NEBOSH / HSE
Certificate in Process Safety Management

HSE

nebosh

Element 1

PROCESS SAFETY LEADERSHIP

Learning outcomes

1.1   Outline the meaning of process safety and how it differs from personal safety.

1.2   Explain the role of leadership in process safety management.

1.3   Explain the purpose of organisational learning, the sharing of lessons learnt and sources of information.

1.4   Explain how 'change' should be managed to effectively reduce risks to people and plant.

1.5   Outline the benefits, limitations and types of worker participation and engagement.

1.6   Outline what is meant by competence and its importance to process safety.

Element 1: Process safety leadership

1.1   Process safety management meaning.

1.2   Process safety leadership.

1.3   Organisational learning.

1.4   Management of change.

1.5   Worker engagement.

1.6   Competence.

Group discussion

Process Safety vs Personal Safety

1. What do you understand by the term "**process safety**"?

2. How do you think this differs from "**personal safety**"?

Personal safety vs process safety

Personal Safety

— prevention of incidents causing injuries to individuals;

— applicable in all workplaces.

Process Safety

— blend of engineering and management skills;

— prevention or mitigation of catastrophic failures;

— high-hazard industries.

Element 1: Process Safety Leadership

1.1   Process safety management meaning.

1.2   Process safety leadership.

1.3   Organisational learning.

1.4   Management of change.

1.5   Worker engagement.

1.6   Competence.

Hazard and risk awareness of leadership teams

In process safety, leaders need to be:

- Competent and actively engaged.

- In possession of facts and data as decision makers.

- Aware of the hazards and risk potential of their plant and sites through their life cycle:

  – design;

  – commissioning;

  – operations;

  – decommissioning.

Group discussion

Board level commitment to process safety is often achieved by being visible.

- What practical measures can board members take to **reinforce** the importance of **process safety**?

Board level visibility

The **Principles of Process Safety Leadership** place emphasis on board level visibility to promote process safety.

Practical measures can include:

- leading by example, eg, wearing PPE;

- following site rules;

- providing resource for site and projects;

- supporting the risk assessment process;

- carrying out site visits;

- asking questions!

Process safety responsibilities

- Everyone has a role to play in process safety.

- Roles need to be clearly defined.

- Competency and accountability is a must:

    - **managers:** allocate resources;

    - **engineers:** design and maintain;

    - **safety professionals:** advise and guide;

    - **workers:** follow safety procedures.

Reasons for holding to account all individuals with PSM responsibility

- High potential consequences, if fail to carry out responsibilities adequately.

- Encourages engagement.

- Look for root causes.

  NB need to avoid a blame culture.

Responsibilities at senior leadership level

CEOs and leaders assure their organisation's **competence** to manage the hazards of its operations. They must:

- ask critical questions;

- ensure competence at all levels;

- ensure that there is continual development of expertise, especially with new law and technology;

- provide adequate resources and time for risk analysis;

- provide training and scenario planning;

- listen to process experts;

- ensure the organisation manages/reviews contractors and third parties competency;

- communicate effectively.
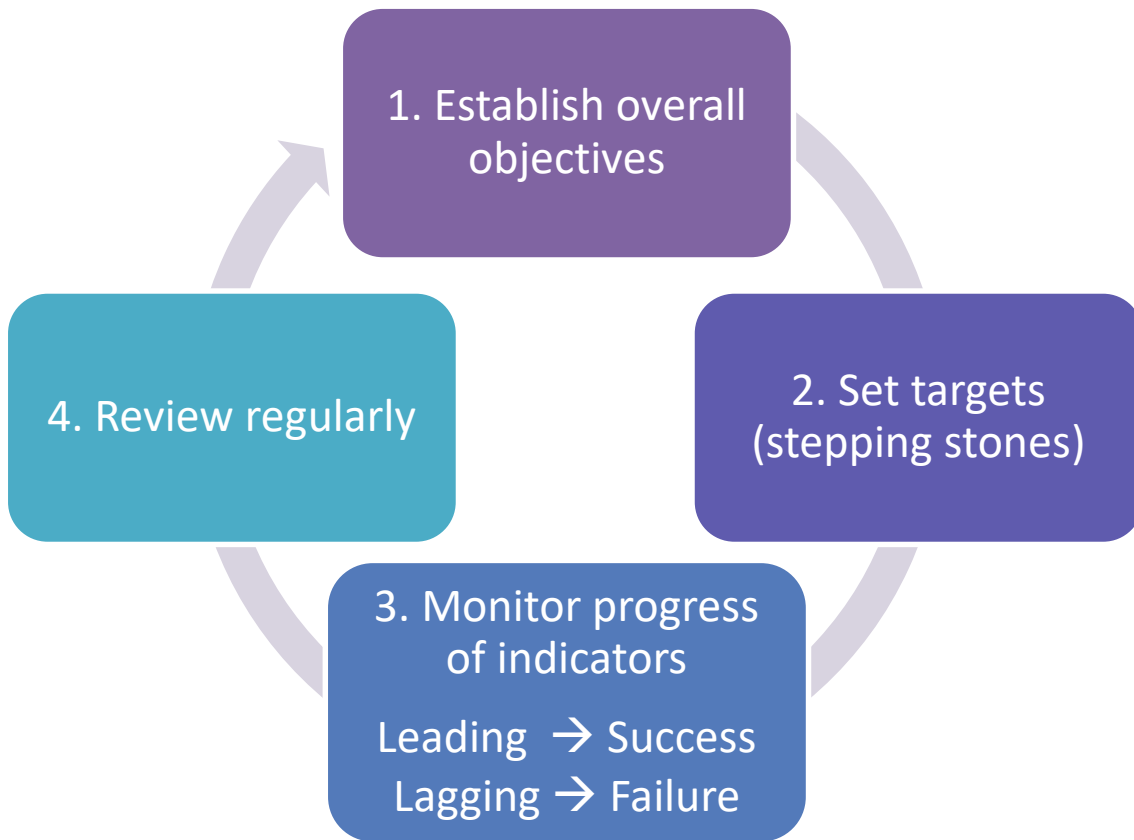
The provision of adequate resources

"Appropriate resources should be made available to ensure a high standard of process safety management throughout the organisation and staff with process safety."

Appropriate resources can be:

- human;
- financial; and
- physical.

Under-resourcing process safety is a risky business!

Process safety objectives and targets

Group discussion

Why might process safety be considered a **continuous improvement** process?

- Suggest practical ways in which organisations can seek to improve.

Continuous improvement

Organisations change

- New processes and products.
- New operational conditions.

Technology changes

- New equipment available.

Standards change

- Benchmarking to other organisations.
- Legislation and guidance changes.