

LOK SABHA

UNSTARRED QUESTION NO. 1548

TO BE ANSWERED ON 05.03.2018

OIL AND GAS PIPELINE

**1548. SHRI SHARAD TRIPATHI:
SHRI G. HARI:**

Will the **Minister of PETROLEUM AND NATURAL GAS** be pleased to state:

पेट्रोलियम और प्राकृतिक गैस मंत्री

- (a) the total length of oil and gas pipeline along with the length of unused pipeline in the country at present;
- (b) the number of incidents of leakage of oil and gas from pipelines during the last three years noticed/reported and quantum and value of oil and gas wasted due to such leakages;
- (c) the details of the compensations paid for the loss during the said period;
- (d) the steps taken by the Government for the safety of oil and gas pipelines in the country;
- (e) whether the Government has formulated any scheme to check the theft of oil and gas if so, the details thereof; and
- (f) whether the leakage in ONGC pipeline in Andhra Pradesh reported recently from the same place where three such incidents had taken place earlier and if so, the details thereof along with the steps taken by the ONGC to ensure that no such leakage takes place in future?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्री (श्री धर्मेन्द्र प्रधान)

MINISTER OF PETROLEUM & NATURAL GAS (SHRI DHARMENDRA PRADHAN)

(a) The total length of oil and gas pipelines in the country as on 01.01.2018 is as under:

Pipeline for	Length in KMs
Crude Oil	10,299
Petroleum Products	16,582
Natural Gas	16,475

(b) and (c): During financial years 2015-16, 2016-17 and 2017-18 (upto February, 2018), as per onsite major incidents reporting norms for cross country pipelines, 13 numbers of incidents of leakage of oil and gas from pipelines have been reported to Oil Industry Safety Directorate (OISD). Oil and Gas PSUs wise details of such incidents are placed at **Annexure -I**.

(d): Oil Industry Safety Directorate (OISD), a technical directorate under Ministry of Petroleum & Natural Gas was setup to oversee safety of Oil & Gas industry in India and which formulates safety standards for the sector i.e. Upstream, Midstream & Downstream in Oil & Gas industry. OISD carries out periodic audits including pre-commissioning audit for cross country pipelines. The Shortcomings noticed during audits and the measures for improvement of safety are communicated to the concerned organizations by OISD for rectification. These safety gaps are reviewed in the apex level meeting of the Safety Council wherein CEOs of all the Oil and Gas Companies participate and is constituted at the Ministry, and chaired by Secretary, Ministry of Petroleum & Natural Gas. Companies are advised in the meeting for necessary compliance. As per the directive of the Safety Council, all the audit findings of respective Oil and Gas companies are required to be reviewed at Board level on quarterly basis. Government has issued directive to all Public Sector Oil Companies in July, 2014, indicating that in cases of any breach in safety systems and practices leading to incidents, the respective functional Directors of the companies concerned will be held accountable. Regional Heads (GMs/EDs) would be held responsible for any violation of any of the laid down engineering operations and maintenance practices including non-compliance with statutory requirements and audit findings.

(e): Corrective measures taken by the Government to check the theft of oil and gas are furnished as under:

(i) Amendment in the P&MP (Petroleum & Minerals Pipelines – Acquisition of Right of Users in Land) Act was made in 2012 called “P&MP Amendment Act’2011” wherein provisions have been made for more stringent punishment for persons caught in pilferage activity, (a) whoever makes or causes to make an unauthorized connection with, or removes, destroys, damages or displaces any pipeline or inserts any device to extract petroleum or its products or minerals from such pipeline or disrupts supplies being made through the pipeline, should be punishable with rigorous imprisonment for a term which may extend to ten years and shall also be liable to fine; (b) a person who repeats the same offence after conviction once be punishable with rigorous imprisonment for a term which shall not be less than three years and may extend to ten years for the second or subsequent offence; and (c) whoever, with the intent to cause or knowing that he is likely to cause damage to or destruction of any pipeline, causes by fire, explosive substance or otherwise damage to, shall be punishable with rigorous imprisonment which shall not be less than ten years and may extend to imprisonment for life or death.

