

32ND MEETING

HELD AT

RRL, JORHAT

ON

JANUARY 19 –20, 1995

NO.J-13012/1/92-Gen
Government of India
Ministry of Petroleum & Natural Gas

New Delhi, the 28th February, 1995

To

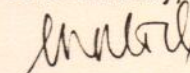
1. The Members of the Scientific Advisory Committee on Hydrocarbons of the Ministry of Petroleum & Natural Gas (By name).
2. Chief Executive of Oil Companies

Subject : **Meeting of the Scientific Advisory Committee on Hydrocarbons of the Ministry of Petroleum & Natural Gas - Circulation of the Minutes.**

Sirs,

I am directed to forward herewith a copy of the minutes of the meeting of the Scientific Advisory Committee on Hydrocarbons of this Ministry, held at Jorhat on 19-20 January, 1995 for information and necessary action.

Yours faithfully,


(K.C. Katoch)

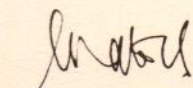
Under Secretary to the Govt. of India
Tel. No. 384376 (o)

Copy to :

Prof. M.M. Sharma, Professor of Chemical Engineering and Director of Chemical Technology, University of Bombay, Matunga, Bombay - 400 019

Copy also to:

1. JS(E)/JS(R)/JS(M)/Adv. (E)/OSD(R) - (Shri K.P.Shahi)/DS(CC)
2. ED, CHT, New Delhi
3. FA&CAO, OIDB, New Delhi
4. P.S. to Secretary (P&NG)


(K.C. Katoch)

Under Secretary to the Govt. of India

Minutes of the 32 nd meeting of Scientific Advisory Committee (SAC) of the Ministry of Petroleum and Natural Gas held at RRL, Jorhat on 19-20th Jan, 1995.

List of participants is attached.

Before the meeting started the members of the SAC and invitees were taken around the laboratories of RRL, Jorhat to familiarise them with the various facilities available.

Dr.A.C.Ghosh, Director, RRL, Jorhat extended a warm welcome to the Chairman of SAC and other distinguished members and invitees and apprised the participants of the various activities being carried out at RRL, Jorhat.

Prof. M.M.Sharma, Chairman, SAC thanked Dr.A.C.Ghosh and RRL, Jorhat for hosting the meeting and initiated the proceedings of the meeting.

A. As there were no comments from any members of the SAC, the Minutes of the 31st meeting were taken as approved as such.

B. The agenda items were taken up for discussions.

32.1 Proposal of RRL, Jorhat for 'Technology Development for the production of high quality micro-crystalline waxes using short path distillation technology'.

The summary of the report of the Sub-Committee on the above project was presented by RRL, Jorhat. The proposal was discussed in great detail and SAC made the following recommendations :-

- Based on the report of the Sub-Committee, SAC recommends the short path distillation route for the development of technology for production of micro-crystalline wax using a pilot plant of 20,000 tons per annum capacity at Digboi refinery with provision to hook on to the refinery facilities in future to be used for semi commercial purposes.
- The hydro-finishing unit which is being installed under Digboi refinery modernisation plan will be useful in treating the distillate from short path distillation pilot plant during semi commercial production.
- Firm estimate for the proposal to be made in consultation between RRL, Jorhat and AOD, Indian Oil Corporation and submitted to CHT within a month.
- As the pilot plant will be located in Digboi Refinery, operating cost should be borne by AOD.
- Required analytical facilities are to be provided at RRL, Jorhat.
- SAC recommended for 100% funding by OADB.

32.2 Presentation by IIP on 'Establishment of an autonomous body for formulating test methods for new grades of lubricants under Indian conditions and testing & certifying of the same; facilities required, work plan etc. for this autonomous body'.

- SAC recommended in principle the establishment of an Autonomous Body. IIP was requested to prepare a DPR for the same. IIP indicated that the cost of preparation of DPR would be around Rs.15.0 lakhs. The proposal for DPR is to be submitted by IIP to CHT.

32.3 Proposal of IIP on 'Studies on the effect of soaker geometric and internals on visbreaking process'.

SAC agreed in principle that this study should be taken up and made the following recommendations:

- Cold flow model studies should be carried out at UDCT before the pilot plant studies are carried out.
- A meeting should be held between IIP, EIL & UDCT to work out the modalities of carrying out the studies and firm up the cost of the project proposal.
- The revised project proposal can be submitted to CHT directly for obtaining necessary approvals.

32.4 Project proposal of EIL (R&D) on 'Developmental studies for improvements in Cooling towers'.

SAC made the following recommendations.

- Consider using the existing cooling tower at EIL (R&D) or IOCL (R&D) instead of putting up new Cooling tower cells.
- Submit the revised proposal in the next SAC meeting.

When asked about the utilisation of the results of the study, EIL stated that they are actively considering to include the findings as their engineering specs. and would give over all guarantee.

32.5 Project proposal of RRL, Jorhat on 'Development of CFPP / PPD additives for diesel fuel'.

RRL, Jorhat could not find a collaborative refinery in the North East region as recommended by SAC in the previous meeting. SAC advised that RRL, Jorhat could collaborate with any refinery in India for this project and informed that SAC will not consider the proposal without a collaborative refinery.

