

**FORTY-FIFTH REPORT  
COMMITTEE ON PETITIONS  
(SEVENTEENTH LOK SABHA)**

**MINISTRY OF PETROLEUM & NATURAL GAS**

**(Presented to Lok Sabha on 24.3.2023)**



**सत्यमेव जयते**

**LOK SABHA SECRETARIAT  
NEW DELHI**

***March, 2023/Chaitra, 1945 (Saka)***

**CPB No. 1 Vol. XLV**

**© 2023 BY LOK SABHA SECRETARIAT**

**Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Sixteenth Edition).**

## CONTENTS

	<b>PAGE</b>
<b>COMPOSITION OF THE COMMITTEE ON PETITIONS .....</b>	<b>(ii)</b>
<b>INTRODUCTION.....</b>	<b>(iii)</b>

### REPORT

Representation of Shri Deepak Sharma regarding the need for revamping the Training Institute, namely, the Institute of Petroleum Safety, Health & Environment Management [IPSHEM] at Betul, South Goa.	1
--	---

### ANNEXURE

Minutes of the 28<sup>th</sup> sitting of the Committee on Petitions held on 23.03.2023

(i)

## COMPOSITION OF THE COMMITTEE ON PETITIONS

Shri Harish Dwivedi - *Chairperson*

### MEMBERS

2. Shri Anto Antony
3. Shri Hanuman Beniwal
4. Prof. Sanjay Sadashivrao Mandlik
5. Shri P. Ravindhranath
6. Dr. Jayanta Kumar Roy
7. Shri Brijendra Singh
8. Shri Sunil Kumar Singh
9. Shri Sushil Kumar Singh
10. Shri Manoj Kumar Tiwari
11. Shri Prabhubhai Nagarbhai Vasava
12. Shri Rajan Baburao Vichare
13. Vacant
14. Vacant
15. Vacant

### SECRETARIAT

1. Shri T.G. Chandrasekhar - Additional Secretary
2. Shri Raju Srivastava - Director
3. Shri Tenzin Gyaltzen - Deputy Secretary

**FORTY-FIFTH REPORT OF THE COMMITTEE ON PETITIONS  
(SEVENTEENTH LOK SABHA)**

**INTRODUCTION**

I, the Chairperson, Committee on Petitions, having been authorised by the Committee to present on their behalf, this Forty-Fifth Report (Seventeenth Lok Sabha) of the Committee to the House on the representation of Shri Deepak Sharma regarding the need for revamping the Training Institute, namely, the Institute of Petroleum Safety, Health & Environment Management [IPSHM] at Betul, South Goa.

2. The Committee considered and adopted the draft Forty-Fifth Report at their sitting held on 23 March, 2023.

3. The observations/recommendations of the Committee on the above matters have been included in the Report.

**NEW DELHI;**

**HARISH DWIVEDI**  
*Chairperson,*  
*Committee on Petitions*

**23 March, 2023**

**02 Chaitra, 1945 (Saka)**

## REPORT

### **REPRESENTATION RECEIVED FROM SHRI DEEPAK SHARMA REGARDING THE NEED FOR REVAMPING THE TRAINING INSTITUTE, NAMELY, THE INSTITUTE OF PETROLEUM SAFETY, HEALTH & ENVIRONMENT MANAGEMENT [IPSHEM] AT BETUL, SOUTH GOA.**

Shri Deepak Sharma had submitted a representation dated 06.10.2022 before the Committee on Petitions regarding on the need for revamping the Training Institute, namely, the Institute of Petroleum Safety, Health & Environment Management [IPSHEM] at Betul, South Goa.

2. The representationist, in his representation, *inter-alia* stated that the Institute of Petroleum Safety, Health and Environment Management (IPSHEM) was set by ONGC in Goa in the year 1989 for promoting safety, occupational health and environment practices and standards in Petroleum sector. It started functioning from its own campus at Betul village in South Goa since 1997. Since then, thousands of personnels have been trained in various training courses. The representationist stated that this Institute is claimed to have been developed as a role model of international standard having state-of-the-art HSE training facilities under one roof including a modern Sea Survival Training Vessel exclusively for offshore going personnel. Further, it has also been claimed that it is an ISO certified Entity. The institute also deputed in-house faculties to countries like Qatar, Sudan, and trained personnel of other E&P Companies and also carried out other studies and International Diploma Programmes in Safety Management and Environment Management.

3. The representationist has further stated that this Institute has also won several prestigious awards including Golden Peacock Environment Management Award for the year 2004 and Greentech Environment Excellence Awards for the years 2003-04 and 2006. Since then around one and a half decade has elapsed and IPSHEM has slowly and gradually has gone into oblivion and now, this has become a liability even for the ONGC, The representationist has stated following facts as part of his representation:-

- (i) High impact projects of IPSHEM during 2021-22 are –
  - (a) Environment Monitoring around ONGC Installations in Western Offshore Area of Mumbai High and Kutch-Saurashtra Region.
  - (b) Offshore Environment Monitoring of Eastern-Offshore-KG Basin, Bay of Bengal & EOA, Kakinada.
- (ii) Technologies upgraded/inducted: Nil
- (iii) Papers published: 06 (04 National Journal and 02 International Journal)
- (iv) IPRs
  - (a) Patents Filed: Nil
  - (b) Patents obtained: Nil
  - (c) Copyrights Filed: Nil
  - (d) Copyrights registered: Nil

Further, it may be seen from the above that there is a dismal performance of IPSHEM during the last two decades, specially upto the year 2014. There has also been no publicity of this Institute, which was earlier a pioneer Institute in petroleum safety, health & environment management, due to which the enrolment of learners has been decreasing at a fast pace and now the institute is in a sorry state of affairs. The funding used to be made by ONGC and the Government has also stopped due to which the faculty members have also been switching over to other organizations.

