# CHAPTER-1
# INTRODUCTION

A devastating fire/explosion accident occurred on 29.10.2009 at about 7.30 pm in the POL installation of M/S Indian Oil Corporation at Sitapura (Sanganer), Jaipur, Rajasthan killing 11 persons and injuring 45. The product loss of around **60,000** KL has been reported. In this accident the entire installation was totally destroyed and buildings in the immediate neighborhood were also heavily damaged.

This accident occurred while officials of M/S IOCL were preparing for Pipeline Transfer (PLT) operations for transferring Motor Spirit (MS) and Superior Kerosene Oil (SKO) from their tanks to the tanks of nearby installation of M/S Bharat Petroleum Corporation Ltd (BPCL). During the PLT operations there was leakage of MS from a valve in the outlet line of MS tank of IOCL which continued uncontrolled for about 75 minutes. This massive loss of containment of MS resulted generation of colossal quantities of petroleum vapours forming a vapour cloud which covered the entire installation. This vapour cloud found a source of ignition and a devastation blast occurred.The blast which completely destroyed the facilities and building within the Terminal resulted in 9 of the 11 tanks catching fire in immediate succession, which also spread subsequently to other two product tanks.

Fire tenders from various organisations like ONGC, IOC Mathura Refinery, IOCL Panipat Refinery and local fire brigades rushed to the site and were in position within hour but no fire fighting action was initiated since a decision was taken by the IOC Management to allow the fire to burn till such time the products get completely burnt out. The last tank fire extinguished itself after 11days on 10.11.09.

The blast also caused extensive damage to the buildings, structures and to some of the neighbouring industries. The effect of the blast extended to almost 2 Km from the terminal which resulted in devastating immediate adjacent other factory buildings and in glass panes shattering and some other incidental damage to buildings in this area.

The incident caused the death of 11 people, out of which 6 were company personnel (includes one contractor's personnel) and the other 5 were from neighbouring industry/factories.

The Ministry of Petroleum and Natural Gas (MoPNG) immediately thereafter i.e. on 30.9.2009 constituted an Independent Inquiry Committee to inquire into the incident.

Terms of reference of the Committee are:

To inquire into the incident of fire at POL Terminal of IOCL at Sanganer, Jaipur and to arrive at the causes of the incident and suggest the remedial measures to prevent recurrence of such incidents; and

The Committee is to submit its report within 60 days from the date of its constitution.

**The Committee consists of the following:**

1. Shri M B Lal, Ex C&MD, HPCL - Chairman
2. Dr. Govind Sharma, Principal Secy. Deptt. Of Mines and Minerals, Govt. of Raj. – Member
3. Sh. M K Joshi, Director (Technical), EIL – Member
4. Sh. J.B. Verma, Executive Dir, OISD – Member

5. Sh. P.B. Yedla, Jt.Chief Controller of Explosives In -charge – PESO) – Member
6. Sh. S.K. Hazra, Ex-MD, Aegis Logistics – Member
7. Sh. B.K. Datta, Executive Dir. (Supply Chain Optimisation), BPCL – Member

The MoPNG's circular No.F.P-19012/35/2009-IOC dated 30.10.09 to this effect is enclosed as **Appendix 1.** Further, MoPNG vide its letter No.P19012/35/2009-IOC dated 30.12.2009 granted extension of time for submission of the final report by 31.1.2010.

The Committee constituted by the MoPNG visited the site immediately and members from the Committee were present at the site from 30th October, 2009 onwards till the 3rd of November to gather first hand evidence and information. Subsequently, the Committee made several other visits to Jaipur site and to IOC Jodhpur Terminal as well besides conducting interview until January 14, 2010. The information thus collected was used to analyse the sequence of events and deduce the causes thereof. In the absence of hard disk of computers (TFMS System), records of CCTV which were collected and remained in police custody, the conformity assessment could not be carried out.

## ACKNOWLEDGEMENT

The Committee has interviewed & interacted with IOC officials, Local Civil Authority, Government of Rajasthan, Government agencies and Industry Associations who provided invaluable inputs to the Committee. The Committee would like to acknowledge the contributions made by organizations like PESO, OISD and the oil companies.

Dr S Kamal, Dy Chief Controller of Explosives, Dr. D.J Roy, Deputy Chief Controller of Explosive, Jaipur, Shri A Misra, Director (Mktg. Coordination) OISD, and Shri Narendra Puranik, Deputy Manager & Executive Assistant to Chairman, who all deserve special mention for their active involvement in the activities of the Committee, which included providing technical inputs and contribution in preparation of the report.