THIRTY-NINTH REPORT COMMITTEE ON PETITIONS

(SEVENTEENTH LOK SABHA)

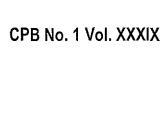
MINISTRY OF PETROLEUM & NATURAL GAS

(Presented to Lok Sabha on 13.12.2022)



LOK SABHA SECRETARIAT NEW DELHI

December, 2022/Agrahayana, 1944 (Saka)



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COMPOSITION OF THE COMMITTEE ON PETITIONS

Shri Harish Dwivedi -

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- 3. Shri Hanuman Beniwal
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Additional Secretary

2. Shri Raju Srivastava

Director

3. Shri Tenzin Gyaltsen

Deputy Secretary

THIRTY-NINTH 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 Thirty-Ninth Report (Seventeenth Lok Sabha) of the Committee to the House on the representation of Shri Vikram regarding need for employing specialised personnel by the Oil & Natural Gas Corporation Limited (ONGC) to adhere to Environmental Laws as well as effective liaisoning with the Indian Meteorological Department (IMD)/Coast Guard.
- 2. The Committee considered and adopted the draft Thirty-Ninth Report at their sitting held on 12 December, 2022.
- 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.

<u>12 December, 2022</u> 21 Agrahayana, 1944 (Saka)

COMMENT REPORT

REPRESENTATION FROM SHRI VIKRAM REGARDING NEED FOR EMPLOYING SPECIALISED PERSONNEL BY THE OIL & NATURAL GAS CORPORATION LIMITED (ONGC) TO ADHERE TO ENVIRONMENTAL LAWS AS WELL AS EFFECTIVE LIAISONING WITH THE INDIAN METEOROLOGICAL DEPARTMENT (IMD)/COAST GUARD.

Shri Vikram had submitted a representation dated 05.06.2022 before the Committee on Petitions regarding need for employing specialised personnel by the Oil & Natural Gas Corporation Limited (ONGC) to adhere to Environmental Laws as well as effective liaisoning with the Indian Meteorological Department (IMD)/Coast Guard.

- 2. The representationist, in his representation, *inter-alia* stated that an incident which occurred on May 2021 during the cyclone Tauktae, shook the entire operations as well as reputation of ONGC. Consequently, a total of 86 personnel lost their lives due to sinking of vessels deployed for ONGC projects. Therefore, to enquire into the sequence of events leading to the stranding of vessels and the accident, the Government of India had constituted a High Level Committee. In addition to the above, another two-member Committee consisting of Director General (Shipping) and Additional Secretary (Exploration), Ministry of Petroleum and Natural Gas had been constituted to look into the reforms required in terms and conditions for hiring vessels and suggesting amendments, if required. The above gruesome incident has the following three dimensions:-
 - (i) Untimely death of 86 personnel.
 - (ii) Constitution of a High Level Committee to ascertain the reasons for sinking of the vessel.
 - (iii) Re-visiting the term and conditions of hiring of vessels.



- 3. After this unfortunate incident, ONGC has also claimed to have taken the following measures to avoid recurrence of such incidents:-
 - (i) Arrangement with DG (Meteorology), Indian Metrological Department (IMD) for providing weather forecasts specific to their fields in offshore.
 - (ii) Single point Authority, Marine Cell has been created for vessel information, management and safety related to marine operations.
 - (iii) Revision of SOP (Standard Operating Procedure), ERP (Emergency Response Plan) and DMP (Disaster Management Plan) to suitably address severe Cyclone Emergency Response.
 - (iv) Benchmarking of Health, Safety and Environment practices through a Consultant of international repute.
- 4. The representationist has mentioned that the accident happened on May, 2021 but the findings of the High-Level Committee is still not available in public domain. In addition to this, the outcome of two-member Committee constituted to look into the reforms required regarding the terms and conditions for hiring vessels and suggesting amendments is also not known to anybody. ONGC has not disclosed the outcome of various measures taken by them to avoid recurrence of such incidents and therefore such delay on part of ONGC reflects poorly on the seriousness of ONGC to deal with and avoid such future occurrences. The representationist further draws attention to an another accident which occurred on 28 June, 2022, whereas a brand new Pawan Hans Chopper with nine people on board crashed into the Arabian Sea, about 50 nautical miles from the Mumbai coast, killing four persons including three ONGC employees including the fourth person who was employed by a Contractor working for ONGC. The representationist alleged that had the ONGC formulated

and timely implemented the action plan, this accident could have been avoided. He further opines that the ONGC should immediately review their functioning alongwith their policy of hiring of Contractors for their operations. As far as the violation of Environment norms by ONGC is concerned, the representationist has pointed out that an application alleging violation of certain environmental norms by ONGC in Krishna Godavari (KG) Basin has been filed before the National Green Tribunal (NGT), Chennai. Pursuant to this, the NGT constituted a Joint Committee to inspect the area and submit a report, which has since been submitted. However, the action taken by ONGC on this report has also not been made public by the ONGC. In view of the foregoing, a visible slackness appears to have been set in across the top Management of ONGC, due to which not only the precious resources are being wasted but also precious lives have been lost. The representationist has therefore requested to look in the matter by examining aforementioned issues raised in his representation directing ONGC to formulate such policies on professional lines so as to avoid such incidents in future.

- 5. The Committee on Petitions (Sixteenth Lok Sabha) took up the representation of Shri Vikram 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 in the representation and also, a detailed List of Points was also forwarded to the Ministry of Petroleum and Natural Gas for furnishing their appropriate replies in the matter.
- 6. In order to have realistic assessment of the issues/points raised in the representation of Shri Vikram, the Committee undertook an on-the-spot study Visit to Kochi on 14 September, 2022. During the said Study Visit, the Committee also held informal discussion with the representative of the Ministry of Petroleum & Natural Gas and Oil and Natural Gas Corporation (ONGC).

7. The Committee desired to know the major initiatives taken by ONGC to strengthen the preparedness and response against such unprecedented emergencies like Tauktae incident. The Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

(i) Weather and Cyclone Forecast

- (a) MOU has been signed between DGH, IMD, INCOIS, DGS, ICG and OISD for providing cyclone forecasts to E&P companies. Accordingly, ONGC has been receiving cyclone warning and weather forecasts regularly. This is in addition to the contract with 'Skymet' for getting weather/ cyclone forecasts. The forecasts are shared with stakeholders for timely preparedness and action.
- (b) IMD has provided training to nearly 250 key personnel in Western and Eastern offshore on familiarizing on basic terms and terminologies associated with cyclonic disturbances, monitoring and forecasting aspects, forecasts and warning provided by IMD for effective weather monitoring and cyclonic conditions.

(ii) ERP (Emergency Response Plan)

- (a) ERP have been updated which include actions to be taken immediately on prediction of cyclone and Pre-emptive actions. ERP focusses on personnel safety and is binding on all vessels/ barges/ tankers and fixed installations.
- (b) Risk analysis is carried out by the authorities at installations and barges/tankers. For the purpose of joint risk analysis authority rests with Installation Manager, Surface Area Manager, Surface Manager based on the level of risk perception. Based on the weather forecast of deep

depression/ cyclone, the action is taken on the worst case scenario, accordingly, all barges are asked to leave for safe water and their movement to safe water will be monitored on VATMS (Vessel and Air Traffic Management System).