4. The representationist has also proposed that a thorough study by an independent organization and suggested that the Parliamentary Committee is most suitably placed for undertaking such a study. While undertaking the said study, special emphasis needs to be given for revamping this Institute so that it may attain

its past glory and the students should also be trained on all these aspects at an international standard.

5. The Committee on Petitions (Seventeenth Lok Sabha) took up the representation of Shri Deepak Sharma for examination under Direction 95 of the Directions by the Speaker, Lok Sabha. Accordingly, the representation was referred to the Ministry of Petroleum and Natural Gas for furnishing their comments on the issues raised therein.

6. In order to have realistic assessment of the issues/points raised in the representation of Shri Deepak Sharma, the Committee undertook an on-the-spot study Visit to Goa on 02 January, 2023. During the said Study Visit, the Committee held informal discussion with the representatives of the Ministry of Petroleum and Natural Gas and Oil and Natural Gas Corporation (ONGC).

7. On being asked by the Committee as to when the Institute of Petroleum Safety, Health & Environment Management (IPSHEM) was set up by Oil & Natural Gas Corporation Limited at Goa, the representatives of the Ministry of Petroleum and Natural Gas and ONGC informed that the IPSHEM was set up at Goa by Oil & Natural Gas Corporation Limited in July, 1989.

8. The Committee, thereafter, desired to know as to how the establishment of such an Institute in the country was conceptualized by Oil & Natural Gas Corporation Limited (ONGC). The representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

*"The establishment of the Institute of Petroleum Safety, Health & Environment Management (IPSHEM) - a premier training institute of Oil and Natural Gas Corporation Ltd. (ONGC), with focus on promoting Safety, Occupational Health and Environment Management practices and standards in the Petroleum Sector was conceptualized by ONGC in 230<sup>th</sup> Executive Committee (EC) meeting held on 28<sup>th</sup> November 1984 to focus its attention on Safety and Environment training and to crystalize safety measures in the petroleum industry, and in particular for Oil & Natural Gas Corporation Limited (ONGC)*



*installations. In 1989, IPSHEM started functioning from a hired office premises in Margao, South Goa and Sea Survival and Fire fighting trainings were imparted at scattered facilities at Margao, Vasco and Panajim Fire Services headquarters. The Master Plan of the Institute was prepared by Norwegian consultants SikteC A/S under a bilateral Agreement between the Government of India and Government of Norway in 1990. IPSHEM started functioning from its own campus at Betul village in South Goa since 1997."*

9. The Committee further asked to furnish a short note on IPSHEM. In response, thereto, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

*"The Institute of Petroleum Safety, Health and Environment Management (IPSHEM) is a premier training institute of Oil and Natural Gas Corporation Ltd. (ONGC), with focus on promoting Safety, Occupational Health and Environment Management Practices and Standards in the Petroleum Sector. Oil and Natural Gas Corporation Ltd (IPSHEM) provides expert HSE and Fire Fighting Trainings to the personnel of the Petroleum Sector so that they can conduct Exploration, Drilling, Production and other Exploration & Production operations in a safer, greener and more responsible way. IPSHEM also conducts Offshore Environment monitoring studies around Oil & Natural Gas Corporation Limited (ONGC) installations located in Western and Eastern offshore and other HSE studies as per requirement of Assets/Basins.*

*MISSION - To promote excellence in Safety, Health and Environment Management in Petroleum Sector.*

*VISION - To become a Centre of Excellence of International Repute in Safety, Health and Environment Management in Petroleum Sector. To become a trend-setter in establishing Standards of Safe and Healthy Work Practices and Environment Management in Petroleum Sector.*

*The scope of IPSHEM includes, training on:*

- (i) Survival at Sea, Helicopter under Water Evacuation Exercise, Safety and Environment Management.*

- (ii) *Environment Protection including pollution control measures, oil spill combatment.*
- (iii) *Fire fighting within confined space in offshore areas and evacuation exercise.*
- (iv) *Developments of the codes, manuals, data bank.*
- (v) *Offering short duration courses in safety aspects of operation activities.*
- (vi) *Offering diploma courses in Safety and Environment Management.*
- (vii) *Promotion of Research & Development (R & D) in the areas of Safety, Environment, Occupation Health and Ergonomics."*

10. On being asked to furnish the details of Theoretical and Practical Courses on Health, Safety & Environment (HSE) Management conducted by the Institute, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

<b>Theoretical Training Programme</b>	<b>Practical Training Programme</b>
<i>National Examination Board in Occupational Safety and Health (NEBOSH) International Diploma.</i>	<i>Mandatory Offshore Safety Training on Survival at Sea (SAS)</i>
<i>National Examination Board in Occupational Safety and Health (NEBOSH) Certificate Program</i>	<i>Offshore Petroleum Industry Training Organization (OPITO) approved HUET (Helicopter Underwater Escape Training) with EBS (Emergency Breathing System).</i>
<i>Safety in Logging Operations (including handling of radioactive substances).</i>	<i>Practical Fire Fighting</i>
<i>Behaviour Based Safety (BBS)</i>	<i>Advanced Fire Fighting</i>

