:2</b></p>

### 2.4 Comments on Published Indian Standards

Sl. No.	New Subject	Recommendation of Subcommittee
1.	<b>IS 534 : 2021</b>  <b>Benzene - Specification</b>	<ul style="list-style-type: none"> <li>The Subcommittee <i>NOTED</i> that the revised draft standard is under WC circulation for a period of 60 days, ending on 10 February 2024.</li> <li>The Subcommittee also <i>NOTED</i> that BIS has sent letters to other manufacturers of benzene to seek inputs on the recommendation from Reliance Industries to remove “Type B” benzene.</li> <li>Dr. Jhala, IOCL Refinery, stated his viewpoint that “Type B” benzene should be retained in the standard because the difference between Type A and Type B is minimal and during production it provides more flexibility to correct for operational errors if two grades are available.</li> <li>Response from other manufacturers is awaited.</li> <li>BIS informed that guidance from Subcommittee is needed regarding user industries of benzene. Shri Pramod Mall, Reliance, informed that he will provide a list of consumers of benzene from their marketing department.</li> <li>In the meantime, the Subcommittee <i>RECOMMENDED</i> BIS to approach paint, specialty chemicals, and phenol manufacturers.</li> </ul>



		<p><b>COMMITTEE DECISION:</b> The Committee <b>ENDORSED</b> the recommendation of PCD 3:2 to circulate the document on industrial grade hexane, provided by Shri Pramod Mall, as P-draft for a period of 30 days. The Committee also <b>DIRECTED</b> BIS to take inputs from user industries for proposal from Reliance to remove Type B.</p>
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### Item 3 VOTE OF THANKS

As there were no other agenda points for discussion, the meeting ended with a vote of thanks from Convenor to all members of the Subcommittee.


### ANNEX I Meeting Attendance - PCD 3:2 (Clause 1.3)

#### Subcommittee Members:

1. Shri V Nandakumar, Mangalore Refinery and Petro Chemical Limited, Mangalore (Convenor)
2. Dr. Sagar Janampelli, Bharat Petroleum Corporation Limited, Mumbai
3. Dr. Sanat Kumar, CSIR - Indian Institute of Petroleum, Dehradun
4. Shri Prasenjit Ghosh, CSIR - Indian Institute of Petroleum, Dehradun
5. Shri H. Ramakrishnan, Chennai Petroleum Corporation Limited, Chennai
6. Shri Krishnan Venkatesh, Hindalco Industries Limited, Mumbai
7. Shri Harshad Kumar Pandit, Hindalco Industries Limited, Mumbai
8. Shri Santosh Dhaku Bhogale, Hindustan Petroleum Corporation Limited, Mumbai
9. Shri Shitanshu Pati Tripathi, Hindustan Petroleum Corporation Limited, Mumbai
10. Dr. Ajay Kumar Arora, Indian Oil Corporation (R and D Centre), Faridabad
11. Dr. Y.S. Jhala, Indian Oil Corporation – Refineries and Pipelines Division, New Delhi
12. Shri Manish Malhan, Indian Oil Corporation Limited - Marketing, Mumbai
13. Shri A. S. Krishnamoorthy, Indian Oil Corporation Limited - Marketing, Mumbai
14. Dr. P.M.S Reddy, Indian Oil Corporation – Refineries and Pipelines Division, New Delhi
15. Smt. Jyothi Prashant, Mangalore Refinery and Petro Chemical Limited, Mangalore
16. Shri Sachidananda Jena, National Aluminium Company Limited, Bhubaneswar
17. Shri Taruna Kumar, National Aluminium Company Limited, Bhubaneswar
18. Shri Milan Vasoya, Nayara Energy Limited, Mumbai
19. Shri Dinesh S R Reddy, Oil and Natural Gas Corporation Limited, New Delhi
20. Shri. Vasant Warke, Reliance Industries Limited, Mumbai
21. Shri Pramod Mall, Reliance Industries Limited, Mumbai
22. Smt. Leena D Chaudhari, Reliance Industries Limited, Mumbai



**ANNEX IV  
(Clause 4.4)**

	<b>भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS</b>
	<b>(PETROLEUM, COAL &amp; RELATED PRODUCTS DEPARTMENT)</b>
<b>MINUTES</b>	
<b>19 January 2024, Friday, 1430 - 1600 h</b>	
<b>Gaseous Fuels Subcommittee, PCD 3:5</b>	<b>30<sup>th</sup> Meeting</b>
<b>Convenor: Dr. M O Garg, In personal capacity (Former Director CSIR-IIP)</b>	<b>Member Secretary: Ms. Kreeti Das</b>

**Item 1 OPENING OF THE MEETING**

**1.1 Welcome address**

Ms. Kreeti Das, member secretary, PCD 3, welcomed Convenor and all members to the 30<sup>th</sup> meeting of PCD 03:5 and thanked everyone for attending.

