

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

UNSTARRED QUESTION NO:2010

ANSWERED ON:09.03.2015

FIRE INCIDENTS IN PIPELINES

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

- (a) the number of cases of gas leakage and fire incidents in underground natural gas pipelines, refineries and oil fields/wells including Gas Authority of India Limited pipeline in Delhi etc. reported and loss of revenue incurred as a result thereof during the last three years and the current year, State and Oil Marketing, company- wise;
- (b) the number of persons injured/killed in such incidents along with the efforts made by the Government to provide compensation/job to the victims/next of kin of the deceased;
- (c) the oil companies/persons and other agencies found responsible for such incidents and the action taken by the Government against them;
- (d) the role and power of the Oil Industry Safety Directorate in regard to safety and security of oil installations and persons/agencies handling them; and
- (e) the steps being taken by the Government to prevent the recurrence of such incidents in future?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF PETROLEUM & NATURAL GAS (SHRI DHARMENDRA PRADHAN)

(a) to (c): The information is being collected and will be laid on the Table of the House.

(d): OISD was formed through a resolution of the Government in 1986 and is a self-regulating industry body for safety matters for midstream (cross country pipelines) and downstream (refineries, gas processing and marketing operations}. OISD formulates safety standards for the sectors, upstream, midstream and downstream in oil and gas industry, verifies the implementation of standards through periodic safety audits, carries out incident investigations for learnings to avoid recurrence, monitors implementation of audit recommendations by review at various levels with industry.

(e): Some of the major safety measures undertaken by the Oil & Natural Gas Industry include:

(i) Incorporation of in-built safety aspects i.e. during the design phase itself. These include process safety, instrumentation & safety interlocks, safety while design of equipments following the best international standards, etc.

(ii) Review of Piping and Instruments Diagram (P&ID) is carried out for incorporating the Quantitative Risk Assessment (QRA)/Hazard & Operability (HAZOP) studies recommendations.

(iii) Mounded Bullets storage for petroleum like Liquefied Petroleum Gas (LPG) and construction of Blast Resistant Control Rooms for enhanced safety of personnel and equipment.

(iv) Development and implementation of well laid down systems and procedures like work permit system, operating manuals entailing start-up, shutdown, emergency handling procedures, disaster management plan etc.

(v) Each installation has its own dedicated fire fighting facilities which are equipped with gadgets, well trained crew to fight fire in case of any eventuality.

(vi) Safety measures in oil industry is looked after by dedicated group of personnel and headed by Senior Management Executive in the rank of General Manager/Executive Director who in turn report to Top Management Executive.

(vii) The industry also carries out regular Internal Safety Audits and conducts periodic mock drills both on-site and off-site. It has also developed its own Disaster Management plan and organizes mock drills both offsite & onsite to ensure emergency preparedness.

Specific measures taken for safety of gas pipelines include periodical internal cleaning, cathodic protection to prevent external corrosion and intelligent pigging of pipelines to identify internal metal loss, daily foot patrolling in populated/urban centers, periodical technical audit of the pipeline operations and maintenance by authorities such as PNGRB and OISD, round the clock monitoring of

flow and pressure in the pipeline through Supervisory Control and Data Acquisition (SCADA) system.