<i>Accident and Incident Investigation</i>	<i>Fire Team Member Courses</i>
<i>Emergency Preparedness and Response</i>	<i>Blow out Control Contingencies</i>
<i>HSE Awareness</i>	<i>Breathing Apparatus Courses</i>
<i>ISO Lead Auditors and Internal Auditors Program</i>	<i>Fire Prevention &amp; Protection at Work Places (FPPW)</i>
<i>Safety Auditors Program</i>	<i>Pressure-fed Fuel Fire Fighting (PFFF)</i>
<i>Environmental Impact Assessment (EIA) Studies</i>	<i>Basic Fire Fighting Training (BFF)</i>
<i>Basic Offshore Safety Training</i>	<i>Advance Fire Fighting Training (AFF)</i>
<i>Safety in Drilling and work-over operations</i>	<i>Blow-out Control Contingencies (BCC)</i>
<i>Disaster Management</i>	<i>Fire Fighting Training (FFT)</i>
<i>Sub-surface Safety Valve</i>	
<i>Safety in Office/Site</i>	
<i>Occupational Health courses</i>	
<i>Fire Risk Management (FRM)</i>	
<i>Fire Station Management (FSM)</i>	
<i>Occupational Health &amp; Ergonomics</i>	

11. On being further asked by the Committee as to whether new courses have been added by the Institute during the last five years, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

*“The following New Training Courses have been introduced during the last five years by IPSHEM:-*

(i) *National Examination Board in Occupational Safety and Health*

*(NEBOSH) International Diploma in Occupational Safety & Health.*

- (ii) National Examination Board in Occupational Safety and Health (NEBOSH) International Technical Certificate in Oil & Gas Operational Safety (IOGC).*
- (iii) National Examination Board in Occupational Safety and Health (NEBOSH) International General Certificate in Occupational Health and Safety (IGC).*
- (iv) Training in Occupational Health & Work Life Management.*
- (v) Training on Occupational Health & Ergonomics.*
- (vi) Personal Survival Techniques (PST) as per International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW) 2010.*
- (vii) Proficiency in Survival and Craft Rescue boat (PSCRB) as per International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW) 2010.*
- (viii) Elementary First Aid (EFA), International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW 2010).*
- (ix) Personal Safety and Social Responsibility (PSSR) as per International Convention on Standards of Training, Certification and Watch keeping for Seafarers. (STCW) 2010.*
- (x) Advance Fire Fighting (AFFF) as per STWC 2010.*
- (xi) Fire Prevention and Fire Fighting (FPFF) as per International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STWC) 2010.*
- (xii) Helideck Landing Assistant Course.*

- (xiii) *HSE Orientation for field going officers.*
- (xiv) *Emergency Preparedness and Response for onshore Installation.*
- (xv) *Behaviour Based Safety Management.*
- (xvi) *Safety in Warehouse Management, Logistics, Material handling and coastal jetty safety for Officers.*
- (xvii) *Safety in Warehouse Management, Logistics, Material handling and coastal jetty safety for Staff.*
- (xviii) *HSE Awareness program for Rig Managers/Shift In-Charges/Safety Officers.*
- (xix) *HSE Awareness program for Installation Managers/Shift In-Charges/Safety Officers.*
- (xx) *HSE Awareness program for contract supervisors.*
- (xxi) *Behaviour Based Safety Management."*

12. On being enquired by the Committee about the role of ONGC in running the affairs of IPSHEM in relation to finances, logistics, selection faculty and placement of students after completion of courses, engaging other National and International Petroleum Companies, etc., the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted, as under:-

*"ONGC has 13 numbers of Institutes including The Institute of Petroleum Safety, Health and Environment Management (IPSHEM) and they are all part of ONGC. ONGC provides all kinds of support (including Financial, Logistics and Human resources) to all these Institutes for smooth functioning of these institutes as per the respective mandates. ONGC has the mandate to provide HSE trainings to own employees. IPSHEM, Goa provides expert HSE and Fire Fighting Trainings to its own ONGC employees as well as to the personnel of the Petroleum Sector so that they can conduct hydrocarbon operations in a*

safer, greener and more responsible way. IPSHEM also provides HSE and Fire fighting trainings to external national (Gas Authority of India Limited (GAIL), Oil India Limited (OIL), Reliance Oil, BPCL (Bharat Petroleum Corporation Limited), IOCL (Indian Oil Corporation Ltd), HPCL (Hindustan Petroleum Corporation Ltd), etc.) and international (TOTAL Gas, ROSNEFT etc.) oil & gas upstream as well as downstream companies and also to other industries like aviation (Airport Authority).

Faculties for the HSE & Fire Fighting Training course Includes in-house subject experts as well as ex-ONGC personnel. However for some of the specialized training courses, domain experts from other industries are also engaged as faculty. As far as the placement of students is concerned, it may please be noted that IPSHEM conducts HSE trainings only for employees of Petroleum Sector only. IPSHEM doesn't conduct any degree or diploma training courses for placement purpose."

13. The Committee, then, asked to furnish the details of various courses offered by IPSHEM with specific reference to the mode of selection of candidates. In reply thereto, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted, as under:-

The mode of selection/ eligibility criteria of candidates for the training courses offered by IPSHEM is based on Target group and the Trainee Profile/Level of the participants. In the annual calendar of IPSHEM level of the participants and targeted group are clearly identified and displayed against each of the training courses. The training schedule is published on ONGC reports with details regarding the eligibility for the training course and depending of the different work centre nominations are received with due approval of Head of the work centres. A sample of training calendar depicting eligibility criteria/mode of selection of candidates is given as under:-

Sl. No	Program Title	Accreditation Agency	Category of Training	Mode of Training/ Venue	Target Group	Trainee Profile/ Level
1.	Survival at Sea, First Aid, H <sub>2</sub> S Safety & Fire Fighting (SAS)	--	Mandatory	Physical/IPSHEM	Offshore Going Personnel	All Levels