(ii) Requirements for Design, Inspection and Operation for Liquid Hydrocarbon Cross Country Pipeline are mentioned in ‘OISD-STD-141’. The standard is part of the Petroleum Rules (Amended), 2011 and applicable to crude and petroleum product pipelines. Following related measures are stipulated in OISD-STD-141, (a) as per Clause No.14.4.2, patrolling of pipeline is to be done 24x7 by Line Walker or alternative security surveillance system, where the pipeline locations are vulnerable from pilferage point of view; and (b) as per Clause 5.3.5, Supervisory Control and Data Acquisition (SCADA) System including leak detection system is required to be installed for the pipeline length of 50 km and above or line fill of 5000 K1 and above.

(f): Leakage in ONGC pipelines have been reported in Kesavadasupalem field of Rajahmundry Asset in Andhra Pradesh. These gas leakages are occurring mainly due to sand ingress along with well fluid i.e. liquid & gas.

The said leakages have not been reported from the same place and the relevant details are placed at **Annexure-II.**

Following steps have been taken by ONGC in this regard to prevent such leakages:-

- Pipeline of 35 km length (leakage prone) has been replaced in 04 identified cluster wells of Kesavadasupalem (KV) field to prevent further leakages. Replacement of the pipelines is being done depending upon the condition of pipeline.
- Desanders (sand filters) have been installed in identified well sites. Also to control sand from reservoir, gravel pack have been installed in identified wells.

- Gas Corrosion Inhibitor (GCI) dosing is being done at well heads with help of mobile units in well flow lines of Endamuru & Mori Gas Collecting Station (GCS).
- Nine Gas De-hydration Units (GDU) are in operation to supply dry gas to M/s GAIL as per PNGRB Guide lines.

ANNEXURE-I

Annexure referred in reply to part (b) & (c) of Lok Sabha Unstarred Question No. 1548 for answer on 05.03.2018 regarding Oil & Gas Pipeline

INCIDENTS OF LEAKAGE AND FIRE IN UNDERGROUND OIL & NATURAL GAS PIPELINES DURING 2015-16, 2016-17 and 2017-18 (February 2018)						
Sl.No	Organisation/ Location	Date	Fire	Leakage	Fatality	Description of the incident
2015-16						
1.	ONGC/Hazira, Gujarat	09.04.2015	1	1	0	A fire incident took place on 9.4.2015 at 03.20 Hrs. in 12" dia Ankleshwar - Hazira gas pipeline near Ichhapore (around 5 Kms away from Hazira plant). The fire was put off by around 7.00 AM. There is no loss of property or life reported.
2.	Mumbai Port /Wadala, Mumbai	13.06.2015	1	1	0	On 13.06.2015 at 1848 hrs, fire took place in the 14" OD pipeline, which is used for transfer of MS and Naptha from HPCL / BPCL Refineries to IOCL, BPCL and HPCL Marketing terminals. The leakage point was below a road culvert crossing at the entrance of Castrol Company gate
3.	IOCL / Vasundhra, Rajkot	15.10.2015	0	1	0	Leak incident happened in IOCL's crude pipeline in Salaya-Viramgam Section of SMPL. Leak occurred during pipeline coating refurbishment activities at site.
4.	IOCL / Dhulagori, Hawraha	24.10.2015	0	1	0	An incident of oil leakage took place from Haldia-Mourigram-Rajbandh product pipeline near to Borzola industrial waste disposal canal near Dhulagori, Hawraha on 24.10.2015.
5.	IOCL / Beawar, Rajasthan	01.01.2016	0	1	0	An incident of crude oil leak due to pipeline failure occurred in Mundra-Panipat crude oil pipeline at around 1800 Hrs. on 01.01.2016 near Beawar Pump Station .
6.	GAIL / Pithampur, Indore	08.1.2016	1	1	1	A leak/fire incident took place in natural gas pipeline of AJL(Awantika Gas Limited) on 08.01.2016 at Pithampur, Indore The leakage and the fire was 180 mm MDPE pipeline of AGL laid parallel to GAIL's JIPPEL Reliance .
2016-17						
1.	HPCL / Hassan, Karnatka	15.11.2016	0	1	0	An incident of LPG leakage due to pilferage attempt took place in Manglore-Hassan-Mysore-Solur LPG pipeline line between Hassan station and SV12 on 15.11.2016.
2.	IOCL / Adesar, Gujarat	1.12.2016	0	1	0	An incident of leakage took place in Mundra-Panipat Crude Pipeline near Adesar Chitrod village, Adesar Taluka, Kutch Distt between Mundra and Radhanpur on 1.12.2016
3.	BPCL / Agaskhindi, Nasik, Maharashtra	27.01.2017	0	1	0	An incident of HSD leakage took place in Mumbai-Manmad-Bijwasan Product Pipeline near Agaskhindi village, Ch-157, Nasik district, Maharashtra downstream of IPS -Washala on 27.01.2017.

