	भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS	
	(PETROLEUM, COAL & RELATED PRODUCTS DEPARTMENT)	
AGENDA		
24 July 2024 (Wednesday), 2:00 pm – 4:00 pm		
Gaseous Fuels Subcommittee, PCD 3:5		32nd Meeting
Convenor: Dr. M O Garg, In Personal Capacity		Member Secretary: Ms. Kreeti Das
Meeting Information		
Meeting mode: Virtual Meeting Link: https://bismanak.webex.com/bismanak/j.php?MTID=m3b5cbaf910a8bc9956716a308ddb3ada Meeting number: 2517 295 6513 Password: Pcd3_5#32		

Item 1 OPENING OF THE MEETING

1.1 Welcome address

1.2 Opening remarks by the Convenor

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

2.1 The title, scope and composition of Gaseous Fuels Subcommittee, PCD3:5 is given in **Annex I**.

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

3.1 The list of Indian Standards published under PCD 3:5 is given at **Annex II**.

3.2 PCD 1 - Methods of Sampling and Test for Petroleum and Related Products of Natural or Synthetic Origin (excluding bitumen) Sectional Committee - has published IS 15319 : 2020/ISO 13734 : 2013 "Natural Gas – Organic Components used as Odorants – Requirements and Test Methods".


This standard specifies requirements and test methods for organic compounds suitable for odorization of natural gas and natural gas substitutes for public gas supply. As it is a product specification and in ISO, this subject falls under ISO/TC 193/WG 5, both of which fall under the scope of PCD 3, it is proposed that IS 15319 : 2020 may be transferred to PCD 3 from PCD 1.

*The Subcommittee may **CONSIDER**.*

3.3 Draft Standards/Amendments for Finalization

Sl. No.	Indian Standard	Decision in Previous Meetings	Action Taken/Current Status
i.	PCD 03 (23073)WC 20 percent Dimethyl ether (DME) blended liquefied	<ul style="list-style-type: none"> The Subcommittee DISCUSSED and RESOLVED the comments received on the WC document. 	<ul style="list-style-type: none"> The document has been finalized and sent for printing. <i>The Subcommittee may NOTE.</i>




	petroleum gas (LPG) - Specification	<ul style="list-style-type: none"> The Subcommittee RECOMMENDED to finalize the document for printing as the comments on WC document were resolved with consensus. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:5 and DIRECTED BIS to communicate the publication of this standard to Niti Aayog.</p>	
ii.	PCD 03(25678)WC Second Revision of IS 16087 : 2016 Biogas (Biomethane) - Specification	<ul style="list-style-type: none"> The Subcommittee REVIEWED the draft amendment prepared by BIS and AGREED for the value of 95% for methane and 5% for CO₂ + N₂ + O₂ The recommended change for total sulphur content to match with piped natural gas distribution network specification of PNGRB was also agreed upon. 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. Hence, Subcommittee RECOMMENDED to retain the value of max. 0.5% for oxygen. The Subcommittee RECOMMENDED BIS to circulate the amendment into WC for 2 months as per discussion in Subcommittee. The Subcommittee also RECOMMENDED BIS to send the WC specifically to CBG manufacturers, ARAI, and Shri Shantanu Gupta at IOCL for comments. 	<ul style="list-style-type: none"> There were more changes required to the standard in terms of correction of typographical error and correction of referred test methods, hence an ad-hoc (31st) meeting of PCD 3:2 was called on 9 May 2024 and it was recommended that a revised draft of IS 16087 should be circulated into WC instead of an amendment. The revised draft of IS 16087 was issued into WC for a period of 60 days on 15 May 2024, ending on 14 July 2024. Comments received on the WC document attached:  Collated%20Comments%20-%20PCD%20 The Subcommittee may CONSIDER.

3.4 Comments on Indian Standards

Sl. No.	New Subject	Decision in Previous Meetings	Action Taken/Current Status
1.	IS 14861 : 2000 Liquefied petroleum gases (Lpg) for automotive	NA	<ul style="list-style-type: none"> Comment has been received on the standard from Shri Chandrakant Ghatol from IOCL



	purposes - Specification		 Collated%20Comments%20-%20IS%2014 <ul style="list-style-type: none"> • <i>The Subcommittee may CONSIDER.</i>
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3.5 New Subjects

Sl. No.	New Subject	Decision in Previous Meetings	Action Taken/Current Status
1.	Piped Natural Gas (PNG)	<ul style="list-style-type: none"> • The Subcommittee RECOMMENDED BIS to co-opt PNGRB in the Subcommittee as PNGRB has developed gas quality specification for city gas distribution (CGD) network. • Thereafter, the Subcommittee RECOMMENDED BIS to develop a preliminary working draft taking inputs from PNGRB on quality of piped natural gas for CGD network. • The preliminary working draft to be put up to the Subcommittee for perusal. <p>COMMITTEE DECISION: The Committee ENDORSED the recommendation of PCD 3:5</p>	<ul style="list-style-type: none"> • PNGRB has been co-opted in PCD 3:5. • PNGRB may be requested to provide characteristics and values for PNG for BIS to develop a working document. • <i>The Subcommittee may CONSIDER.</i>

Item 4 ANY OTHER BUSINESS

4.1 NWIP on Biomethane Specification

4.1.1 In 30th meeting, 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.

4.1.2 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 **AGREED with the recommendation of Subcommittee.**

4.1.3 The Form 4 was re-circulated for a period of 7 days, however no comments received. Hence, the attached Form 4 will be tabled for approval of PCD 03.