2.	Refresher Course on Survival at Sea (RAS)	--	Mandatory	Physical/IPSHEM	Offshore going Personnel	All Levels
3.	Helideck Operations Initial Training (HLO & HDA)	--	Regular	Physical/Off Campus	Offshore Platform Logistics personnel & Well Head Team Members	All Levels
4.	Offshore Lifeboat Coxswain Training (OLC)	--	Regular	Physical/Off Campus	Designated Offshore Going personnel	All Levels
5.	Helicopter Underwater Escape Training with EBS (HUET)	OPITO	Mandatory	Physical/Off Campus	Offshore Going Personnel	All Levels
6.	NEBOSH International Technical Certificate in Oil & Gas Operational Safety (IOGC)	NEBOSH	Proposed Mandatory	Physical/Virtual/IPSHEM	Only for Safety executives posted in Drilling, Work-over, Logging, Engineering and Geophysical Services	E1 to E6

14. On being asked to furnish the details regarding enrolment of candidates to the various courses offered by IPSHEM in a tabular form, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted, as under:-

Sl. No.	Courses	Total number of Candidates Enrolled (April-March)						Remarks
		2017	2018	2019	2020	2021	2022	
1.	Fire fighting for Operational Personnel	1959	2376	2812	2626	3242	1695	
2.	Advanced Search & Rescue-cum-Fire Fighting for Professional Fire-Fighters	97	161	309	120	65	69	
3.	Blow out Contingency control	0	19	16	0	0	0	Scheduled in Feb'23 (2022-23).
4.	Survival at Sea	729	879	747	536 (O*)	353 (O*) 115 (P*)	612	
5.	Offshore Petroleum Industry Training Organization (OPITO) accredited	947	825	750	817 (O*)	349 (O*) 77 (P*)	1608	

	Helicopter Underwater Escape Training (HUET)							
6.	National Examination Board in Occupational Safety and Health (NEBOSH) International diploma for HSE Personnel	0	20	0	0	0	0	Conducted one NEBOSH Diploma course and subsequently, continued with NEBOSH Certificate course.
7.	National Examination Board in Occupational Safety and Health (NEBOSH) Certificate Programme	58	158	155	0	0	56	
8.	Behaviour Based safety	110	192	115	117 (O*)	77 (O*)	55 (O*)	
9.	Occupational Health & Ergonomics	121	102	58	110 (O*)	0	27	
10.	Onsite Hydrogen Sulphide safety	87	0	144	33 (O*)	65 (O*)	0	Scheduled in Feb'23 (2022-23).
11.	Accident and Incident Investigation	18	11	0	39 (O*)	51 (O*)	0	Scheduled in Feb'23 (2022-23).
12.	Safety & Handling of Explosives	0	0	0	0	0	0	This topic/subject is part of "Safety in Logging Operations" training course
13.	Safety in Logging Operations	45	29	27	27 (O*)	14 (O*)	18	
14.	Emergency Preparedness & Response	0	20	0	37(O*)	0	0	Scheduled in Feb'23 (2022-23).
15.	HSE Awareness	497	222	709	366 (O*)	150 (O*)	401	
16.	ISO Lead Auditors and Internal Auditors Programme	114	37	61	307 (O*)	89 (O*)	15	
17.	Safety Auditors Programme	0	0	85	0	0	0	Scheduled in Mar'23 (2022-23).
18.	Oil Spill Management	0	0	0	0	0	0	Conducted by respective Asset HSE section in association with local Indian Coast Guard.
19.	Environment Impact Assessment Studies (EIA)	0	0	0	0	0	0	EIA studies are being undertaken by Third Party Contractors for ONGC projects.

O\* - Training in Online mode



15. The Committee, thereafter, desired to know as to whether all the candidates are considered for appropriate placement, on completion of any specific training course. The Committee, in this connection, also asked to furnish the details of various National and International Petroleum Companies who are providing jobs to these candidates. In reply, the representatives of the Ministry of Petroleum and Natural Gas and ONGC informed that IPSHEM conducts HSE trainings only for the employees of Petroleum Sector and doesn't conduct any degree or diploma training courses for the placement purpose.

16. While considering the fact that IPSHEM is considered to be an exemplary Institute in Hydro Carbon Sector, the Committee desired to know as to how the accidents/incidents like sinking of vessels during Cyclone Tauktae in May, 2021, crash of Pawan Hans Chopper into the Arabian Sea in June, 2022, etc., had led to several casualties of personnel. In this backdrop, the Committee also desired to know as to whether there is an urgent need to re-assess the training modules/courses offered by IPSHEM which could be helpful in averting the loss of assets and life of personnel during such devastating incidents. In response thereto, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted, as under:-

*"For all offshore going employees in ONGC, Offshore Petroleum Industry Training Organization (OPITO) accredited Helicopter Underwater Escape Training (HUET) with Emergency Breathing Training (EBS) training and Survival at Sea training are mandatory. IPSHEM conducts these trainings for all the offshore going ONGC personnel. Through these trainings, crew learns how to escape out of the sinking Helicopter in case of emergency landing on water/ ditching of helicopter in water and survival in sea till the support arrives. Worldwide all renowned Oil & Gas industries provides the HUET and Survival at Sea training as per OPITO Guidelines to their offshore going crew, similarly IPSHEM provides OPITO accredited HUET with EBS training and Survival at Sea to the offshore going personnel*

*Regarding Pawan Hans chopper accident in June 2022, detailed investigation is being carried out by AAIB (Aircraft Accident Investigation Bureau) and the*

report of same is awaited. However ONGC has taken additional precautions and measures, as brought out as under:-