**1.2 Opening remarks by the Convenor**

Dr. M O Garg, Convenor, welcomed all members to the 30<sup>th</sup> meeting of PCD 03:5.

**1.3 Attendance of the meeting is given at Annex I.**

**Item 2 TITLE, SCOPE AND COMPOSITION OF PCD 03:5**

**2.1** The Subcommittee **NOTED** the title and scope of PCD 03:5 as given in Annex I of the agenda.

**2.2** The Subcommittee **REVIEWED** the composition of PCD 03:5 as given in Annex I of the agenda. As the attendance is being monitored based on 50% attendance, the Subcommittee **RECOMMENDED** the following:

- It was noted that ARAI, BPCL, CHT, and FIPI attended this meeting.
- Letters for updating nominations have been sent to 7 organizations
- Out of these 7 organizations, if no update in nominations are received from EIL, IFFCO, IGL, and OIL, within a month, they may be withdrawn due to non-participation and no response.
- IOCL R&D and CHT were once again requested to provide updated nominations.

**COMMITTEE DECISION: The Committee **ENDORSED** the recommendation of PCD 3:5**

**Item 3 ACTIVITIES OF GASEOUS FUELS SUBCOMMITTEE, PCD 3:5**


**3.1** The Subcommittee **NOTED** the list of standards published under PCD 03:5 as given in Annex II of the agenda.



### 3.2 Draft Standards/Amendments for Finalization

Sl. No.	Indian Standard	Recommendation of Subcommittee
i.	<b>IS 15127 : 2002/ISO 13686 : 1998</b> <b>Natural gas — Quality designation</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>NOTED</b> that ISO 13686 : 2013 has been adopted and sent for printing.</li> </ul> <p><b>COMMITTEE DECISION: The Committee NOTED.</b></p>

### 3.3 Draft Standards/Amendments for Approval for Wide Circulation

Sl. No.	Document Number	Recommendation of Subcommittee
i.	<b>PCD 03 (23073)WC</b> <b>20 percent Dimethyl ether (DME) blended liquefied petroleum gas (LPG) – Specification</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>DISCUSSED</b> the comments received on WC document and <b>RECOMMENDED</b> as given in attached document:                        Collated%20Comments_PCD%2003(2307</li> <li>The Subcommittee <b>RECOMMENDED</b> to finalize the document for printing as the comments on WC document were resolved with consensus.</li> </ul> <p><b>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:5 and DIRECTED BIS to communicate the publication of this standard to Niti Aayog.</b></p>

### 3.4 Comments on Indian Standards

Sl. No.	Indian Standard	Recommendation of Subcommittee
2.	<b>IS 16087 : 2016</b> <b>Biogas (Biomethane) — Specification (first revision)</b>	<ul style="list-style-type: none"> <li>The Subcommittee <b>REVIEWED</b> the draft amendment prepared by BIS and <b>AGREED</b> for the value of 95% for methane and 5% for CO<sub>2</sub> + N<sub>2</sub> + O<sub>2</sub></li> <li>The recommended change for total sulphur content to match with piped natural gas distribution network specification of PNGRB was also agreed upon.</li> <li>However, there were concerns from Reliance regarding the proposed value of max 0.2% for oxygen and GAIL representative mentioned that he will confirm from his organization the justification for proposed oxygen value.</li> </ul>



		<ul style="list-style-type: none"> <li>Hence, Subcommittee <i>RECOMMENDED</i> to retain the value of max. 0.5% for oxygen.</li> <li>The Subcommittee <i>RECOMMENDED</i> BIS to circulate the amendment into WC for 2 months as per discussion in Subcommittee.</li> <li>The Subcommittee also <i>RECOMMENDED</i> BIS to send the WC specifically to CBG manufacturers, ARAI, and Shri Shantanu Gupta at IOCL for comments.</li> </ul> <p><b>COMMITTEE DECISION:</b> The Committee <i>ENDORSED</i> the recommendation of PCD 3:5</p>
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### 3.5 New Subjects