- (iii) Regular drills are being carried out to check the efficacy of ERPs and RCP (Regional Contingency Plan).
- (iv) Emergency Response Team (ERT) consisting of officers from different disciplines has been identified who shall assess the situation and assist the chief emergency coordinator, i.e. Senior most Offshore Asset Manager activates the ERT.
- (v) Adequate number of Anchor Handling Tugs (AHTs) and Emergency Towing Vessel (ETVs) of required capacity are made available in the field for emergency situations. Approved towing plan for nonpropelled barges are being checked by barge audits.
- (vi) Marine Cell carries out pre-deployment inspection of all types of marine spread. Observations found are conveyed to user section and verification inspections are carried out to check compliance. Vessels are deployed only after clearance from Marine Cell. Marine cell also vets Technical Specifications of vessels for hiring. On-board HSE inspections/drills are being carried out.
- (vii) LSTK contractors engage resources (Master Mariner/Marine Expert etc.) having competency in areas such as selection, operation, monitoring and emergency response of the marine spread in line with DG shipping requirement.
- (viii) Weather limiting conditions for suspending operations have been incorporated in the revised Marine Operations Manual. Limiting conditions for barge withdrawal are covered under Installation/Rig specific ERP of adverse weather. Vessels have their own ISM

- (international safety management) procedures in the Marine Operations Manual limiting conditions for safe operations.
- (ix) Disaster Management Plans/Regional Contingency Plans have been updated. Communication channels, mechanism, control rooms, escalation levels etc. have been identified. Contact Points of Control Room namely DGCOMM, Indian Navy, Indian Coast Guard, ONGC/DGH and their escalation are being regularly updated and circulated to all. Any advisory/alert issued by weather agency, Navy, Coast Guard, DGCOMM (DG Comm Centre) are communicated to all installations and vessels for timely action. Advisories are also shared with other agencies.
- (x) ICG (Indian Coast Guards)/ MRCC (Maritime Rescue Coordination Centre) are the nodal executing agency to deal with cyclonic emergency situations at sea, including for pre-emptive measure required in case of Cyclones and Tsunamis.
- (xi) DGS (DG Shipping)/DG Communication Centre are the focal point for coordination amongst various authorities, agencies, and stakeholders in case of any emergency situation at sea.
- (xii) CDMP has been thoroughly revised incorporating the DMP- 2020 of Ministry of Petroleum and Natural Gas (MoPNG), National Disaster Management Plan- 2019, MoPNG Guidelines issued on COVID-19, MoPNG Guidelines issued after Cyclone- Tauktae, recommendations by High Level Committee on Tauktae cyclone incident.
- (xiii) Work is in progress under Project Parivartan, for ensuring that risk based contractor management system is fully embedded into the Project Management. This shall include checklists/ formats for inclusion of HSE parameters for contractor evaluation. Objective Procedure for Contractor evaluation shall be developed and made

part of the bidding document. Uniform guidelines, for ONGC and its associated subsidiaries/operating Units, are being finalized for developing and documenting bidding documents.

- (xiv) The referred helicopter incident happened on 28th June, 2022. Regional Contingency Plan (RCP) was immediately activated. Offshore Defense Advisory Group (ODAG) and Maritime Rescue Coordination Centre (MRCC) were informed by ONGC Radio Room and support from Indian Coast Guard and Indian Navy was sought under RCP. With swift response and action all 9 personnel were rescued swiftly. ONGC is taking requisite measures for the safety of personnel involved in offshore operations.
- (xv) Regarding KG Basin, ONGC submitted its response to National Green Tribunal, Southern Zone, Chennai in response to report (dated 24.03.2022) of Joint committee. Submission includes response as well as action taken. The Judgement of the Tribunal has been pronounced on 02.08.2022 and the same is under examination, in ONGC, before taking the next course of action after due consultation with Additional Solicitor General of India, Southern Zone, Chennai. Judgment is available to public in the NGT site.
- (xv) ONGC management provides highest priority to the HSE related issues. Through the proactive leadership by management, overall accident numbers have decreased over years. Following measures have been taken to strengthen the HSE management system of ONGC:-
 - (a) A resilient Health, Safety and Environmental (HSE) Management System, based on ISO 9001, ISO 45001 and ISO 14001, is in place.
 - (b) Safety studies like Hazard Identification (HAZID), Hazard Operability (HAZOP), Qualitative/ Quantitative Risk

Assessment (QRA) and Safety Integrity Level (SIL) are conducted at inception stage. All relevant National & International standards & codes are complied with.

- (c) The hazards associated with each operational activity have been objectively identified, quantified and documented in risk register. Based on which site specific safe working practices/management plans are developed and implemented.
- (d) Internal Safety Audits (ISAs) are conducted at regular intervals. In addition Oil Industry Safety Directorate (OISD) and Directorate General of Mines Safety (DGMS) conduct regular audits/inspections. Audit observations are compiled on priority.
- (e) Standard Operating Procedures (SOP) are available for all the operations, covering HSE compliance, inspection, health monitoring & control, preventive maintenance and repair procedure, emergency / abnormal operation procedure, etc.
- (f) Site specific Emergency Response Plans are available. Efficacy of the emergency response and resources is regularly checked through regular mock drills.
- (g) All jobs are carried out after conducting Job Safety Analysis (JSA) and Tool Box Talk (TBT) before start of work in every shift.
- (h) ONGC has implemented Ten Safety Rules, since 2016, which are followed by all employees and contractual workforce. Regular awareness programs are held to ensure strict adherence to these Rules.
- (i) To further strengthen its safety management system and safety culture, ONGC has taken proactive step of engaging

an expert consultant M/s DNV GL Pvt. Ltd., for Safety Management Assessment. The project is being implemented all across the organization. Project Parivartan has been launched by CMD, ONGC for monitoring of the implementation of recommendations of the consultant, for improving safety culture and safety performance of the organization, in time bound manner.

8. On being asked to furnish a brief note on the safety standards formulated by the Oil Industry Safety Directorate (OISD), clearly highlighting the revised safety standards *vis-a-vis* earlier safety standards, the Ministry of Petroleum and Natural Gas and ONGC, in a written reply, submitted:-

Oil Industry Safety Directorate (OISD) has developed 120 standards for the oil and gas industry till date and these standards are periodically reviewed through a participation process. Revision/ formation of these standards involves pooling of knowledge and experience of the industry/ stakeholder coupled with latest advancements, new/ change regulations. as well lessons learnt from incident. Revision of OISD standard is undertaken by the functional committee of experts from oil & gas industry. This process is coordinated by OISD. Revised document is reviewed by a committee of Directors at OISD and then web hosted/ mailed for comments from Public/ Professional bodies/ industry. Suggestions received are reviewed by functional committee for incorporation in the draft document. This revised document is then adopted by the Steering Committee comprising of Principal Panelists from entire spectrum of Oil & Gas industry and then finally circulated to Safety Council, a council chaired by Secretary PNG including other members (Additional Secretary/ Joint Secretary) from Ministry of Petroleum and Natural Gas(MoP&NG). CEO of oil & gas industry, regulators and OISD for approval.