1. Indian Coast Guard has positioned dedicated SAR (Search & Rescue) Helicopter with 'Crew on duty' at ONGC Helibase Juhu since August, 2022.
2. Standby boat is ensured during crew change helicopter operations offshore Rigs.
3. Safety and Technical Audits of helicopters are being carried out by RWSI (Rotary Wing Society of India).
4. Safety meeting are held with all helicopter operators with respect to safety measures/ initiatives being taken for knowledge sharing and lesson learnt among operators.
5. ONGC has acquired membership of HeliOffshore, a global association focussed on safety of offshore helicopter operations.
6. Aviation safety section is further strengthened by recruitment of one Aviation Safety expert.
7. Further, following safety measures are also being ensured for helicopter operations:-
  - a. Mandatory trainings like Survival at Sea and Helicopter Underwater Egress Training for all personnel travelling by helicopter.
  - b. Specific medical and physical fitness criteria for personnel deputed for offshore assignments.
  - c. Mandatory safety briefing for all personnel before travelling by Helicopter to and from Offshore, including physical demonstration of the life jackets and safety belts.

- d. *Checking of all inflatable life jackets prior to sortie and donning of same being ensured by the pilot.*
- e. *Briefing of passengers by the Pilot about location and use of emergency equipment, normal and emergency exits, flight details, etc. before boarding the helicopter.*
- f. *Ensuring that one passenger/crewman is equipped and familiarised with a headset for communication with Pilots and is marked as the lead passenger.*
- g. *Availability of Night Landing Facilities including HAPI (Helicopter Approach Path Indicator) at offshore Installations/ Rigs.*

*The Tauktae cyclone was one of its kind and extraordinary. The encountered phenomenon of abrupt shifting of cyclone path was unparalleled and associated with highest recorded wind speed in Western offshore. To further strengthen the Emergency Response in Case of cyclone related exigencies, ONGC has taken following measures:-*

1. *MOU has been signed among Director General of Hydrocarbon (DGH), Indian Meteorological Department (IMD), and Indian National Centre for Ocean Information Services (INCOIS), Director General of Shipping (DGS), Indian Coastguard (ICG) and Oil Industry Safety Directorate (OISD) for providing cyclone forecasts for offshore E&P operational areas.*
2. *A Marine Cell, with experienced marine professionals, was created for pre-deployment inspection, checking and verification of certifications and other necessities as per statutory requirements, prior to deployment of vessels for offshore operations.*
3. *ERP (Emergency Response Plan) have been updated to further strengthen preparedness and response for adverse weather conditions.*
4. *Formation of Emergency Response Team reporting to senior most Asset Manager of offshore Assets.*

5. *Contract requires Barges/ vessels in new projects to be demobilized to safe location in case of any Cyclone forecast/ warning under Force-Majeure. The decision of ONGC in such cases is final.*
6. *Technical Specifications of vessels directly hired by ONGC have been reviewed. Enhanced safety measures like introduction of DP2 (Dynamic Positioning 2) has been introduced for vessels hired to support offshore operations.*
7. *Authorities have been fixed for risk analysis on rigs, installations and vessels, in case of inclement weather. On the basis of analyzed risk of predicted cyclone, the vessel/ barge is to move out of field to safe/sheltered water. Movement to safe water is monitored through VATMS (Vessel and Air Traffic Monitoring System).*
8. *Adequate number of AHTs (Anchor Handling Tugs) and ETVs (Emergency Towing Vessels) are being ensured in the field for emergency situations.*
9. *DMP (Disaster Management Plan)/ RCP (Regional Contingency Plan) have been updated. Communication channels, mechanism, control rooms, escalation levels etc. have been identified. Contact Points of DG Communication Centre, Indian Navy, ICG (Indian Coast Guards), ONGC, DGH (Directorate General of Hydrocarbons) and their escalation are being updated on monthly basis.*
10. *CDMP (Corporate Disaster Management Plan) has been thoroughly revised, incorporating- Disaster Management Plan (DMP)-2020 of Ministry of Petroleum & Natural Gas, National Disaster management Plan (NDMP) -2019, Ministry of Petroleum and Natural Gas guidelines on COVID-19 & cyclone Tauktae, High Level Committee's recommendations on cyclone Tauktae.*

11. *ICG/ MRCC (Maritime Rescue and Coordination Centre) remain the nodal executing agency to deal with cyclonic emergency situations at sea. DG Shipping/DG Communication Centre are the focal point for coordination amongst various authorities/ agencies.*
12. *Marine operations manual revised for updating weather limiting conditions for suspending operations."*

17. On being asked to furnish the details of 'Samudra Siksha' module of IPSHEM, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted, as under:-

*"Details of Samudra Shiksha Module: - IPSHEM Goa is presently conducting Survival at Sea (SAS) & Refresher training for Survival at Sea (RAS) trainings on the vessel SamudraShiksha. The duration for the SAS training is 5-days' and for the RAS training is 3 days'. With the present facilities three to four batches of SAS and RAS training per month are conducted with 20 persons in each batch. Out of five days SAS training, two days class room training is provided at IPSHEM campus with in-house faculty and three days' practical skill training is carried out on-board ONGC vessel "SamudraShiksha" berthed at Goa Shipyard Ltd. (GSL) jetty at Vasco, Goa.*

*The training modules include Theory of fully enclosed life boats & rescue boats, Air support & sprinkler system in fully enclosed life boats, Practical training on donning of life jacket, Practical familiarization of fully enclosed life boats & rescue boats, Practical: Life boat / rescue boat drill, Lowering life boat/ rescue boat & boat Casualty evacuation & man overboard drill, Life boat/rescue boat drill. Lowering life boat / rescue boat & boat handling, Practical demonstration of sprinkler system in fully enclosed life boats, Swimming Techniques, Scramble net drill, Inflation of life raft & Wet life raft drill, Films on Survival at Sea, Basic First Aid etc."*