Form%2004%20Bio
gas%20-%20specific



*The Subcommittee may **CONSIDER**.*

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

4.2.1 In last (51st) meeting of PCD 3, the Committee had **DIRECTED** BIS to approach GAIL and ONGC for nomination of experts to ISO/TC 193 and its WGs. Communication was sent to GAIL and ONGC for nomination of experts.

4.2.2 Nominations of experts received from GAIL for ISO/TC 193 and its WGs as attached:



Letter from GAIL
reg. nomination of I

*The Subcommittee may **CONSIDER**.*

4.2.3 In last (51st) meeting of PCD 3, the Committee had **APPROVED** the registration of Shri Debasis Sarma as Committee Member and expert in ISO/TC 255 and its WGs. The Committee had also **REQUESTED** IOCL to provide nomination of experts for ISO/TC 255.

4.2.4 As no nomination of experts has been received from IOCL after reminders, Shri Debasis Sarma may registered as Committee Member and expert in ISO/TC 255 and its WGs.

*The Subcommittee may **NOTE**.*

Item 5 VOTE OF THANKS



ANNEX I
(Item 2.1)
TITLE, SCOPE AND COMPOSITION

GASEOUS FUELS SUBCOMMITTEE, PCD 3:5

a) Scope: To formulate Indian Standards for gaseous fuels including specification for natural gas and codes of practice for storage, handling, transport and application

b) LIAISON with

- ISO/TC 28 Petroleum Products and Lubricants, so far as it concerns its own scope
- ISO/TC 193 Natural gas
- ISO/TC 255 Biogas
- TED 2 Automotive Primemovers, Transmission Systems and Internal Combustion Engine Sectional Committee
- PCD 1:5 Test methods for Gaseous Fuels Subcommittee

c) Composition of PCD 03:5 is given below:

Convenor: Dr. M O Garg, In Personal Capacity

Sl. No.	Organization	Member Name	Member Email	Member Designation	Role	29 th	30 th	Total
1.	Automotive Research Association of India, Pune	Shri M A Bawase	bawase.aml@araiindia.com	General Manager	Principal Member	N	P	0/2
		M I Jamadar	jamadar.edl@araiindia.com	Dy. General Manager	Alternate Member			
		Debjyoti Bandyopadhyay	bandyopadhyay.pt@araiindia.com	Engineer	Young Professional			
2.	Bharat Petroleum Corporation Limited, Mumbai	Shri Siddhartha Mitra	siddhartham@bharatpetroleum.in		Alternate Member	N	P	0/2
		Shri Chako M Jose	chackomjose@bharatpetroleum.in		Principal Member			



3.	Biogas Forum India, New Delhi	Nomination Awaited	Letter for nomination of representatives sent to organization					
4.	CSIR – Indian Institute of Petroleum, Dehradun	Mr. Soumen Dasgupta	soumen@iip.res.in	Sr. Principal Scientist	Principal Member	Y	N	0/2
		Mr. Ankur Bordoloi	ankurb@iip.res.in	Principal Scientist	Alternate Member			
5.	Centre for High Technology, New Delhi	Shri Rajesh Agarwal	ed.cht@cht.gov.in	Executive Director	Principal Member	N	P	0/2
		Shekar Kulkarni	kulkarni@cht.gov.in	Additional Director	Alternate Member			
6.	Federation of Indian Petroleum Industry, New Delhi	Shri D. L. N. Sastri	dlnsastri@fipi.org.in	Director (Oil Refining & Marketing)	Principal Member	N	P	0/2
		Shri S K Sharma	dir_gas@fipi.org.in	Director (Gas)	Alternate Member			
		Shri Sujay Sarkar	sujay@fipi.org.in	Sr. Assistant Director (Gas)	Young Professional			
7.	GAIL (India) Limited, New Delhi	Ajit Kumar Jha	ak.jha@gail.co.in	GM (O&M-CMG)	Principal Member	P	P	2/2
		Nitin Kumar Mishra	nk.misra@gail.co.in	DGM (PD)	Alternate Member			
8.	Hindustan Petroleum Corporation Limited, Mumbai	S N Sheshaschala	shesha@hpcl.in	CGM R&D	Principal Member	N	P	1/2
		Sudhir Anamanamuri	sudhiranamanamuri@hpcl.in	Senior Manager - Technical	Alternate Member			
9.	Indian Biogas Association, Gurugram	Dr. A R Shukla	shuklaar@yahoo.com	President	Principal Member	N	P	1/2
10.	Indian Oil Corporation (R and D Centre), Faridabad	Dr M Subramanian	Subramanianm@indianoil.in		Principal Member	P	N	1/2
		Shri M. Sithanathan	sithanathanm@indianoil.in	GM (AR)	Alternate Member			



