

**GOVERNMENT OF INDIA  
PETROLEUM AND NATURAL GAS  
LOK SABHA**

UNSTARRED QUESTION NO:3338  
ANSWERED ON:30.08.2013  
SAFETY AUDIT OF OIL AND GAS INSTALLATIONS  
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**Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:**

- (a) the steps taken/being taken by the Government for safety of vital oil and gas installations/ pipelines in the country;
- (b) whether safety audits of oil and gas installations/pipelines are being conducted at regular intervals;
- (c) if so, the details thereof during the year 2012-13, installation-wise;
- (d) whether a number of serious lapses/ shortcomings have been noticed during such audits;
- (e) if so, the details thereof; and
- (f) the remedial measures taken by the Government in this regard?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SMT. PANABAACA LAKSHMI)

(a) Oil industry maintains the highest level of safety standards. The safety measures include both proactive and secondary measures to combat any unsafe situation and are systematic in nature. Some of the safety measures taken by the Industry include incorporation of in-built safety aspects at the nascent stage, that is, during the design stage itself. These include process safety hazard analysis with remedial measures, instrumentation and safety interlocks, safety during design of equipment etc.

Further, the Government of India vide resolution dated 10th January, 1986, has set up a Safety Council to ensure proper implementation of the various aspects of safety of all the Oil & Gas Installations in India. The Safety Council is headed by Secretary, Petroleum & Natural Gas. The Safety council is assisted by a technical body, the Oil Industry Safety Directorate (OISD), which has expertise in the design of facilities, operations, maintenance, fire and safety aspects etc.

OISD, over the years has developed technical expertise in overseeing safety in entire Oil & Gas Sector including onland & offshore exploration.

(b) and (c): OISD conducts safety audit of oil and gas installations at regular intervals. The details of number of external safety audits carried out by OISD during the year 2012-13 are given as under:-

Installations	2012-13
Refineries & Gas	23
Processing Plants	
Marketing Installations	79
Cross Country Pipeline	
Installations (Kms)	2943
Exploration & Production	68
Installations	

(d) to (f): The shortcoming in the safety aspects are different for each type of oil installations. Some of the common shortcomings noticed during audit of oil installations are mentioned hereunder:

# Non conformity in facility Layout vis-a-vis extant OISD Standards.

# Deviation in operation from prescribed procedures in line with relevant OISD Guidelines/ recommended practices. # Deficiencies in Fire Fighting System Vs OISD Norms.

# Non-compliance with Statutory Guidelines as regards gas flaring, marinating safety devices etc. # Deficiency in standard of construction, inspection and preventive maintenance.

# Lack of monitoring of critical operating assets and preventive maintenance.

The Shortcomings noticed during audits are communicated to the concerned organizations by OISD for rectification of the same.

Simultaneously, the measures for improvement of safety are recommended which are implemented by industry in a time bound manner. OISD monitors the implementation of these measures. Some of the major safety measures already implemented by industry are delineated hereunder:-

# Installation of LPG mounded bullets by decommissioning the Horton spheres storage.

# Relocation the fire station control room to safe area.

# Connection of Safety valve discharge to flare.

# Provision of hydrocarbon detectors near LPG and Naphtha Pumps and double mechanical seals in LPG Pumps.

# Provision of close blow-down system.

# Strengthening of work permit system, training for employees and contractors and updation of operating manuals with a view to minimize human error.