

**Study of Incident Prevention Tools in Transmission and Distribution of
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Abstract — ‘INCIDENT’ is an event which no Organization will like to have. Although it happens in the Organizations. By Proactively analyzing existing Risk Management System and different tools Incidents in organizations can be reduced. There are certain practices/tools which are vital and play an important role in Incident Prevention. For the Study of Incident Prevention in Transmission and Distribution of Natural Gas Industry focus is on different tools such as Organization commitment, Safety Culture, Work Permit system, Safety Risk Assessment and Risk Management Tools, Communication.

Key Words- Incident Prevention Tools, Study of Incident Prevention in Transmission and Distribution of Natural Gas

I. INTRODUCTION

Natural Gas is being used as a source of energy in India. Natural gas is received from Oil Wells or LNG terminals and distributed to the Customers – Domestic, Industrial, Automobile by means of Pipes which are both above ground and underground. So there is no fixed premises, premises of this industry starts from Gas receiving terminals and ends at the tip of Gas Burner of House or CNG filling Station

Use of Natural Gas is increasing day by day. It is far more environment friendly than other fuels such as Petrol, Diesel, Kerosene, Furnace Oil, Coal etc. So Government of India is emphasizing to use Natural Gas as a fuel in Industries, Domestic and commercial (cooking), Automobile sector.

Field of Natural Gas Transmission and Distribution is in nascent stage in India. There are few entities that are currently in the business of Natural Gas Distribution and Transmission.

II. FACTORS ARISING NEED OF INCIDENT PREVENTION TOOLS

Study of Incident Prevention tools has its own reasons. Incident will not only damage Human beings, Property, Environment, Loss of Man hours, Insurance Claims, Profit of Management, Legal Penalties etc. it will also taint image of organization and finally trust among the community.

It is indeed critical in an Industry especially in transmission and Distribution of Natural Gas Industries because any emergency due to Natural Gas can result in to severe consequences. Group which might be affected due to emergency of this industry is large and includes users and non-users of Natural Gas as this industry has no specific boundary or fixed premises. Thus, Incident prevention is challenging.

III. PILLARS OF INCIDENT PREVENTION

Organizations aim to prevent and minimize Incidents. There are certain practices/tools which are vital and play an important role in Incident Prevention. All the tools revolve around Plan-Do-Check-Act Cycle.

Incident Prevention in Transmission and Distribution of Natural gas industry revolves mainly on Organizational Commitment, Safety Culture, Work Permit system, Risk Assessment and Risk Management Tools, Communication.

1. Organizational Commitment

Organizational commitment is pivotal. It is Top to Bottom approach in Health, Safety, and Environment of an Organization. Sound Committed Organizations increase standard of safety and reduce Incidents.

2. Safety Culture

Safety culture of an organization plays a critical role in to the Incident Prevention. Sound and Positive Safety Culture results in to the lesser number of Incidents, High Employee Moral, High Sense of Security

3. Work Permit system

Sound well developed, understood Work Permit system is driving force in the area of Incident Prevention. This Industry is unique hence by the means of latest IT inventions well developed Work Permits are practiced.

4. Risk Assessment and Risk Management Tools

Risk Assessment and Risk Management aims in reduction of risk up to the ALARP Level. Different tools for Risk Reduction are opted by different Organizations such as Event Tree Analysis, Fault Tree Analysis, Fish Bone Analysis, HAZOP Study, Quantitative Risk Assessment, Qualitative Risk Assessment etc.

5. Communication

Organizations adopt different means to communicate. Effective and clear Communication of Organizations helps positively. It is one of the very basic at the same time very strong Pillar for Incident Prevention.

IV. METEDODOLOGY

Methodology is theoretical, it also includes interview with the Working Professionals of the Industry.

V. CONCLUSION

It is observed during study of different tools of Incident Prevention for Natural Gas Transmission and Distribution that tools are being used differently as the Industry is scattered and not having fixed Boundary but ultimately they are being practiced and Risk reduction and ultimately Incidents are reduced.

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