The details of these standards including revision status are placed in below:-

S	I. OISD o. Standard No.	Standard Name	First Edition	Current Edition in vogue	Remarks
	OISD-STD-105	Work Permit System	Feb, 1988	Sep, 2004	Under Revision
	OISD-STD-106	Pressure Relief & Disposal System	Nov, 1988	Oct, 2010	
		Recommended Practices on Oil Storage and Handling	Jul, 1997	Jul, 1997	Under Revision
-	OISD-STD-109	Process Design and Operating Philosophies on Blow Down & sewer system	Nov, 1988	Jan, 2015	
\Box	OISD-RP-110	Recommended Practices on Static Electricity	Aug, 1990	Oct, 2018	
		Process Design & Operating Philosophies on Fired Process Furnace	Mar, 1989	Apr, 2016	
	OISD-STD-112	Safe Handling of Air Hydrocarbon Mixtures & Pyrophoric Substances	1989	Aug, 2019	
	OISD-STD-113	Classification of Area for Electrical Installations at Hydrocarbon Processing & Handling Facilities	Sep, 1996	Oct, 2013	
	OISD-STD-114	Safe Handling of Hazardous Chemicals	Jul, 1998	Oct, 2010	
1		Guidelines on Fire Fighting Equipment and Appliances in Petroleum Industry	Jul, 2000	Jul, 2000	Under Revision
1	1 OISD-STD-116	Fire Protection Facilities for Petroleum Refineries and Oil/Gas Processing Plants	Mar, 1991	Oct, 2017	
1	2 OISD-STD-117	Fire Protection Facilities for Petroleum Depots, Terminals, Pipeline Installations & Lube oil installations	Aug, 2007	Sep, 2017	
_1	3 OISD-STD-118	Layouts for Oil and Gas Installations	Nov, 1988	Jul, 2008	Under Revision
1		Selection, Operation and Maintenance of Pumps	Jul, 1990	Jul, 2008	Under Revision
1		Selection, Operation and Maintenance of Compressors	Jan, 1990	Jul, 2008	Under Revision
1	6 OISD-STD-121	Selection, Operation Inspection & Maintenance of Steam & Gas Turbines	Jan, 1990	Oct, 2010	Under Revision
1	7 OISD-RP-122	Selection, Operation and Maintenance of Fans, Blowers, Gear Boxes, Agitators & Mixers	Jan, 1990	Jul, 2008	Under Revision
1		Selection, Operation and Maintenance of Rotary Equipment Components	Jan, 1990	Jul, 2008	Under Revision
1		Predictive Maintenance Practices	Mar, 1990	 	Under Revision
2		Inspection & Maintenance of Mechanical Seals	Jul, 1990	Aug, 2007	Under Revision
2		Specific practices for installations and maintenance of Rotating Equipment	Aug, 1990	Aug, 2007	Under Revision
2		Selection, Operation, Inspection & Maintenance of Diesel Engines	Oct, 2010	Oct, 2010	Under Revision
2		Inspection of Unfired Pressure Vessels	Nov, 1988	Oct, 2010	Under Revision
2		Inspection of Storage Tanks	Nov, 1988	Nov, 2006	Under Revision
2		Inspection of Piping Systems	Nov, 1988	Jul, 2008	
2		Inspection of Boilers	Apr, 1990	Aug, 2019	
2		Inspection of Pressure Relieving devices	Nov, 1990	Jul, 2012	
2		Inspection of Fired Heaters	Nov, 1990	Apr, 2016	
3		Inspection of Heat Exchangers Inspection of Loading & Unloading hoses for Petroleum Products	Mar, 1990 Feb, 1996	Oct, 2010 Sep, 2021	
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32	OISD-STD-139	Design, Construction, Inspection & Maintenance of Offshore Pipelines and Facilities & Requirements of Deep Water Pipelines		Oct, 2017	
33	OISD-STD-140	Inspection of jetty pipelines	Aug, 2000	Aug, 2019	
34		Design and Construction requirements for cross country liquid hydrocarbon pipelines	Apr, 1990	Jul, 2012	Under Revision
35	OISD-STD-142	Inspection of firefighting equipments and systems	Feb, 1996	Feb, 1996	Under Revision
36	OISD-STD-144	Liquefied Petroleum Gas (LPG) Installations	Apr, 1994	Oct, 2017	
37	OISD-STD-145	Internal Safety Audits	Jul, 1995	Sep, 2021	•
38		Preservation of idle electrical equipment	Oct, 1993	Aug, 2000	Under Revision
39		Inspection & safe practices during electrical installations	Oct, 1993	Oct, 2002	Under Revision
40	OISD-RP-148	Inspection & safe practices during overhauling electrical equipment	Oct, 1993	Aug, 2000	Under Revision
41	OISD-RP-149	Design aspects for safety in electrical systems	Feb, 1996	Oct, 2013	
42	OISD-STD-150	Design and Safety Requirements For Liquefied Petroleum Gas Mounded Storage Facility	Aug, 2000	Sep, 2021	
43	OISD-STD-151	Safety in Design, Fabrication and Fittings Propane Tank Trucks	Jul, 1999	Oct, 2018	
44	OISD-STD-152	Safety Instrumentation for Process System in Hydrocarbon Industry		Oct, 2010	Under Revision
45		Maintenance & inspection of safety instrumentation in hydrocarbon industry	Mar, 1993	Jan, 2015	
46	OISD-STD-154	Safety aspects in Functional Training	Oct, 1993	Sep, 2001	Under Revision
47		Personal protective equipments	Jul, 1995	Sep, 2021	
48		Fire Protection Facilities for Ports Handling	Jan, 1992	Oct, 2017	
	-	Hydrocarbons	·	•	-
49		Safety in Transportation of Bulk Petroleum Products (Rail and Road)	Sep, 1996	Aug, 2019	
50		Recommended Practices on Storage and Handling of Bulk Liquefied Petroleum Gas	Jul, 1997	Aug, 2000	
51		LPG Tank Trucks - Requirements of Safety on Design/Fabrication & Fittings	Jul, 1997	Oct, 2018	
52	OISD-GDN-161	LPG Tank Truck Incidents Rescue & Relief Operations	Aug, 1993	Oct, 2018	
53		Safety in installation and maintenance of LPG Cylinders Manifold	Jul, 1995	Oct, 2018	
54		Safety of Control Room in Hydrocarbon industry	Sep, 2001 (Amended Edilion)	Sep, 2004	Under Revision
55	OISD-STD-164	Fire Proofing of Steel Supporting Structures in Oil & Gas Industry	Jul, 1998	Jul, 2012	
56	OISD-GDN-165	Guidelines for Rescue & Relief Operations for POL Tank Truck Accident	Jul, 1999	Jul, 1999	Under Revision
57	OISD-GDN-166	Guidelines for Occupational Health Monitoring in Oil and Gas İndustry		Jul, 2012	•
58		POL Tank lorry Design & Safety	Jul, 1997	Aug, 2019	
59	OISD-GDN-168	Emergency Preparedness Plan for Marketing Locations of Oil Industry	Jul, 1997	Jul, 1997	Under Revision
60	OISD-GDN-169	OISD Guidelines on Small LPG Bottling Plants (Design and Fire Protection facilities)	Sep, 1993	Oct, 2017	
61		Inspection, Maintenance, Repairs & Rehabilitation of Foundations & Structures	Jul, 1997	Jul, 1997	

62	OISD-STD-171	Preservation of Idle Static & Rotary Mechanical Equipment	Jul, 1998	Jul, 1998	
63	OISD-STD-173	Fire Prevention and Protection System for Electrical Installations	Jul, 1998	Oct, 2017	
64	OISD-RP-174	Well Control	1998	Apr, 2016	Under Revision
65	OISD-STD-175	Cementing Operations	1999	Jan, 2015	
66		Safety Health & Environment Training for Exploration & Production (Upstream) Personnel	Sep, 1996	Sep, 2003	Under Revision
67	OISD-STD-177	Inspection and Maintenance of Insulation Systems	Jun, 1998	Sep, 2021	
68	OISD-GDN-178	Guidelines on Management of Change	Jul, 1999	Jul, 1999	Under Revision
69	OISD-STD-179	Safety Requirements on Compression, Storage, Handling & Refueling Of Natural Gas (CNG) For Use In Automotive Sector.	Jul, 1998	Apr, 2016	
70	OISD-GDN-180	Lightning Protection	Jul, 1999	Oct, 2018	
71	OISD-STD-181	Geophysical Operations	1999	Oct, 2010	Under Revision
72	OISD-GDN-182	Safe Practices for Workover and Well Stimulation Operations	2000	Oct, 2018	-
73	OISD-STD-183	Standard on Logging Operations	June, 1999	Oct, 2013	
74		Standard on Life Saving Appliances	Aug, 2000	Sep, 2021	
75		Wire Line Operations	Aug, 2002	Aug, 2002	
76	OISD-GDN-186	Simultaneous Operations in E&P Industry	2000	Aug, 2008	Under Revision
77	OISD-STD-187	Care and Use of Wire Rope	Aug, 2000	Aug, 2000	Under Revision
78	OISD-STD-188	Corrosion Monitoring and Control of Offshore & Onshore Pipelines	Aug, 2000	Aug, 2019	
79		Standard On Fire Fighting Equipment for Drilling Rigs, Work Over Rigs And Production Installations	Aug, 2000	Jul, 2012	Under Revision
80	OISD-STD-190	Safety in Derrick Floor Operations (Onshore and Offshore Drilling Rigs)	Aug, 2000	Jan, 2015	Under Revision
81	OISD-STD-191	Oil Field Explosive Safety	Aug, 2000	Oct, 2017	
82	OISD-GDN-192	Safety Practices during Construction	Jul, 2000	Apr, 2016	
83	OISD-GDN-193	Guidelines for Gas Lift Operations & Maintenance	Sep, 2001	Sep, 2001	
84	OISD-STD-194	Standard for Unloading, Storage and Regasification of Liquefied Natural Gas (LNG)	Aug, 2000	Apr, 2016	
85	OISD-STD-195	Safety in Design, Operation, Inspection and Maintenance of Hydrocarbon Gas Compressor Stations and Terminals	Sep, 2001	Sep, 2001	
86	OISD-GDN-196	Guidelines for Seeking Environmental Clearance of Development Projects in Petroleum Industry	Sep, 2001	Sep, 2001	Under Revision
87	OISD-GDN-197	Guidelines for Environmental Impact Assessment	Sep, 2001	Sep, 2001	Under Revision
88	OISD-GDN-200	Guidelines For Preparation of Oil Spill Response Contingency Plan	Oct, 2002 (Amended Edition)	Oct, 2002	Under Revision
89		Environment Management in E&P Sector .	2001	Jul, 2008	Under Revision
90		Field Inspection of Drilling & Work-over Rig Mast, Substructure & Rig Equipment	2002	Jan, 2015	
91		Operation, Maintenance & Inspection of Hoisting Equipment	Sep, 2003	Sep, 2003	
92		Medical Requirements, Emergency Evacuation and Facilities (for Upstream)	Sep, 2001	Sep, 2001	Under Revision
93		Recommended Practices for Crane Operation, Maintenance & Testing (for Upstream)	Oct, 2002	Aug, 2019	
94	OISD-GDN-206	Guidelines on Safety Management System in	Sep, 2001	Sep, 2001	Under Revision

