

Guidance on meeting expectations of
EI *Process safety management framework*

Element 8: Operating manuals and procedures

GUIDANCE ON MEETING EXPECTATIONS OF
EI PROCESS SAFETY MANAGEMENT FRAMEWORK ELEMENT 8:
OPERATING MANUALS AND PROCEDURES

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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 OPERATING MANUALS AND PROCEDURES

This guideline sets out good practices for developing and maintaining operating manuals and procedures required for managing process safety.

Operation of facilities within established parameters and according to legislation is an essential aspect of health, safety and environment (HS&E) and process safety management (PSM). The organisation should ensure that the operating manuals and procedures required to support operations are identified, available, accurate, up-to-date, understood and used.

1.2 EXPECTATIONS FOR ELEMENT 8: OPERATING MANUALS AND PROCEDURES

Element 8 of EI *High level framework for process safety management (PSM framework)* describes six 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: Operation of facilities within established parameters and according to legislation is an essential aspect of HS&E and process safety. Management must ensure that the operating manuals and procedures required to support operations are identified, available, accurate, up to date, understood and used.

8.1 Approved operating manuals and procedures are identified, available, accurate, up-to-date, understood and used, and are commensurate with the operational risk, and include human factors considerations.

8.2 Operating manuals are designed to maximise usability and minimise the likelihood of error and non-compliance.

8.3 Operating manuals and procedures should provide:

- a clear safe operating envelope (SOE);
- the steps required to prevent an excursion outside the SOE, and
- clear instructions on actions to be taken if an excursion outside the SOE occurs.

8.4 Operating manuals and procedures are regularly reviewed and updated; these reviews involve supervisors and personnel who are required to use them.

8.5 Arrangements for operating manuals and procedures are understood and followed; understanding of arrangements and compliance with them is regularly tested.

8.6 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.