INCIDENTS OF LEAKAGE AND FIRE IN UNDERGROUND OIL & NATURAL GAS PIPELINES DURING 2015-16, 2016-17 and 2017-18 (February 2018)						
Sl.No	Organisation/ Location	Date	Fire	Leakage	Fatality	Description of the incident
4.	IOCL / Village Barsundara Haldia, West Bengal	3.3.2017	0	1	0	An incident of leakage took place in, at Ch. 12.000 KM (Ex Haldia) in Haldia-Barauni section of Crude Oil Pipeline at 0404 hrs on 03.03.2017 in village Barsundara under Police station Bhabanipur, Haldia, Dist. East Mednipur.
2017-18						
1.	IOCL / Mota Thavaria, Jamnagar, Gujarat	17.6.2017	0	1	0	Crude pipeline leakage at Chainage 50.4 Km of Mainline of IOCL's Salaya - Mathura crude oil pipeline near Village Mota Thavaria, Jamnagar district, Gujarat on 17.6.2017 at 0945 hours resulting in spillage of crude oil
2.	IOCL / Village - Daharpur, West Bengal.	8.6.2017	0	1	0	Crude oil leakage incident was occurred in ch.39.0km of IOCL's Paradip- Haldia Barauni crude oil Pipeline at Village - Daharpur, Police station -Tamluk, District - Purba Medinipur , State - West Bengal on 8.6.2017 at 1030 hrs. resulting in spillage of crude oil.
3.	BPCL / Village - Khandgaon Thadi, Niphad, Nasik, Maharashtra	06.12.2017	0	1	0	HSD leakage from pipeline at chainage 201 of Mubai-Manmad section Village Khandgaon, Niphad, Nasik maharashtra due to drilling in pipeline by miscreants in tapping attempt on 06.12.17 at 18.02 hrs.

Details of compensations paid by IOCL, is as under:

Year	Incidents of leakage of Oil	Compensation paid for crop (Rs. in Lakh)
2015-16	4	3.18
2016-17	2	8.19

ANNEXURE-II

Annexure referred in reply to part (f) of Lok Sabha Unstarred Question No. 1548 for answer on 05.03.2018 regarding Oil & Gas Pipeline

Details of recent gas leakages in Kesavadasupalem field of Rajahmundry Asset in Andhra Pradesh

SN	Flowline	Location	Date of repair of leakage	Remarks
1	Gs#49-4 to GGS	Behind GCS boundary wall	25.11.2017	6 mtrs Underground line pipe replaced
2	Gs#49-4 to Mori GCS	Near well site	23.09.2017	6 mtrs Underground line pipe replaced
3	KV#7 to Mori GCS	Behind GCS boundary wall	06.09.2017	6 mtrs Underground line pipe replaced
4	KV#7,12,22 to Mori GCS	Paddy field	21.08.2017	3 mtrs Underground line pipe replaced
5	KV#4 to Mori GCS	Near well site	10.08.2017	Flow arm replacement
6	KV#4/9 to Mori GCS	Canal crossing road	08.08.2017	16 mtrs Underground line pipe replaced