		Petroleum Industry			1
95	OISD-GDN-207	Contractor Safety	Oct, 2002	Apr, 2016	
96	OISD-STD-210	Storage, Handling and Refueling of LPG for automotive use	Oct, 2002	Oct, 2010	Under Revision
97	OISD-GDN-211	Safety in Petroleum Laboratories	Sep, 2003	Aug, 2019	
98	OISD-STD-214	Cross Country LPG Pipelines	Oct, 2006	Oct, 2013	Under Revision
99		Electrical Safety in Onshore Drilling & Workover Rigs	Sep, 2007	Jan, 2015	
100		Guidelines For Safe Rig- Up & Rig- Down of Drilling And Work-Over Rigs	Oct, 2004	Oct, 2004	
101		Guidelines on Field Inspection, Handling & Testing of Casing Pipe & Tubing	Oct, 2004	Oct, 2004	
102	OISD-GDN-224	Monitoring & Control of Volatile Organic Compounds Emission	Nov, 2006	Nov, 2006	Under Revision
103		Storage, Handling & Dispensing at Petroleum Retail Outlets		Oct, 2010	
104	_	Natural Gas Transmission Pipelines and City Gas Distribution Networks	Aug, 2007	Oct, 2013	Under Revision
105	OISD-GDN-227	Emergency Response and Preparedness in E&P Industry	Aug, 2007	Aug, 2007	Under Revision
106		Selection, Training & Placement of Fire Operators in Hydrocarbon & Petrochemical Industry	Jul, 2008	Jul, 2008	
107	OISD-STD-230	Unlined Underground Rock Cavern Storage for Petroleum & Liquefied Petroleum Gas	Jul, 2008	Sep, 2021	
108	OISD-STD-231	Sucker Rod Pumping Units	Jul, 2008	Jul, 2008	
109		Identification of hazards and control measures in E&P industry	Oct, 2013	Oct, 2013	
110	OISD-GDN-233	Guidelines on inspection of non-piggable pipelines.	Oct, 2013	Oct, 2013	
111		Electrical Safety in Onshore Production Installations in E&P Sector	Jan, 2015	Jan, 2015.	
112		Storage, Handling, Refuelling and Firefighting at aviation fuelling stations	Jan, 2015 -	Jan, 2015	Under Revision
113		Design, Layout, Operation & Maintenance of Refrigerated LPG Storage	Dec, 2014	Feb, 2014	
114	OISD-STD-237	Layout, Design consideration, Safety, Operation and Maintenance of Lube/ Grease manufacturing and filling plants	Jan, 2015	Jan, 2015	
115	OISD-RP-238	Well Integrity	Apr, 2016	Apr, 2016	
116	OISD-GDN-239	Guidelines On Annular Casing Pressure Management For Onshore Wells	Mar, 2016	Mar, 2016	
117	OISD-RP-242	Drilling and Testing of HPHT Wells	Sep, 2021	Sep, 2021	
118		Recommended Practices on Coal based Methane (CBM) operations	Oct, 2018	Oct, 2018	
119	_	Storage and handling of Petroleum Products at depots and terminals including standalone crude oil storage facilities		Jan, 2015	Under Revision
120	OISD-STD-245	Standard on safety for LNG bunkering facilities at ports for large ships, coastal shipping and inland water transport (IWT) terminals		Oct, 2018	

9. On the aspect of institutional mechanisms available with the ONGC to scrupulously follow all such standards and also to take suitable measures to ensure safety, the Ministry of Petroleum &Natural Gas and ONGC, in a written reply, submitted:-

The following details of mechanism are available with the ONGC to follow all such standards and also to take suitable measures to ensure safety:-

- (i) Compliance to OISD Standards and Audits
 - (a) In ONGC, relevant OISD standards/ guidelines are followed on onshore and offshore installations, rigs and pipelines, including design, operation and maintenance aspects.
 - (b) Pre-commissioning Safety Audits of newly built and modified facilities and regular External Safety Audits (ESA) of existing facilities are carried out by OISD.
 - (c) Consent to Operate for E&P Offshore Operations is also provided by OISD under the Petroleum & Natural Gas (Safety in Offshore Operations) Rules, 2008.
 - (d) The compliance are monitored at Asset level, corporate level as well as by the higher management.
 - (e) Director-I/c HSE(Health Safety and Environment) reviews the status of audit compliance in monthly review meetings of each Asset.
 - (f) Review meetings are also taken up specifically on OISD audit compliance by respective directorates.
 - (g) The compliance is also submitted regularly to the information of the Board.

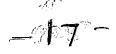
- (h) The status of OISD audit compliance is also deliberated in the Safety Council Meetings, chaired by Secretary, Ministry of Petroleum and Natural Gas.
- (ii) Measures taken to strengthen HSE

Following measures have been taken to strengthen the HSE management system of ONGC:-

- (a) A resilient Health, Safety and Environmental (HSE) Management System, based on ISO 9001, ISO 45001 and ISO 14001, is in place.
- (b) Best engineering practices have been incorporated in line with American Society of Mechanical Engineers (ASME), American Petroleum Institute (API), Deutsche Institute Fur Normung (DIN), National Fire Prevention Association (NFPA), Bureau of Indian Standards (BIS), OISD Standards, etc.
- (c) The hazards associated with each operational activity have been objectively identified, quantified and documented in risk register. Based on which site specific safe working practices / management plans are developed and implemented.
- (d) inspection, health monitoring & control, preventive maintenance and repair procedure, emergency / abnormal operation procedure, etc.
- (e) ONGC is having three tier system of handling the emergencies depending on the severity of events- (i) Site specific ERP (Emergency Response Plan), (ii) Offsite & Onsite DMP (Disaster Management Plan) for onshore and RCP (Regional Contingency Plan) for offshore, and iii) CDMP (Corporate Disaster Management Plan).

- (f) ONGC is having three tiered oil spill emergency response plan for mitigation and control of oil spill related emergencies in offshore areas.
- (g) Efficacy of the emergency response and resources is regularly checked through regular mock drills.
- (h) To ensure adequate safety critical barriers, ONGC has implemented a policy on Identification, Standardization, Maintenance and Monitoring of Safety Critical Equipment (SCE) which ensures engineering controls so that the risk due to Major Accident Hazards (MAHs) are minimized.
- (i) Bench-marking of all ONGC installations has been done in SAP on various HSE parameters by implementing HSE Index. It is an important measure of monitoring safety performance of Rigs/ Installations/ Plants and is a self-evaluation tool for providing a quantified status on the mapped HSE parameters.
- (j) PTW (Permit to Work) system ensures that the crew involved in specific jobs are aware of the specific hazards, necessary precautions have been taken, the work is being properly supervised, etc. The system has been made online as Electronic Permit to Work, which removes requirement of physical approvals, maintains system based checks & balances and eliminates possibility of bypass of procedures.
- (k) MOC (Management of Change) procedure is followed to address the risks associated with changes in any technical/ administrative/ operational procedure, process and system or any other change that may affect the safety. Online module of the MoC procedures is being implemented for effective compliance.

