



Accident Prevention and Learnings from Major Incidents / Accidents in Petroleum Industry

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Global Disasters

National Disasters



La Mede, France - Refinery Explosion
(6 Fatalities, 1SIF)



Williams Olefins,
(2 Fatalities, 16



Pipeline Explosion
Fatalities, 16 injuries)



Jaipur Oil Depot Fire
(11 Fatalities)



Norco, Shell – Fire
(7 fatalities, 48 Injuries)



Longford Gas
(2 Fatalities, 8



Refinery Explosion
0 fatalities)



Nagothane Petchem plant fire
(32 Fatalities)

1982 to 2024
more than 40
years
incidents
continue in
Petroleum
industry



BP Texas City Explosion
(15 Fatalities, 180 injuries)



Mahul Refinery Disaster
(34 Fatalities, 29 SIFs)

Where is the next and who is the victim

**No incident is new
all are repeat
only place and people are new**

1. SOP / Practices including transient operating
2. Process isolation
3. Risk Assessment and Permit To Work
4. Trained and experienced workforce
5. Mechanical integrity
6. Culture and Cost

**We are convinced on the root cause of failures
But
We believe/ follow only when it happens to us**

**There are 100 ways of doing a job
But
There is only one way of doing a job safely**

Visible Felt Leadership

Aspect	Complacent Leader	Visible Safety Leader
Commitment to Safety	Treats safety to meet auditor's requirement.	Clearly prioritizes safety as a core value.
Visibility and Engagement	Ask people to conduct audits as required by management	Leads safety programs /activities, safety meetings and field audits.
Role Modelling	Follows safety procedures which are under supervision. Reacts on incident.	Consistently demonstrates safe behaviors and demands from others. Acts on processes.
Communication	Avoids RED and appreciates GREEN	Challenge GREEN and embrace RED

Visible Felt Leadership

Aspect	Complacent Leader	Visible Safety Leader
Response to Safety Concerns	Avoid / delay in addressing safety issues	Takes immediate action to establish safety systems
Psychological Safety	Creates a fear and employees worry about retaliation	Fosters a culture where employees feel safe to report hazards and mistakes.
Accountability	Shifts blame to employees and does not take personal accountability	Holds self accountable and others responsible for safety performance.
Resource Allocation	Treats safety resources as additional expense	Allocates sufficient and capable resources to ensure safety and automation

Thank You