

Guidance on meeting expectations of
El Process safety management framework

Element 14: Emergency preparedness

GUIDANCE ON MEETING EXPECTATIONS OF
EI PROCESS SAFETY MANAGEMENT FRAMEWORK ELEMENT 14:
EMERGENCY PREPAREDNESS

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- *Element 6: Hazard identification and risk assessment*
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- *Element 12: Management of change and project management*
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FOREWORD

Process safety management (PSM) is vital to ensuring safe and continued operations in major accident hazard (MAH) organisations. However, PSM is a multifaceted process, and a number of high profile incidents since 2005 have suggested that without a holistic understanding of the various factors required for effective PSM it can be difficult and inefficient to ensure, and measure, performance.

In 2010 the Energy Institute (EI) published *High level framework for process safety management (PSM framework)*, which aimed to define what PSM should involve. Divided into four focus areas (process safety leadership, risk identification and assessment, risk management, and review and improvement), and sub-divided into 20 'elements', it sets out a framework of activities MAH organisations should undertake to ensure PSM. Each element lists a number of high level activities organisations should meet (expectations).

EI *Guidance on meeting expectations of EI Process safety management framework* is a series of 20 publications (guidelines) that build on the *PSM framework*. Commissioned by the EI Process Safety Committee (PSC) each guideline captures and presents current industry good practices and guidance on how organisations can meet the expectations set out in each element of the *PSM framework*. Each guideline includes:

- a logical flow diagram of activities (steps) the organisation should undertake to manage that element;
- descriptions of those steps;
- example performance measures (PMs) to measure the extent to which key steps have been undertaken;
- a list of further resources to help undertake key steps;
- a table mapping the steps against the expectations in the *PSM framework*, and
- annexes of useful information.

Readers implementing the guidance in this publication should be aware of the *PSM framework* and the other publications in this series, particularly if they are a manager with oversight of the wider implementation of PSM.

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Suggested revisions are invited and should be submitted through the Technical Department, Energy Institute, 61 New Cavendish Street, London, W1G 7AR. e: technical@energyinst.org

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1 INTRODUCTION

1.1 EMERGENCY PREPAREDNESS

This guideline sets out good practices for emergency preparedness, ensuring that effective crisis and emergency response plans are developed, so that the organisation can respond effectively to any crisis, emergency situation or incident.

This guideline covers crisis management planning, local emergency planning and ensuring that appropriate emergency equipment is available.

The efforts of organisations should ensure that the likelihood of a health, safety and environment (HS&E) or process safety incident occurring is minimised. However, organisations should consider the crisis and emergency scenarios which could occur, ensure that they are appropriately prepared and have the appropriate plans in place to manage these situations should they happen. Being prepared, competent and confident in the event of a crisis or emergency should have a significant positive impact upon the consequences should a crisis or emergency situation occur.

1.2 EXPECTATIONS FOR ELEMENT 14: EMERGENCY PREPAREDNESS

Element 14 of EI *High level framework for process safety management* ('PSM framework') describes 10 expectations – arrangements and processes that organisations should (to an appropriate degree), have in place in order to ensure they are managing this aspect of PSM appropriately:

'Overview: The consequences of an incident can be significantly reduced if the organisation is appropriately prepared to handle potential emergency situations.

Management must ensure that, in the event of an incident, the organisation is appropriately prepared for all necessary actions which may be required for the protection of: the public; the organisation's and contractors' personnel; the environment; plant and equipment, and the organisation's reputation.

14.1 Required emergency procedures are identified commensurate with identified credible emergency scenarios.

14.2 Effective emergency plans, including and involving external emergency services and general public, are in place.

14.3 Emergency response plans (ERPs) are documented, accessible and clearly communicated. The plans based on assessed HS&E and process safety risks cover:

- response organisation structure;
- defined roles and responsibilities;
- internal and external communication procedures;
- procedures for accessing and mobilising personnel and equipment;
- procedures for interfacing with other organisations and external emergency response organisations;
- public relations, and
- recovery and remediation.

- 14.4** There are arrangements to ensure that specified levels of management regularly review ERPs, using findings from drills and incidents to identify and address issues and opportunities for improvement, so that they are kept up-to-date as living systems.
- 14.5** Equipment and facilities needed for emergency response are defined and readily available and maintained.
- 14.6** Adequate numbers of competent personnel are available to fulfil the defined roles in the emergency plans.
- 14.7** Mutual aid schemes involving relevant third parties and external emergency services are established and agreed as appropriate.
- 14.8** A regular programme of drills involving internal and external resources is used to exercise, develop and improve capabilities for a range of emergencies.
- 14.9** Arrangements for emergency preparedness are understood and followed; understanding of arrangements and compliance with them is regularly tested.
- 14.10** Compliance and performance trends are reviewed by specified levels of management.'

This guideline provides a process, along with guidance, to help organisations meet these expectations. It also suggests a number of compliance checks and performance measures (PMs) to measure the extent to which key activities involved in meeting these expectations have been or are being undertaken.