- (I) ONGC has implemented Stop work program for immediate action against any unsafe act or condition.
- (m) A robust system of accident/ incident management is in place which ensures that all accidents are investigated for root causes and remedial measures are undertaken to avoid their recurrence. It is also ensured that all accidents are timely reported and actions is taken against any personnel, if found responsible for the accident.
- (n) IT (Information Technology) enabled services are provided in Drilling, Workover, Production operations. All Daily Progress Reports (DPR) are uploaded in SAP system to ensure speedy decision making. SCADA (Supervisory Control and Data Acquisition) system is available for real time monitoring of operations.
- (o) Data analytics is done by capturing the data from SAP regarding accidents, near miss, audit observation compliance, mock drills, HSE index, etc. The analysis is correlated in various aspects, gaps are identified and action is taken on the areas of improvement. On the basis of such analysis, periodic reports are being published for awareness of all employees as well as secondary workforce.
- (p) IT based measures have been for enhancing the ease of access of HSE related information. The information is made available through ONGC's internal portal (ONGC Reports) as well as through dedicated HSE website and app. These can be anytime and anywhere by ONGC personnel.
- (q) Trainings, sensitization and awareness programs are held for all personnel, including secondary workforce, for enhancing the competency and skills. All the employees and secondary workforce have to undergo mandatory safety trainings



pertaining to their operations like Survival at Sea (SAS), Helicopter Underwater Egress Training (HUET), Mines Vocational training (MVT), Firefighting, first aid, well control courses of International Well Control Forum (IWCF) and International Association of Drilling Contractors (IADC), etc. All the entrants have to undergo mandatory safety trainings at the time of their induction. In addition, trainings like NEBOSH (National Examination Board in Occupational Safety) courses, Major Health Emergency Management Initial Response (MEMIR), Basic Disaster Management, Disaster Management and Resilience, etc., are also conducted.

- (r) Focused sensitization and awareness programs are being conducted, especially for field personnel, including ONGC and secondary workforce. Various safety issues such as Injuries, Hand/ Finger Injuries, Process Safety, Safety Alerts, case studies of previous incidents, etc. are covered in these workshops. Experts are also roped in for webinars and workshops, specific on various HSE topics. The participants include both ONGC employees and secondary workforce.
- 10. On a pertinent query as to whether the safety standards formulated by OISD are to be mandatorily implemented by all OMCs (including ONGC) and in case of any disagreement between OISD and OMCs regarding its implementation alongwith total time taken by them to resolve the impasse, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

The revision/ formation of OISD standards are undertaken by the functional committee of experts from oil and gas industry. The contents of the standard are finalised by the functional committee. Oil & gas industry including ONGC mandatorily complies with all applicable OISD standards/guidelines issued from time to time. OISD carries out regular safety audits to check and review whether the safety standards and norms are being followed by the industry as per the laid down OISD standards. All OISD

audit observations are complied in consensus with OISD. Further, the details of total fund utilization in HSE fund centre across ONGC during last five years is as under:-

Year	Amount (Rs. In crore)	
2017-18	137	
2018-19	131	
2019-20	147	
2020-21	127	
2021-22	157	***************************************

11. The Committee further desired to know the fact that as to whether the safety standards are invariably revised only after any accident takes place and if so, whether it is not prudent for the ONGC to periodically review the implementation of safety standards in principle to assess the preparedness as well as pointing out the deficiencies, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

The revision/formation of standards is coupled with latest advancements, new/change in regulations and lessons learnt from incident. Revision of safety standards is a regular process and being taken up by OISD as and when required. Currently, there are 46 standards which are under revision/formation stage. ONGC ensures that its standards and procedures are in sync with the changes, updations and revisions of standards/Guidelines of various statutory/regulatory/Competent Authorities, to further strengthen the safety systems of ONGC. The Standard Operating Procedure are suitably updated, field personnel are sensitized and implementation is also checked through audits and inspections.

12. On the aspect of a revised Disaster Management Plan (DMP) - 2021 visa-vis the earlier plan in terms of incorporating various provisions based on occurrence and steps required to avoid such incidents, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

Major changes incorporated in the DMP – 2021 are as follows:-

- (i) Organization should also consider IMD data for warnings apart from input provided by other forecasting agencies for cyclone classification and wind speed. Organization to consider the worst case forecasting scenario for initiating the action.
- (ii) Emergency Response and Disaster Management Plan (ERDMP) has been re-framed as "All the locations in the midstream and downstream oil and gas sector prepare the Emergency Response & Disaster Management Plans (ERDMPs) and get it certified through accredited agency as approved by the Petroleum & Natural Gas Regulatory Board (PNGRB). The location level ERDMP document is approved by the management and then submitted to PNGRB. The periodic review of ERDMP is also carried out by the industry."
- (iii) "Quantitative Risk Assessment (QRA) shall be done prior to construction of new facilities, major changes in existing facilities or once in every five years whichever is earlier" has been added in the QRA.
- (iv) "Hazard, Risk & Vulnerability Assessment shall be carried out in line with OISD-GDN-206 and requirement of PNGRB (Emergency Response & Disaster Management Plan, ERDMP) Regulations, 2010 and amendments thereof" has been included in the Hazard, Risk & Vulnerability assessment.
- (v) Resource database under chapter 5 (Preparedness and Response Capacity Building) has been included as under:

The Oil & Gas industry remain equipped with resources like specialized machines/ equipment heavy equipment, critical supply items, skilled human manpower etc. to fight disasters. Industry must share this data of available resources with respective District Authority in the prescribed formats for up-dation of India Disaster Resource Network (IDRN) database (https://idrn.nidm.gov.in/). The up-dation of this data bank shall facilitate deployment and pooling of such resources in case of any disaster in shortest possible time. Such resources can then be used anywhere in the country wherever need arises. District administration shall prepare the plan based on the data provided by the installation(s), to make the most effective use of combined resources to minimize loss of life, property, environment and to restore facilities at the earliest. As Section 135 of companies Act has been amended and Disaster Management has been included as one of the entries under schedule VII. CSR funds can be utilized for procurement of specialized equipment for fighting disaster.

Major report-able incidents to MoP&NG by all CPSUs has been modified as under:-

An incident shall be treated as major, if any of the following occurs and to be reported to MoP&NG:

- (i) Any incident of fire not extinguished in 15 minutes.
- (ii) Any incident on account of explosion/ blowout/ radioactive (leakage or loss).
- (iii) Any incident causing shutdown of operation(s) for more than eight hours.
- (iv) Any incident causing financial loss above Rs. 50 lakhs.

- (v) Any incident within unit/ installation premises leading to fatality(s).
- (v) Any incident within unit/ installation premises, leading to permanent loss of body part and/ or permanent disability.
- (vi) Any incident causing major loss of containment and having adverse impact outside the plant/ location premises including disaster defined under Section 2 (d) of DMP Act 2005.
- (vii) Cumulative lost time, due to incident (within unit/ installation premises) is more than 45 mandays.
- (xi) Any incident of road accidents (during transportation of petroleum products) resulting in fire/ explosions which in turn leads to fatality(s).

Additionally, any incident not covered above but which gets reported in the National media within 24 hours of the occurrence shall also be reported.

SOP for cyclone has been added as below:

- (i) All Crude and product vessels should be ensured to be away from the eye and track of Cyclone at a safe distance.
- (ii) Barges should also be moved to safe location/impounded docks.
- (iii) Unloading arms at jetty should be properly secured, so that no damage takes place.
- (iv) SPMs should be water flushed and secured.