18. On being asked to furnish the details of various Awards won by IPSHEM since its inception, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

*"The various awards received by IPSHEM for outstanding performance in the field of HSE are as under:-*

*Financial Year 2021-2022*

- a. IPSHEM was selected for the prestigious Energy & Environment Foundation Global Environment Award 2021 in Platinum Category in environment management.*
- b. IPSHEM was bestowed with Apex India Green Leaf Award 2020 for Environment Excellence in Platinum category.*
- c. IPSHEM was awarded for prestigious 10th Exceed Environment Award 2021" under "Environment Preservation" Category in Petroleum Exploration Sector.*
- d. The Institute is certified with ISO 9001:2015, ISO 14001:2015 and ISO 45001: 2018 standards.*

*Financial Year 2020-2021*

- a. IPSHEM was bestowed with prestigious "Apex India Green Leaf Award 2019" by Apex India Foundation under PLATINUM category.*
- b. FY 2020-21 IPSHEM was selected for the prestigious "Gold Award" for "Grow Care India Environment Awards 2020" for outstanding contribution in Environment Management.*
- c. IPSHEM has been awarded the "Global Environment Award-2020" by Energy and Environment Foundation, India under PLATINUM category.*
- d. IPSHEM has been awarded the "Global Safety award-2021" by Energy and Environment Foundation, India under PLATINUM category.*
- e. IPSHEM was declared as winner of FAME India Excellence Award for Environment Excellence under PLATINUM category.*

*Financial Year 2019-2020*

- a. *Grow Care India Environment, Water Management & Sustainability Award 2019 in 'Gold' category on 03rd April 2019 at Chandigarh.*
- b. *Golden Bird Best Training Award 2019 in 'Diamond' category on 02nd June 2019 at Chandigarh, by the Foundation for Accelerated Mass Empowerment (FAME).*
- c. *Greentech Environment Award 2019 in R&D sector on 11th July 2019 at New Delhi.*
- d. *Energy and Environment Foundation Global Environment Award 2019 in 'Platinum' category on 23rd August 2019 at the 10th World Renewable Energy Technology Congress & Expo 2019, New Delhi.*
- e. *Apex India Environment Excellence Award 2019 in 'Platinum' category and Apex India Occupational Health & Safety Award 2019 in 'Gold' category on 24th September 2019 at the Apex India OSHE Sustainability Conference 2019, Dona Paula, Goa.*
- f. *Grow Care India Safety Award 2019 for Oil & Gas Sector in 'Gold' category on 24th December 2019 at New Delhi.*
- g. *QHSE Management System: ISO-9001, ISO-14001 and OHSAS-18001 were renewed and maintained as per the system requirements. Changeover from OHSAS-18001 to ISO-45001 was achieved in January 2020.*

*Financial Year 2018-2019*

*Individual Awards:*

- a. *Shri. Sanjay Kumar, DGM( Fire Services)- was decorated with the President of India's Fire Service Medal for Distinguished Service.*

- b. *Dr. U. K. Chakrabarty, DGM(P) was conferred with "APEX India Lifetime Achievement Award 2019" and he was also honoured as "National BBS Ambassador" by Forum of Behavioural Safety.*
- c. *Shri. G. L. Das, DGM (Chemistry)- was conferred with " Research Ratna Award 2019" in "Distinguished Researcher in Environment Studies" category by international journal for research under Literary Access (IJRULA) under World Research Council (WRC).*

*Institute Awards:*

- a. *Grow Care India Safety Award 2018 in Platinum category.*
- b. *FAME Excellence Award 2018 in Platinum category.*
- c. *Global Environment Award 2018 in Platinum category.*
- d. *Energy and Environment Foundation Global Safety Award 2019 in Platinum category.*
- e. *Apex India Environment Excellence Award 2019 in Platinum category.*

*Financial Year 2017-2018*

- a. *Grow Care India Environment award 2017 in Gold category received in July 2017-18.*
- b. *Global Environment Award 2017 Platinum category received in August 2017-18.*
- c. *Fame India Ltd. Award "Rashtra Vibushan" in September 2017 under Platinum Category.*
- d. *Energy & Environment foundation Global Safety Award 2018 in February, 2018 under Platinum Category.*

*Financial Year 2016-2017*



- a. *Greentech Environment Award Gold.*
- b. *Renewal of DSIR recognition for IPSHEM as an In-house R&D Center of ONGC for the period from 26.07.2016 to 31.03.2018.*

*Financial Year 2015-2016*

- a. *Greentech Environment Award 2015 Gold Award in Petroleum Exploration Sector.*
- b. *IPSHEM has been recognized as an in-house R&D Institute of ONGC by Department of Scientific and Industrial Research (DSIR), Government of India, by awarding the Certificate of Recognition on 17.04.2015.*

*Financial Year 2014-2015*

*CMD Award for Best Performing Institute (Other than R&D)"*

19. On being enquired by the Committee as to whether any other information germane to the petition/representation under reference, which the Ministry of Petroleum & Natural Gas and Oil and Natural Gas Corporation would like to submit before the Committee, the representatives of the Ministry of Petroleum and Natural Gas and ONGC submitted as under:-

*"Way Forward for IPSHEM: IPSHEM has taken numerous initiatives towards becoming a renowned World Class Training Institute for the E&P sector.*

- (i) *IPSHEM is collaborating with internationally renowned PETROFAC Ltd. to provide globally acclaimed training in HSE Courses.*
  - (a) *Signed a Memorandum of Intent (MOI) to collaborate and pool resources in the respective domain expertise and organise HSE and Fire-fighting Training Courses for national and international oil & gas companies including the existing clientele of PETROFAC and ONGC as target groups.*