11.	Indian Oil Corporation Limited - Refineries and Pipelines Division, New Delhi	S Bhar	S_bhar@indianoil.in	Dy. General Manager (Technical Services)	Alternate Member	N	P	1/2
		Shri Ashish Kumar Jain	jainashish@indianoil.in	Dy General Manager (Technical)	Principal Member			
12.	Mangalore Refinery and Petro Chemical Limited, Mangalore	Shri R M Prakash	rmprakash@mrpl.co.in	Chief Manager, Quality Control	Principal Member	P	N	1/2
		Shri Subramanaya Prabhu	sprabhu@mrpl.co.in	Chief Manager, Production	Alternate Member			
13.	Nayara Energy Limited, Mumbai	Shri Pratik Shah	pratik.shah@nayaraenergy.com		Principal Member	P	P	2/2
		Shri Milan Vasoya	milan.vasoya@nayaraenergy.com		Alternate Member			
14.	Oil and Natural Gas Corporation Limited, New Delhi	Smt. Leena John	leena_john@ongc.co.in	General Manager	Alternate Member	N	P	1/2
		Shri Gour Mohan Dass	das_gm@ongc.co.in	Group General Manger-Chief Labs	Principal Member			
		Dr. Devkishan Chhimpa	chhimpa_devkishan@ongc.co.in	Chief Chemist	Alternate Member			
15.	Petroleum and Natural Gas Regulatory Board, New Delhi	Shri Gagan Agarwal	gaggarwal@pngrb.gov.in	Deputy Director (Tech-II)	Principal Member	-	-	-
		Shri Sumit Sarkar	sumit.sarkar@pngrb.gov.in	Assistant Adviser (Tech-II)	Alternate Member			
16.	Reliance India Limited, Mumbai	Shri Balasubramanian K	Balasubramanian.kuppuswamy@ril.com	Vice President	Principal Member	N	P	1/2
		Shri S R Udayan	sivathanu.udayan@ril.com	Vice President	Alternate Member			



		Shri Debasis Sarma	Debasis.Sharma@ril.com	Senior General Manager	Alternate Member			
17.	Society of Indian Automobile Manufacturers (SIAM), Delhi	Shri Prashant Kumar Banerjee	pkbanerjee@siam.in	Executive Director	Principal Member	P	N	1/2
		Dr. Sandeep Garg	sgarg@siam.in	Dy. Executive Director	Alternate Member			
18.	Tata Motors Limited, Pune	Shri D.S. Kulkarni	dskulkarni@tatamotors.com		Principal Member	P	N	1/2
		Shri Pallipalayam Gowrishankar	p.gowrishankar@tatamotors.com		Alternate Member			



ANNEX II
Programme of Work of Gaseous Fuels Subcommittee, PCD3:5

Standards Published

Sl. No.	IS No.	TITLE
1.	IS 4576 : 2021	Liquefied petroleum gases - Specification Third Revision
2.	IS 14861 : 2000	Liquefied petroleum gases Lpg for automotive purposes - Specification
3.	IS 15126 : 2002 ISO 13443	Natural gas - Standard reference conditions
4.	IS 15127 : 2002 ISO 13686	Natural gas - Quality designation
5.	IS 15320 (Part 1) : 2012 ISO 15403-1 : 2006	Natural gas - Natural gas for use as a compressed fuel for vehicles Part 1 designation of the quality First Revision
6.	IS 15958 : 2012	Compressed natural gas Cng for automotive purposes - Specification
7.	IS 16087 : 2016	Biogas Biomethane - Specification First Revision
8.	IS 16704 : 2018 ISO 16861	Petroleum products - Fuels Class F - Specifications of dimethyl ether Dme
9.	IS 16737 (Part 3) : 2018 ISO 8216-3 : 1987	Petroleum products - Fuels Class F - Classification Part 3 family I Liquefied Petroleum Gases
10.	IS 17314 : 2019	Hydrogen Enriched Compressed Natural Gas HCNG for Automotive Purposes Specification
11.	IS 18247 : 2023/ ISO 23306 : 2020	Liquefied natural gas as a fuel for marine applications - Specification
12.	IS 16061 (Part 1/Sub-Sec 2013) : 2021 ISO 14687:2019	Hydrogen Fuel Quality Product Specification