- (v) Coordination with port authorities to be ensured and Loading/Unloading activities at jetty to be suspended.
- (vi) All project activities in the coastal and likely to be affected area should be suspended for the cyclone period and manpower must be moved to safe shelters.
- (vii) All actions will be taken to keep product tanks more than ½ filled in order to avoid damage to the tanks.
- (viii) External Floating Roof Vertical Tanks in Locations are having bypass conductors between roof and shell for lightening protection during cyclone/thunderstorm. Their connections to be re-checked as a precautionary measure.
- (ix) Ensure that doors and windows of buildings are closed & properly secured.
- (x) Securing all temporary structures/sheds, sheets, high mast, chain pulley blocks & HOT crane chains, scaffold structures etc to be ensured.
- (xi) All roof covers etc. of temporary sheds/ structures to be properly secured. To advise Construction group (if any) about the above.
- (xii) Lowering of Boom of all cranes, free from slings and hooks and shifting the crane at safe location.
- (xiii) All temporary connections (including Project, shutdown units/operating units/Tank M&I) to be removed and kept deenergized.
- (xiv) Tree pruning is to be resorted to in case of heavy growth of trees in and around operating area.

Drone attack has been added in the extraneous causes of security disaster in Threat and Vulnerability Assessment

13. On a pertinent query regarding the various 'Environmental Norms' to be followed by ONGC and whether all such relevant norms are being followed and adhered to by ONGC in their operations, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

ONGC complies with all applicable Acts and Rule/ Regulations to ensure that the environment impact of its activities is negligible and within stipulated parameters. Prior environment related clearances are taken from Ministry of Environment Forest and Climate Change, wherever applicable. Environment related Acts applicable to ONGC's operations are given below:-

- The Environment (Protection) Act, 1986 and the rules framed (i) under like Environment | (Protection) Rules. 1986. Environmental Impact Assessment Notification-2006, The Noise Pollution (Regulation and Control) Rules, Hazardous and Other Wastes (Management Transboundary Movement) Rules, 2016, The Solid Waste Management Rules, 2016, The e-Waste (Management) Rules, 2016.
- (ii) Water (Prevention and Control of Pollution) Act, 1974
- (iii) Air (Prevention and Control of Pollution) Act, 1981
- (iv) The Forest (Conservation) Act, 1980
- (v) The Wildlife Protection Act, 1972

(vi) Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

With regard to the litigations pending before Courts/Tribunals connected with violation of 'Environmental Norms' by ONGC a Total of 14 Cases pertaining to ONGC are pending before such Courts/Tribunals, etc.

14. The Committee further desired to know the policy being followed by ONGC for engagement of various Contractors in their operations alongwith the powers and instruments available with ONGC to timely contain such lackadaisical approach of contractors and effect of such punitive measures in averting accidents in the ONGC operations, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

Broadly following methods of tendering for hiring/ procurement of material and services are followed in ONGC:-

- (i) Government e-Marketplace (GeM): ONGC is using GeM portal for procurement of all types of goods and services.
- (ii) Open Tender Open tenders are invited for procurements valuing above ₹ 10 lacs.
- (iii) Limited Tenders Limited Tenders are invited for purchase upto ₹ 10 Lacs without constituting tender committee or if limited suppliers are available or if vendors for the category are empanelled.
- (iv) Procurement on Single Tender- For purchase of spares/proprietary nature of items from Original Equipment Suppliers (OEM)/ Original Equipment Suppliers (OES). Under exceptional circumstances procurement on nomination basis on single tender is undertaken to meet urgent operational requirement.

- (v) Purchase through Board of Officers –In exceptional circumstances when the materials/services/works are either required urgently to overcome an exigency or because firm/ detailed specifications cannot be framed
- (vi) For large projects work is awarded on LSTK (Lump Sum Turn Key) basis through ICB (International Competitive Bidding)/NCB (National Competitive Bidding). In LSTK mode of contract, entire responsibility of project completion in line with prescribed safety, environments and quality provision lies with the contractor.

HSE related instructions/guidelines have been well defined in ONGC tender documents. HSE during the execution of each Project, is governed by Project HSE Manual also called Project Bridging Document. For any and all services and the works by the Contractor or his sub-contractors, the Contractor shall accept full responsibility for compliance with all applicable laws, rules and regulations as amended from time to time. The project progress and compliances by the contractor are regularly monitored by ONGC. If a contractor willfully violates the safety instructions, environment-related guidelines, etc., in their operations, action is taken as per contract provisions. With respect to mechanism of imposition of various punitive measures, ONGC has following provisions in tender documents:

- (i) Failure and Termination Clause/Liquidated Damages Clause for delay in supplies/mobilization,
- (ii) Invocation of PBG (Performance Bank Guarantee) due to non-adherence of contractual provisions.
- (iii) Banning of business dealing with the erring firms.

The above mechanism has been found to be quite effective in averting accidents.

15. On being enquired by the Committee regarding the reasons leading to Barge PaPaa-305 accident as well as the Helicopter crash due to non-adherence of safety guidelines by some ONGC officials and irresponsible attitude of Contractors/vagaries of the weather, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

Accident of Barge Papaa-305, during cyclone Tauktae

- (i) The encountered phenomenon of abrupt shifting of cyclone path by about 100 NM was unparalleled and associated with highest recorded wind speed in Western offshore which gave little time to react. Based on the analysis of sequence of events that occurred post issuance of initial cyclone warning, ONGC took all necessary measures.
- (ii) During the time of the incident i.e. May 2021, there were 37 Barges and Support Vessels working under the ongoing LSTK contracts of or various construction activities. This Marine Spread included Accommodation Barges, Support Vessels, AHT, Crew Boats and Dumb Barges etc. On 13th May 2021, all the barges in the field were instructed by ONGC installations over radio communication to plan and move to safe location, in view of the impending cyclone.
- (iii) All the barges took action based on weather advisories and returned to/were on their way to sheltered waters except for one barge i.e Papaa-305.
- (iv) The Barge Master has the final authority for deciding the positioning of the Barge.

Helicopter Crash incident

- (i) Enquiry of the incident is being conducted by the AAIB (Aircraft Accident Investigation Bureau) to find out the root causes of the incident.
- (ii) DGCA issues guidelines/ rules for helicopter safety. All the Helicopter operators, under the contract of ONGC follow the guidelines. It is part of contract that helicopter operator shall follow all DGCA safety guidelines.
- (iii) As such, the helicopter operators providing the services are responsible for Helicopter safety.
- 16. On being enquired by the Committee regarding the disciplinary action against officials of ONGC with regard to the tragic accident of Barge PaPaa-305 during the cyclone Tauktae, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

Five officers were placed under suspension pending inquiry into the incident relating to Cyclone Tauktae. Three of these executives were of the level of E-9, i.e., Executive Director which is the highest level below Board. One executive was of E-7 level (Chief General Manager) and one of E-6 level (General Manager).

17. The Committee further desired to know that as to whether it was desirable for the ONGC to penalize their experienced officials in place of the Contractor with regard to the Barge Papaa-305 incident, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

The Tauktae cyclone phenomenon was of abrupt shifting of cyclone path by about 100 NM was unparalleled with highest recorded wind speed ever in Western offshore. ONGC took all necessary measures and communicated the requisite information pertaining to cyclone to all concerned.

- (i) On 13th May 2021, all the barges in the field were instructed by ONGC installations over radio communication to plan and move to safe location, in view of the impending cyclone.
- (ii) All the barges took action based on weather advisories and returned to/were on their way to sheltered waters except for one barge i.e Papaa-305.
- (iii) The Barge Master has the final authority for deciding the positioning of the Barge.

In this regard, ONGC had suspended five officials directly concerned with the handling of barge operations/drilling operations to enable conducting an impartial enquiry. The suspension was revoked later on as no responsibility on part of ONGC officials was found.

