

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM & NATURAL GAS

LOK SABHA
UNSTARRED QUESTION NO. 2857
TO BE ANSWERED ON 20TH MARCH, 2017

SAFETY AND SECURITY OF PETROLEUM WELLS

2857. SHRI P.R.SUNDARAM:

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

- a) Whether the Government has provided adequate fire safety and security systems to combat any fire accidents and other dangers arising out in petroleum wells/pipeline and refineries in the country;
- b) If so, the details thereof along with the steps taken by the Government to provide safety and security and comply with international fire safety norms in various petroleum wells and refineries in the country;
- c) the fund allocated/spent during the last three years and the current year for the purpose, installation and company-wise;
- d) the details of safety audit of public/private sector installations conducted by the Oil Industry Safety Directorate and shortcomings found therein along with the steps taken by the Government to remove those shortcomings, company/installations-wise; and
- e) the other steps taken/being taken by the companies for safety and security of their installations to prevent fire accidents/other dangers to various refineries/wells and pipelines etc., company/installation-wise?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री (स्वतंत्र प्रभार) (श्री धर्मेन्द्र प्रधान)

MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI DHARMENDRA PRADHAN)

(a) & (b): Petroleum & Gas installations including petroleum wells/pipelines, refineries, marketing locations etc of Oil Public Sector Undertakings (PSUs) are provided with fire safety and security systems as per safety and security norms/standards set up by regulatory organizations like Oil Industry Safety Directorate (OISD), Petroleum Explosives and Safety Organisation (PESO) & Directorate General of Mines Safety (DGMS). These standards are framed as per laid down procedure. Some of the steps taken by Oil Industry to provide safety and security is at **Annexure-I**.

(c) As per information received, the total funds spent during last three years and current year for providing safety and security of their oil installations by Oil PSUs is at **Annexure-II**.

(d) & (e) Details of safety audit of Oil and Gas installations conducted by OISD is at **Annexure-III**. . The shortcomings noticed during safety audits are communicated to the concerned organizations by OISD for rectification of the same. Simultaneously, the measures for improvement of safety are recommended for implementation in a time bound manner. OISD monitors the implementation of these measures.

Oil PSUs provide safety and security systems as per norms/standards set up by regulatory organizations.

Annexure referred to in reply to part (a) & (b) of Lok Sabha Unstarred Question No. 2857 to be answered on 20.03.2017

Steps taken by Oil PSUs for safety and security of Oil Wells, Pipelines and Refineries.

- (i) Installation of Safety devices on vessel and piping to check any abnormality like over pressurization, leakage etc.
- (ii) Installation of safety devices like sub Surface Safety Valves(SSSV) in oil and gas wells and Shut down valves (SDV) in process piping.
- (iii) Maintenance of primary and secondary well control on drilling rigs to avoid any influx of formation fluid to surface.
- (iv) Provisioning of automatic water deluge, water sprinkler, flooding system etc. Availability of manual firefighting equipment like dry chemical powder system, foam firefighting system, portable fire extinguishers etc. to fight fire.
- (v) Health integrity monitoring of the pipeline through 'Pipeline Integrity Management System',
- (vi) Installation of system "Supervisory control and data acquisition' (SCADA) for real time & effective monitoring of operating parameters such as pressure, flow etc., for pipeline operation.
- (vii) Installation of LPG mounded bullets by decommissioning the Horton spheres storage.
- (viii) Connection of Safety valve discharge to flare
- (ix) Making provision of hydrocarbon detectors near LPG and Naphtha Pumps and double mechanical seals in LPG Pumps.
- (x) Making provision of security of on-shore installations/refineries by Oil PSU security staff and Central Industrial Security Force (CISF).
- (xi) Ground/Aerial patrolling along the Right of Way (RoW) of the Hydrocarbon pipelines.
- (xii) Monitoring movement of line patrolman through GPS enabled devices
- (xiii) Monitoring of pipeline installations through CCTV surveillance etc.
- (xiv) Use of Vessel and Air Traffic Management System (VATMS) for security of offshore installations.

Annexure-II

Annexure referred to in reply to part (c) of Lok Sabha Unstarred Question No.2857 to be answered on 20.03.2017

Details of funds spent by Oil Companies during the last three year and current year on safety & security systems (Rs. In crores)

Oil Company	2013-14	2014-15	2015-16	2016-17
Indian Oil Corporation Limited	335.52	342.18	566.16	332.63
Bharat Petroleum Corporation Limited (includes pipeline & refineries)	67.22	59.96	69.89	128.58
Hindustan Petroleum Corporation Limited (includes pipeline & refineries)	79.86	77.31	57.33	33.00
Oil and Natural Gas Corporation	361.95	267.56	310.40	-
Gas Authority of India Limited	117.40	161.20	164.10	84.90
Oil India Limited	---	6.34	0.79	0.83

Annexure-III

Annexure referred to in reply to part (d) & (e) of Lok Sabha Unstarred Question No. 2857 to be answered on 20.03.2017

Details of the numbers of the Safety Audits of Public/Private Sector installations carried out by OISD during last 3 years and current year

Installations	Financial Year			
	2013-14	2014-15	2015-16	2016-17 (upto Feb., 2017)
Refineries, Gas Processing Plants and LNG Terminals	41	41	36	29
Marketing Installations	100	89	98	107
Cross country Pipeline Installations (Kms)	4600	6600	7900	8385
Exploration & Production Installations	78	72	67	62