32.6 Projects related to microbial oil recovery from oily sludge.

IIP informed the SAC that they have sent their project proposal to Gujarat Refinery. RRL, Jorhat informed that they will submit a proposal to CHT through Biotech Consortium India Ltd.

32.7 Paper on availability of C-5 unsaturates

SAC was informed that C-5 will be a problem in some of the refineries with respect to Vapour Lock Index specification to be adopted by BIS. However the refineries are planning for hydroisomerisation, use of MTBE etc. for meeting benzene content limit in MS and the same will take care of VLI also. It was therefore pointed out that C-5 need not be removed for meeting VLI but need to be removed only for value addition. In this connection proposal of etherification of cracked naphtha was also mentioned.

A reference was made to item 30.3 of the 30th meeting where it was stated "IIP and EIL are also to consider various options like alkylation and isomerisation of suitable naphtha fractions, considering the anticipated changes in MS specifications with respect to permissible aromatics and benzene in MS. A note in this regard will be prepared by EIL & IIP and submitted to SAC". As the note has not been submitted so far, SAC desired that this should be presented in the next meeting so that they will be in a position to give recommendations to the industry for meeting the future specifications of MS.

32.8 Presentation by IOC (R&D) on Augmenting the capacity of existing pipelines without additional hardware covering the transportation of Crude oil petroleum products, gas and oil.

SAC took note of the work done and the activities going on at IOC (R&D), LIL and NCL. SAC commended the work done by LIL and NCL. SAC recommended that IOC (R&D) should work with LIL & NCL to develop drag reducing additives for Crude oil transportation.

It was further suggested that RFL and IIP can come up with proposals for Drag reducing additives.

32.9 Feasibility of using the pilot plant at HPCL (B) for the development of technology for dearomatisation of diesel. & Feasibility of producing naphthalene from diesel

- EIL indicated that HPCL(B) is not very keen in the operation of the pilot plant saying that it is not suitable for safe operation. Chairman requested IIP & EIL to make one more attempt with HPCL(B) and also prepare a paper on the facilities available at HPCL (B).
- IIP was requested to prepare a note on the route to be followed for reducing the aromatics in diesel like hydrofinishing or extraction. The specification for sulphur should also be kept in mind while preparing this note.
- This note should also cover hydrogen sourcing in the refinery.

32.10 Project proposal of IIP on utilisation of Jatropha Curcas oil as diesel component.

The revised proposal states that the utilisation of Jatropha Curcas oil as lube oil base stock in addition to being used as diesel compound.

SAC stated that no bio sources should be used for fuel purposes due to high cost and it should only be considered for Lube base stocks development.

Revised proposal to be submitted in the next SAC meeting for a final decision.

32.11 Re-refining of used lube oils employing best eco-friendly technology.

IOC (R&D) & IIP were of the opinion that the process developed by Balmer - Lawrie could be improved upon by including hydro finishing. IOC (R&D) & IIP were requested to submit a proposal for the development of eco-friendly process. This proposal should cover the principles involved and other technical details.

32.12 SAC requested that the following papers should be prepared and circulated

- Summary of the new Hydrocrackers, Catalytic crackers, Visbreakers & Cokers being installed in India & abroad .
Action by EIL
- Residue upgradation using cokers. Action by EIL
- Summary of papers presented in Petro Tech. w.r.t. refining . Action by IOC (R&D)
- Summary of the Lube oil seminar. - Action by IIP
- A paper on recommendations given in articles published in various Journals . - Action by EIL

32.13 Next Meeting

SAC decided that the next meeting will be held at IIP, Dehradun on 21st April, 1995.

ANNEXURE

32nd Meeting of SAC held at RRL, Jorhat on 19 - 20 January, 1995.
- List of Participants

Chairman: Prof. M.M. Sharma

Members: Prof. K. Vasudeva, IIT (Delhi)
Mrs. Lalitha B. Singh, Adv. (Pet. & Chem.)
Dr.T.S.R.Prasada Rao, IIP, Dehradun
Dr. Anil C Ghosh, RRL, Jorhat
Shri S.N.Sharma, CSIR, New Delhi
Shri. A.P. Chaudhri, CHT, New Delhi

Invitees

BPCL: Shri V.K.Agrawal

IOCL
(R&D) Dr.A.K.Bhatnagar
Dr. S.P. Srivastava
Dr. Sobhan Ghosh
Shri S. Makhija

IOCL (R&P) Shri B.N. Bankapur

IOCL (AOD) Shri A.N.Das
Shri I.P. Baruah
Ms. Krishna Gupta

BRPL: Shri R.M.Hazarika

RRL, Jorhat Dr. K.V.Rao
Dr. S.A.A Rizvi
Shri K.V.Das
Shri B.Subrahmanyam
Dr. K.R. Pillai
Shri I. Suryanarayana

IIP Shri S. Singhal

EIL (R&D) Dr. S.J. Chopra

CRL Dr. M.A. Siddiqui

MRL Shri P.Srikanthan

CHT Shri M.Kannan