18. When the Committee enquired specifically regarding the renewed Health, Safety and Environmental (HSE) issues being given the highest priority in ONGC and the possibility of the same having a visible improvement on the safety and environmental aspects related to the overall operations of ONGC, the Ministry of Petroleum & Natural Gas and ONGC, in a written reply, submitted:-

ONGC is having three tier system of handling the emergencies depending on the severity of events- i) Site specific ERP (Emergency Response Plan), ii) Offsite & Onsite DMP (Disaster Management Plan) for onshore b) RCP (Regional Contingency Plan) for offshore and iii) CDMP (Corporate Disaster Management plan). Post cyclone Tauktae, CDMP (Corporate Disaster Management plan), ERP (Emergency Response Plan) and RCP (Regional Contingency Plan) for offshore have been revised as per need. In addition to the measures already being taken for strengthening the HSE management system of ONGC, proactive step has

been taken by ONGC in engaging an expert safety consultant, M/s DNV to implement Safety Management Assessment project. The consultant is required to assess the prevalent safety scenario of ONGC, find out gaps and implement measures for improvement. The main aim of the project is to develop a robust safety culture in the organization. The project is being implemented in three Phases. Phase-1 is already complete, in which an organization wide Safety Perception Survey was also conducted. The consultant has given several recommendations mapped in 8 strategic goals. The recommendations are being monitored and implemented through dedicated syndicates, constituent of Key Executives. In order to further ensure the time bound implementation of the project, "Project Parivartan" has been launched by CMD, ONGC. Phase-2 is underway with capacity and skill building workshops conducted/ being conducted for Key Executives, CMD and Directors, Senior Officers. Middle Management, Line Managers and Field Personnel.

OBSERVATIONS/RECOMMENDATIONS

<u>Initiatives to strengthen the preparedness and response against unprecedented situations and emergencies</u>

- 19. The Committee while meticulously examining the representation of Shri Vikram *inter alia* regarding the need for employing specialised personal *vis-a-vis* the comments furnished by the Ministry of Petroleum & Natural Gas and ONGC, note that an incident on May, 2021 during the cyclone Tauktae had severely impacted the entire operation along with the reputation of ONGC. Consequently, several personnel lost their lives due to sinking of vessels deployed for ONGC projects and due to lack of proper and timely measures during the cyclone Tauktae. The Committee further note that an inquiry was initiated leading to the constitution of a High Level Committee along with another Two-Member Committee which included DG (Shipping) and AS (Exploration) in the Ministry of Petroleum & Natural Gas, to ascertain the need for reforms related to the terms and condition governing hiring of vessels and also suggesting amendments and measures to avoid recurrence of such incidents, in future.
- 20. The Committee observe that ONGC claimed to have initiated various measures to mitigate and avoid such avoidable incidents in future. To this extent, ONGC have made arrangements with DG (Meteorology, IMD) towards providing weather forecast specific to their offshore fields along with creation of a 'Single Point Authority' Marine Cell for information

and management regarding vessels, including safety related to marine operations. The Committee further note that ONGC has also committed to revise the Standard Operating Procedures (SOPs), emergency response protocol and 'Disaster Management Plan' to effectively address timely cyclone emergency response. Further, steps such as benchmarking of health, safety and environment practices through a Consultant of international repute has also been set in motion.

21. The Committee note from the replies of ONGC that in the aftermath of Tauktae incident, ONGC has taken several measures with respect to the issues pertaining to the preparedness and response to such unprecedented emergencies. With regard to the issues pertaining to the weather and Cyclone forecast, an MOU has also been signed between Director General (Hydrocarbon) (DGH), IMD, Director General (Shipping) (DGS), Indian Coast Guard (ICG) and Oil Industry Safety Directorate (OISD) for providing cyclone forecast, which is shared with all the stakeholders for time bound preparedness and action. The Committee further note that the Indian Meteorological Department is also providing training to key officials/personnels to familiarize them with the basic issues associated with cyclonic disturbances, monitoring and forecasting alongside such other inputs provided by the IMD. With regard to the issue of proper response, an emergency response plan with special emphasis on pre-

emptive actions and prediction of cyclone for safety of all the personnels and assets involved has also been updated.

22. The Committee are constrained to note that only after the unfortunate and avoidable Tauktae incident, ONGC had initiated all the aforementioned steps to strengthen and secure the preparedness and response against such unprecedented emergencies. The Committee are of the view that a timely progress towards a comprehensive plan including steps to deal with such scenarios, ONGC's could have prevented the loss of precious lives and assets. The Committee feel that ONGC should immediately ensure a fool proof and step by step response mechanism to deal with any similar unprecedented emergency in future. The Committee urge the Ministry of Petroleum & Natural Gas and ONGC to come out with a comprehensive policy document which touches upon all issues with regard to cyclone forecasting, emergency response plan, risk analysis based on all emerging factors. The Committee would like to mention the importance of specific training of key officials/personnels along with regular drills to check and ensure proper efficacy of emergency response plan. To this extent, the Committee would like to recommend the establishment of well qualified emergency response teams and trained under the overall guidance of a personnel Chief Emergency Coordinator/Nodal Officer.

The Committee would also to like emphasis upon the importance of 23. an updated 'Disaster Management Plan' with separate priority on region specific contingency plans. The Committee also suggest establishing a proper and extensively laid out communication channel along with control rooms and well defined escalation levels. The Committee would specifically like to point out the importance of coordination during such scenarios and therefore, would like the Ministry of Petroleum & Natural Gas, Indian Navy, Indian Coast Guard and all other stakeholder agencies to conduct mock drills, etc., to effectively deal with such emergency situations at sea including pre-emptive measures required in case of cyclones and tsunamis. The Committee find it disconcerting that the work related to Project Parivartan is still under progress. The Committee therefore, stress upon the Ministry of Petroleum & Natural Gas along with ONGC to immediately resolve all issues to ensure that a 'Risk Based Contractor Management System' is fully embedded in the project management, which shall include all formats and checklist for inclusion under Heath Safety and Environmental (HSE) parameters for a proper contractor evaluation. The Committee also recommend that an objective procedure for contractor evaluation should be developed without fail and made a part of the bidding document. The Committee would therefore, like the Ministry of Petroleum & Natural Gas and ONGC to share the latest status of Project Parivartan with the Committee within three months of presentation of the report.

<u>Safety standard formulated by the Oil Industry Safety Directorate (OISD)</u> and institutional mechanism with ONGC

- 24. The Committee note that with respect to the issue of safety standards prevailing in Oil and Gas Industry, the Oil Industry Safety Directorate (OISD) assumes a position of prominence towards ensuring compliance of updated safety standards vis-a-vis the earlier standards. Further, several institutional mechanisms are also available with ONGC to follow all such updated standards along with suitable measures to ensure overall safety. The Committee observe from the perusal of replies furnished by ONGC that OISD has developed over 120 standards for the Oil and Gas Industry as of today, and such standards and guidelines are being periodically reviewed through pooling of knowledge and experience of all industry participants and stakeholders, which includes discussion comprising of latest advancements, new/changed regulations along with lessons learnt from the incidents. The Committee appreciate the fact that OISD has created sub-Groups covering the entire activities in Oil and Gas Industry overlaying a wide spectrum of undertakings, viz., exploration, production, pipelines marketing, environment engineering and refinery and gas processing.
- 25. The Committee note with concern that although ONGC has emphasized upon the timely and regular revision/formation of safety standards, the 'Tauktae Incident' points out at the shortcomings in the

process. Further, substantial issues are still lagging pertaining to regular and timely updation of respective Guidelines, as also the issue of their internalization within the industry and follow up in practice on a real time basis. The Committee are constrained to note that there are currently forty-six standards which are still under revision/formation stage. The Committee therefore, express their concern regarding the delay in updation of these forty-six Guidelines and are of the considered view that Ministry of Petroleum & Natural Gas and ONGC need to ensure immediate updation of these Guidelines.