Sl. No.	New Subject	Recommendation of Subcommittee
1.	<b>Piped Natural Gas (PNG)</b>	<ul style="list-style-type: none"> <li>The Subcommittee <i>RECOMMENDED</i> BIS to co-opt PNGRB in the Subcommittee as PNGRB has developed gas quality specification for city gas distribution (CGD) network.</li> <li>Thereafter, the Subcommittee <i>RECOMMENDED</i> BIS to develop a preliminary working draft taking inputs from PNGRB on quality of piped natural gas for CGD network.</li> <li>The preliminary working draft to be put up to the Subcommittee for perusal.</li> </ul> <p><b>COMMITTEE DECISION:</b> The Committee <i>ENDORSED</i> the recommendation of PCD 3:5</p>

### Item 4 ANY OTHER BUSINESS

#### 4.1 NWIP on Biomethane Specification

The Subcommittee *RECOMMENDED* BIS to re-circulate the Form 4 to all members of the Subcommittee for a period of 7 days and *REQUESTED* all Subcommittee members to evaluate the form and provide comments, where necessary. If no comments are received, BIS may submit the proposal to ISO through the relevant task group of BIS, after approval from PCD 03.

If comments are received, BIS may update the form with approval of Subcommittee Convenor and submit to ISO through the relevant task group of BIS, after approval from PCD 03.

**COMMITTEE DECISION:** The Committee *ENDORSED* the recommendation of PCD 3:5



#### 4.2 Nomination of Experts in WGs under ISO/TC 193, ISO/TC 197, and ISO/TC 255

The Subcommittee *NOTED* item 4.2 of the agenda and *RECOMMENDED* the following:

- a) BIS to circulate request for nomination of experts once again for 7 days and all members are requested to consider nomination of suitable expert
- b) Nayara Energy to nominate a suitable expert as Shri Sabyasachi Kumar is no longer associated with the organization within 7 days
- c) IOCL R&D to nominate suitable experts within 7 days
- d) Reliance may consider registering Shri S R Udayan and Shri Debasis Sharma in the Subcommittee as their representative as they will be representing BIS in ISO/TC 197 and ISO/TC 255

**COMMITTEE DECISION:** The Committee *NOTED* that no nominations have been received for ISO/TC 193 and *DIRECTED* BIS to approach GAIL and ONGC, in addition to Adani gas (as suggested by PCDC) for seeking interest in PCD 3:5 and ISO work. For TC 197 and TC 255, the Committee *APPROVED* the nominations from Reliance.

#### 4.3 Query for Availability of Indian Standard on “Code of Practice for Biogas Purification/Upgradation”

The Subcommittee *NOTED* item 4.3 of the agenda and *RECOMMENDED* BIS to refer IS 9478 : 2023 “Design, Construction, Installation and Operation of Biogas (Biomethane) Plant - Code of Practice” to Shri Achint Rai, Anka Insights as the standard has clauses on purification/upgradation of biogas.

If there are still further queries, the same may be considered by the Subcommittee or referred to the appropriate committee in MED for consideration.

**COMMITTEE DECISION:** The Committee *NOTED*.

#### Item 5 VOTE OF THANKS

The meeting ended with a vote of thanks from the Convenor and BIS to all members.

#### Annex I (Item 1.3) Attendance – PCD 3:5

1. Dr. Madhukar Garg, In personal capacity (Convenor)
2. Shri Debjyoti Bandyopadhyay, Automotive Research Association of India, Pune
3. Shri M I Jamadar, Automotive Research Association of India, Pune
4. Dr. Janampelli Sagar, Bharat Petroleum Corporation Ltd, Mumbai
5. Shri Shekar Kulkarni, Centre for High Technology, New Delhi
6. Ms. Pankhuri Goyal, Federation of Indian Petroleum Industry, New Delhi
7. Shri Ajit Kumar Jha, GAIL (India) Limited, New Delhi
8. Shri Santosh Sadvelkar, Hindustan Petroleum Corporation Limited, Mumbai





9. Dr. A. R. Shukla, Indian Biogas Association, Gurugram
10. Shri S Bhar, Indian Oil Corporation Limited - Refineries and Pipelines Division, New Delhi
11. Dr. Y S Jhala, Indian Oil Corporation Limited - Refineries and Pipelines Division, New Delhi
12. Shri Pratik Shah, Nayara Energy Limited, Mumbai
13. Shri Milan Vasoya, Nayara Energy Limited, Mumbai
14. Shri Dinesh S R Reddy, Oil and Natural Gas Corporation Limited, New Delhi
15. Shri Balasubramanian K, Reliance India Limited, Mumbai
16. Shri Shrikant Shingte, Reliance India Limited, Mumbai