- (b) *PETROFAC in association with IPSHEM, organized TWO online workshops on HSE courses for ONGC personnel.*
- (c) *PETROFAC shall provide HSE training courses for trainers/faculty and also assist in obtaining international accreditation for IPSHEM.*
- (ii) *In view of the advancement in the technology for providing the trainings in a real time scenario with the help of the state of the art simulators, IPSHEM has planned to install numerous fire training/ Safety State-of-the-art Simulators covering all the upstream and downstream process areas of Hydrocarbon industry, as a part of its fire/safety training expansion programme:*

*Fire Fighting Simulators:*

- *Offshore Platform Fire Simulator*
- *Onshore Drilling / WO Rig Fire Simulator*
- *Onshore Process Facilities Fire Simulators*
- *Electrical Panel & Cable Gallery Fire Simulator*
- *Electrical Transformer Fire Simulator*
- *Mounded Bullet Fire Simulator*
- *Fixed Roof Storage Tank Fire Simulator*
- *Floating Roof Storage Tank Fire Simulator*
- *Smoke House Evacuation Simulator*
- *High Rise Building Fire Simulator*
- *Road Tanker Loading Gantry Fire Simulator*

*Safety Simulators:*

- *Material Handling Safety Simulator*
- *Construction Safety Simulator*
- *Self Escape from Height Safety Simulator*
- *Electrical Safety Lock-Out-Tag-Out (LOTO) Simulator*
- *Confined Space Safety Simulator*

*Simulators Control Centre:*

- Central Console panel
  - New Class Rooms (04 nos.)
  - OH Equipment Display Room
  - Fire Fighting Equipment Display Room
  - Safety Equipment Display Room
  - Briefing Room for Trainees
- (iii) *IPSHEM's capabilities are being shared with other E&P companies to attract nominations. Present clientele list includes TOTAL ENERGY (France), ROSNEFT (Russia), ADANI, GVK, GAIL, INDIAN OIL, OIL INDIA LIMITED, AIRPORT AUTHORITY, CAIRN ENERGY/VEDANTA, etc.*
- (iv) *OIM training module for onshore installations in Virtual Reality (VR) mode is being developed by M/s SIMULANIS.*
- (v) *Actively contributing in developing new and revised oil & gas industry HSE standards as a member of OISD Committee.*
- (vi) *Started developing e-Learning modules for imparting training in digital mode.*
- (v) *An Open-Air Oil & Gas Museum is being developed at IPSHEM to showcase the evolution of Oil & Gas Industry in India.*
- (vi) *An international Convention Centre is planned to facilitate national and international Seminars/Workshops/Symposiums on industry growth based theme topics.*
- (vii) *To facilitate the stay at IPSHEM for the trainees, a new Hostel Block with a capacity of 76 Rooms equipped with latest amenities is being constructed within the IPSHEM Premises."*

20. The Committee expressed their satisfaction that the various issues points raised by the Members during their discussion were explained/clarified by the representatives of the Ministry of Petroleum and Natural Gas and Oil and Natural Gas

Corporation (ONGC). The Committee appreciated the efforts taken by the premier Training Institute of ONGC, i.e., Institute of Petroleum Safety, Health and Environment Management (IPSHEM) in imparting theoretical and practical training with focus on promoting Safety, Occupational Health and Environment Management Practices and Standards to the employees working in the Petroleum Sector. However, keeping in view the increasing instances of natural disasters due to climate change, the Committee expect that the taking a cue from the studies and researches based on the best international health and safety practices and standards, IPSHEM may evolve its Course Structures accordingly.

## OBSERVATIONS/RECOMMENDATIONS

### Background of the Institute of Petroleum Safety, Health & Environment Management (IPSHEM)

21. The Committee note that the Institute of Petroleum Safety, Health & Environment Management (IPSHEM) is a premier Training Institute of Oil and Natural Gas Corporation (ONGC) with primary focus on promoting safety, occupational health and environment practices and standards in Petroleum sector. The master plan of the Institute was prepared by Norwegian Consultants 'SikteC A/S' under a bilateral agreement between the Government of India and the Government of Norway in 1990. The Committee, further, note that IPSHEM started functioning from a hired office premises during 1989 from Margao, South Goa and Sea Survival and Panaji Fire Services Headquarters. Further, as per the stated mandate of IPSHEM, it provides expert Health, Safety and Environment (HSE) and fire fighting training to varied personnel, especially, pertaining to the petroleum sector engaged in exploration, drilling and production so as to enable them to operate in a safer, greener and responsible manner.

22. The Committee note that the Institute has come a long way through imparting training to the personnel and developing infrastructure with a view to evolving itself into a state of the art Centre with requisite International Organization for Standardization (ISO) Certification. In this regard, the Committee note that IPSHEM has all necessary wherewithals and the potential to expand their activities and transform it into a world class Institution. Notwithstanding this, the Committee find that the total number of candidates

enrolled from 2017 to 2022 with regard to the courses, viz., fire fighting for operational personal, advanced search and rescue-cum-fire fighting for professional fire fighters, blow out contingency control, survival at sea, accidents and incident investigation, HSE awareness, etc., has not only broadly remained static but also not in commensuration with the vast demand of such types of training within the country and also abroad.

