

Identifying and embedding good practice in Process safety including:

1. Executive Leadership
2. Engagement & Common practice
3. Lessons Learned from Industry

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Operations Manager - Senior Technical lead at exida, with over 20 years Industry experience, specializing in:

Industrial Automation, Controls, & Instrumentation

Systematic Hi-Level Diagnostics & Analysis

Incident investigation, Process safety, End-User performance & delivery

Current Focuses:


Functional Safety Implementation & Audit(s)

SIL Verification & IEC Standards compliance

Analysis and Advisory services in Functional Safety, Cyber

security, Alarm management, & Human Factors Engineering



A photograph of an industrial facility at night. The scene is illuminated by artificial lights, and a large fire is visible in the center-right area, with bright orange and yellow flames and thick white smoke rising into the dark sky. Several tall, cylindrical structures, likely chimneys or distillation columns, are visible. The foreground shows a complex network of pipes, walkways, and structural steel.

What is Process Safety?

How are we currently measuring our performance?

Are process safety accidents being investigated correctly?

The role of Executive Leadership



Organisational Factors

Human Factors

Strategy


Leadership

Governance

(source - The Times - google images)

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A group of men in dark blue suits and ties are celebrating. They have their arms raised in the air, and some are smiling. The background is slightly blurred, suggesting an outdoor or large indoor event.

“Leadership is a cocktail of courage and drive to achieve the goal, coupled with an innate ability to communicate that goal.... ”

“The most successful Leaders, are validated by those who first stand with them, having the faith and courage to follow”

Engagement



Communication

Message content/delivery, Team engagement, etc.

Credibility

Source of message, Messenger themselves, etc.

Concept

The Plan, (what it is, how it will be done, and why it will work...)



How do we
achieve
common
practice?

Common Practice



People

Training, Human Factors Analysis, Competency, etc.

Processes

Safety Management System, Defined procedures, etc.

Planning

Roadmap, Normative Standards, KPI's, etc.



Are we
learning
from
history?

Piper Alpha

Hi Level - Findings

Pump A and Safety valve maintenance, under separate permits.

Non-leak tested Blind Flange in process line A.

Non-centralized PTW system.

No Handover(s).

Safety critical Communications & Decision making.

Emergency response procedures/training.

Loss of Life, Fatalities...

Hi Level – Lessons

Safety Culture (Organisation & Site).

Normalization of Deviance.

Safety Management System (on paper/in practice).

Competency, Training, Assessment.

Human Factors.

Independent assessment, Audit(s).

Are we learning from history?

Hi Level - Accident

Condensate Pump A under maintenance.

Safety valve in process line A, also removed for maintenance.

Change of Shift personnel (Day/Night)

Condensate Pump B trips.

Operations startup Condensate Pump A.

Gas leak occurs shortly afterwards.

First explosion subsequently follows...

Learning Lessons from Past incidents



What Happened? (ask the right questions)

Find the root cause (incident investigation)

**Implement lessons learned
without delay** (and without bias)

**Eliminate the opportunity for
error or failure in the future** (re-
engineer/design the process)

Summary – Process Safety



PHASE 1: Identify where we are...

- Benchmark/Gap Analysis (engage with Industry Experts)
- Analyse our current Process Safety KPI's (Incident/Accident reports, Strategy etc.)
- Engage our Operational Teams for live feedback (visit site)



PHASE 2: Embedding Good Practice...

- Review the Safety Management system, and re-define our Process safety KPI's (strategy)
- Develop the processes/procedures (standardise)
- Training Program & Competency Development



PHASE 3: High Performance

- Continuously review and verify Competency
- Process safety performance Audits (IEC 61511, etc.)
- Certified System (Competency Management System, Human Factors, Functional Safety, Site maturity, etc.)



Be the change you want to see in the World.

-Mahatma Gandhi



Any Questions?

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