26. The Committee, therefore, recommend that the Ministry of Petroleum & Natural Gas along with ONGC should resolve all pending issues and other road blocks pertaining to the functioning of OISD and its compliance. To this extent, the Committee urge the Government to effectively formulate, standardise and revise (whenever required), the Guidelines encompassing areas of operation and maintenance along with regular audits and continuous follow up of such audit action points. The Committee also desire that in the event of any accident/mishappening, the OISD, under the aegis of Ministry of Petroleum & Natural Gas, should analyse and investigate such incidents in a time bound manner and identify its root cause and formulate remedial Action Plan, so that such incidents are avoided in future. The Committee would like the Government and ONGC to share an action taken report on the issues pointed out in the

recommendation, especially related to the updation of OISD Guidelines within three months of the presentation of the report.

Review of Disaster Management Plan (DMP-2021) vis-à-vis the earlier Plan

- 27. The Committee note that the Disaster Management Plan (DMP-2021) has incorporated various new provisions and changes with regard to the earlier Plan based on some recent incidents. The Committee observe that the Oil and Gas Industry require resources like specialised machinery which includes heavy equipment along with critical supply items, skilled manpower, etc., to keep functioning smoothly and therefore, it becomes crucial to ensure safety of personals and assets involved in such processes. The Committee are of the view that such security coverage can only be ensured with a comprehensive and iron-clad Rules/Guidelines, that are mandated and followed in letter and spirit.
- 28. The Committee note that major changes incorporated in the revised DMP-2021 touches upon various points related to increased focus on IMD data for warnings, apart from inputs provided by other forecasting Agencies towards cyclone classification and wind speed, including worst case scenario for initiating required actions. Further, Emergency Response and Disaster Management Plan (ERDMP) has now been reformed and is required to be certified through an accredit Agency, as approved by Petroleum & Natural Gas Regulatory Board (PNGRB), along

with its periodic review to be done by the Industry. The Committee also observe that Quantitative Risk Assessment (QRA) is also required to be carried out prior to construction of any new facility, including carrying out major changes in existing facilities or once in every 5 years, whichever is earlier.

The Committee further note that on the aspect of preparedness and 29. response including capacity building, the Oil and Gas Industry remain equipped with resources like specialised and heavy machine/equipment, critical supply items, technical manpower to fight disasters. The Committee therefore, recommend that the Industry must share this data of available resources with respective District Authorities in the prescribed format, for updation of India Disaster Resource Network (IDRN) database. The Committee also acknowledge that such updation of the respective data Bank shall facilitate pooling of similar resources in case of any disaster in shortest possible time which can then be utilised anywhere in the country wherever the need arises. The Committee therefore, recommend proper training, awareness and sensitization program to be introduced for personals at all levels including both primary and secondary work force. The Committee feel that these steps would go a long way towards enhancing their competency and skills leading to disaster mitigation along different magnitudes. The Committee further desire enhanced focus on various safety issues such as injuries,

hand/finger injuries, process safety, safety alerts, case studies of various incidents, to be covered under special workshops. Further, renowned Experts may also be roped in to further strengthen the safety management system and safety culture, wherever necessary. The Committee would like to be apprised of the action taken in this regard within three months of the presentation of the report to the house.

<u>Health, Safety and Environmental (HSE) Policy including proper follow up</u> and adherence of environmental norms by ONGC

30. The Committee note from the perusal of replies from the Ministry of Petroleum & Natural Gas and ONGC that a renewed focus on Health, Safety and Environmental (HSE) related issues are being given highest priority in ONGC alongwith its analogous operations. The HSE policies involves managing risk on a day-to-day basis across all operations and acknowledging the responsibility to safeguard the people and property along with special emphasis on the environment. The Committee observe from the submission of Ministry of Petroleum & Natural Gas and ONGC that they have a three-tier system of handling the emergencies depending on the severity of events, viz., Site Specific ERP (Emergency Response Plan), Offsite & Onsite DMP (Disaster Management Plan) for onshore sectors and RCP (Regional Contingency Plan) for offshore sectors and Corporate Disaster Management Plan (CDMP). The Committee are constrained to note that only after the incident post cyclone Tauktae, the CDMP, ERP and RCP for offshore sectors have been revised. Furthermore,

additional measures are now being taken for strengthening the HSE Management System of ONGC, along with proactive steps being taken towards engaging an Expert Safety Consultant (M/s DNV GL Pvt. Ltd.), to implement the Safety Management Assessment Project. In this regard, the Consultant is required to assess the prevalent safety scenario of ONGC, while pin-pointing the gaps and implement measures for their improvement. Therefore, the main aim of the project is to develop a robust safety culture in the organization.

31. The Committee further note that the project is being implemented in three Phases with Phase-1 already concluded, wherein an organization wide Safety 'Perception Survey' was also carried out. The Committee note that the Consultant has given several recommendations mapped in eight strategic goals and the respective recommendations are being monitored and implemented through dedicated syndicates, constituent of Key Executives. Also, Phase-2 is underway with capacity and skill building workshops being conducted for CMD and Directors, key Executives, Senior Officers, Middle Management, Line Managers and Field Personnel. Consequently, in order to further ensure time bound implementation of the project, Project Parivartan has been launched by CMD, ONGC. The Committee are constrained to point out that the Ministry of Petroleum & Natural Gas and ONGC have not provided any exhaustive information regarding Project Parivartan and therefore, the Committee disapprove of

such an approach while sharing information with the Parliamentary Committee. The Committee note that total fund utilisation in HSE fund centre across ONGC during the last 5 years appears to be somewhat stagnant with \mathbb{Z} 137 crore and \mathbb{Z} 131 crore for the years 2017-18 and 2018-19, while that for years 2019-20 and 2020-21 stood at a similar \mathbb{Z} 147 crore and \mathbb{Z} 127 crore respectively. For the year 2021-22, an amount of \mathbb{Z} 157 crore has been utilized.

32. The Committee recommend that ONGC should make concerted efforts towards increasing the allocation and utilisation of funds under the respective head for a better and timely implementation of safety standards formulated by OISD during the forthcoming years. The Committee therefore, recommend that ONGC shall mandatorily comply with all the applicable laws, industry standards and codes to effectively promote occupational health, safety and environmental protection for sustainable development. The Committee further desire that the Ministry of Petroleum & Natural Gas and ONGC ensure enhanced awareness and involvement of stakeholders by including them in promoting occupational health, safety, environment protection while setting targets against international benchmarks. The Committee would like to be apprised of the action taken by the Ministry of Petroleum & Natural Gas and ONGC in this regard.

NEW DELHI;

HARISH DWIVEDI, Chairperson, Committee on Petitions.

<u>12 December, 2022</u> 21 Agrahayana, 1944 (Saka)

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CONFIDENTIAL

MINUTES OF THE TWENTY-FIFTH SITTING OF THE COMMITTEE ON PETITIONS (SEVENTEENTH LOK SABHA)

The Committee met on Monday, 12 December, 2022 from 1500 hrs. to 1700 hrs. in Committee Room 3, Block A, Parliament House Annexe Extension, New Delhi.

PRESENT

Shri Harish Dwivedi - Chairperson

MEMBERS

- 2. Shri Anto Antony
- 3. Shri Hanuman Beniwal
- 4. Prof. Sanjay Sadashivrao Mandlik
- 5. Dr. Jayanta Kumar Roy
- 6. Shri Arvind Ganpat Sawant
- 7. Shri Brijendra Singh
- 8. Shri Sunil Kumar Singh

SECRETARIAT

Shri T. G. Chandrasekhar - Additional Secretary
 Shri Raju Srivastava - Director

- 2. At the outset, the Hon'ble Chairperson welcomed the Members to the sitting of the Committee.
- 3. The Committee, thereafter, took up for consideration the following Draft Reports :-

(i)	***	***	***	***	***	***
(ii)	***	***	***	***	***	***
(iii)	***	***	***	***	***	***
(iv)	***	***	***	***	***	***

(v) Report on the representation of Shri Vikram regarding need for employing specialised personnel by the Oil & Natural Gas Corporation Limited (ONGC) to adhere to Environmental Laws as well as effective liaisoning with the Indian Meteorological Department (IMD)/Coast Guard;

4. After discussing the above mentioned Draft Reports in detail, the Committee adopted all the seven Reports with minor modification(s). The Committee also authorised the Chairperson to finalise the Draft Reports and present the same to the House.

The Committee, then, adjourned.