23. The Committee are of the considered view that it is the opportune time for the Ministry of Petroleum and Natural Gas and ONGC to ensure that the Institute lives upto its 'mission' and 'vision' to promote excellence in the domain of Safety, Health and Environment Management, not only in the Petroleum Sector, but also in other related fields. The Committee desire that IPSHEM should endeavour to broaden its base to provide comprehensive training modules and facilities by utilising its existing infrastructure and expertise in various sectors/segments. The Committee, therefore, recommend the Ministry and ONGC to provide IPSHEM with the requisite funding to further expand its sphere for imparting training so that the Institute is able to utilize its full potential. In this regard, continuous efforts should also be made towards introducing different types of innovative courses of short, medium and long duration suiting to the current and future requirements. The Committee would also like the Institute to move put all their efforts and resources to develop online mode of training along with a short-duration physical modules to cater to the requirements of various vital sectors. The Committee would like to be apprised of the necessary steps taken/proposed to be taken in regard within three months from the date of presentation of this Report to the House.

### Role, Mandate and Way forward

24. The Committee note that the role and mandate of IPSHEM is substantially comprehensive which states that the Institute strives to promote excellence in Safety, Health and Environment Management in the Petroleum Sector. Further, the Institute also conducts various theoretical and practical training programmes. The Committee are of the considered view that IPSHEM, as an Institute, is at the crossroads and the Ministry and ONGC along with the Institute need to take immediate steps to ensure a value-added evolution of IPSHEM as an Institute par excellence. The Committee desire that various issues plaguing the Institute are to be identified such as lack of facilities, development of Curriculum in-tune with the requirements, advance training/teaching modules, lack of required resources and grievances related to/as stated by the participants from time to time. The Committee would like the Ministry and ONGC to initiate steps to develop a time bound 'Action Plan' based on the suggestions derived from the findings on the aforementioned issues and determine its goals, objectives and targeted plan of action to address the same. To this extent, more pressing and crucial issues could be prioritized for better outcomes. The Committee also recommend that IPSHEM should also work out the viability of seeking support and liaise with other International Institutes of repute to imbibe the latest and futuristic methods of research, training and teaching through signing of Memorandum of Understanding (MOUs) at both, Institute and Government level.

25. The Committee further opine that the Ministry and ONGC should initiate affirmative action and follow up on the suggestions of the Committee and determine the effectiveness of the steps taken on the aforementioned issues along with an assessment of any required further action. The committee are of the view that addressing the issues and recommendations pointed out by the Committee requires a combination of research, planning and persistent effort, so that positive and tangible changes could be ensured in a timely manner. The committee would also like the Ministry to share with them a comprehensive Report detailing the steps initiated in this regard within three months of the presentation of the Report.

*Issues pertaining to the Training Courses, Faculty, Infrastructure, etc.*

26. The Committee note that there are 13 Institutes including IPSHEM under the aegis of ONGC, which provide support including financial, logistics and human resources for their smooth functioning. Further, IPSHEM provides training to the employees/personals of ONGC as per the its stated mandate. IPSHEM also provides HSE and fire fighting training to other National Companies, viz., the Gas Authority of India Limited (GAIL), Oil India Limited, Reliance Oil, Bharat Petroleum Corporation Limited (BPCL), Indian Oil Corporation Limited (IOCL), Hindustan Petroleum Corporation Limited (HPCL) and International Companies, viz., Total Gas, ROSNEFT, etc., including oil and gas upstream as well as downstream Companies and other Industries like the Aviation Sector.



27. The Committee further note that the faculty for the HSE and fire fighting training courses includes in-house subject experts as well as former ONGC personnel. Also, with regard to some specialized training courses, domain experts from other Industries are engaged as faculty member. The Committee are of the view that although, IPSHEM has covered appreciable milestones, yet there appears to be sufficient scope for improvement. The Committee, therefore, recommend that with regard to the issues pertaining to the training courses and curriculum, there is a need to routinely update the course content to keep up with the Industry trends and technological advancements, while involving industry experts in the development of the curriculum and its delivery to ensure practical relevance of the courses and research, etc. The Committee, therefore, suggest that there is a need to provide practical training opportunities such as internship and project-based learning to enable the trainees/personnel to bridge the gap between theory and practice and ensure the relevance of the courses. Further, there is a need to evaluate the effectiveness of such training courses through continuous feedback from the trainees, faculty, industry partners and organizations, both National and International.

28. In this backdrop, the Committee are of the considered view that with regard to the faculty, IPSHEM needs to engage, recruit and retain qualified and experienced faculty members and also to encourage them to pursue research and professional development opportunities to enhance their knowledge and skills. The Committee desire that appropriate provisions be made for regular training and workshops to help the faculty members improve their teaching

methodology along with fostering a culture of collaboration and teamwork to promote inter-disciplinary learning. The Committee feel that the issue of infrastructure and its gradual expansion is crucial for any Government Institute. The Committee, therefore, desire that the Ministry and ONGC, through a meticulously calibrated financial provision, ensure that state of the art equipment and technology be provided to help the trainees/personals, etc., with hands on learning experience along with adequate facilities such as Lecture Theaters, Laboratories, Reading Rooms and Recreational Areas to enhance their awareness. The Committee would also like the ONGC to form a 'Supervisory Committee' under a Senior Functionary to regularly assess the requirements of the Institute for upgrading the infrastructure to meet the emerging needs and requirements of the Institute. Further, the Committee are of the considered view that a collaborative approach involving all the stakeholders such as Trainee Personnel, Faculty, Industry Partners and Supervisory Management (i.e., ONGC) can help to regularly identify and address issues pertaining to the training courses, faculty and infrastructure to ensure the transformation of this valuable Institute as a premier Entity for promoting safety, occupational health and environment practices and standards in Petroleum Sector. The Committee would like to be apprised of the necessary steps taken/proposed to be taken in regard within three months from the date of presentation of this Report to the House.

NEW DELHI;

HARISH DWIVEDI  
*Chairperson,*  
*Committee on Petitions*

23 March, 2023  
02 Chaitra, 1945 (Saka)