



MANAGEMENT OF CHANGE

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Amendments to 51/17

Section	Change
5.3	Section extended
5.5	New subsection added (ex 5.7 & 5.8)

1 Introduction

Management of Change (MOC) process forms an important element of a Process Safety Management System (see Element 12 in Doc 186 *Process Safety Management Framework – Guidance Document*: [1]¹) as well as other management systems. The introduction of any change to a process, process equipment, or component and associated premises, if not appropriately managed, can significantly increase the levels of personal, environmental, security, reliability and process safety risk or impact product quality.

Management shall ensure that risks arising from any form of change are systematically identified, assessed and managed.

2 Scope and purpose

2.1 Purpose

This publication provides guidance on how to establish a MOC process and describes the relevant roles in this process.

2.2 Scope

Formal MOC processes cover changes of plant equipment or components, process, inventory or substances or any associated premises in a given unit, which can impact any safety and health conditions, environmental protection, security, reliability or product quality.

Changes subject to a MOC process should be detailed in a company procedure. Examples of changes subject to MOC processes are:

- Change or addition of equipment, pipelines or control systems;
- Revision or new process parameter, procedure or internal standard;
- Installation or modification of new software;
- Construction of a new building inside a production area, or moving equipment close to occupied buildings;
- Introduction of a new substance,
- Change of specification of materials,
- Change of source of critical raw materials.

Examples of changes not subject to MOC processes are:

- Replacement in kind;
- Operating changes within defined safe operating limits.

Processes covered by this document include, but are not limited to:

- ASU production facilities;
- Industrial gases and medical gases production facilities;

¹ References are shown by bracketed numbers and are listed in order of appearance in the reference section

- Cylinder and container filling facilities;
- Speciality gas production, package filling and storage facilities;
- Research and Development facilities;
- Distribution depots;
- Pipelines;
- Transportation;
- Customer installations owned or operated by the gas company;
- Temporary supply systems;
- Cylinder testing facilities.

Note: Organisational change is not covered by this publication. EIGA publication Safety Info HF 10 *Organisation - Managing Organisational Change* [2] provides appropriate guidance.

3 Definitions

For the purposes of this publication, the following definitions apply:

3.1 Publications terminology

3.1.1 Shall

Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

3.1.2 Should

Indicates that a procedure is recommended.

3.1.3 May and need not

Indicate that the procedure is optional.

3.1.4 Will

Is used only to indicate the future, not a degree of requirement.

3.1.5 Can

Indicates a possibility or ability.

3.2 Technical definitions

3.2.1 Change

Modification to equipment, processes, procedures, design documents, operating documents, components, inventory or substances or any associated premises in a given unit etc. that is outside previously established specifications or operating limits.

3.2.2 Replacement in kind

Replacement of equipment, processes, procedures, components, inventory or substances etc. that meets the original design specifications and so does not change the hazards in kind or degree.

4 Roles and responsibilities

The following gives guidance on typical roles associated to the MOC process. Some of these roles can be combined to be performed by one person, provided at least two competent persons are involved in the MOC process. Any person who could be involved in a change shall be trained to understand what constitutes a change and how a change shall be addressed and managed.

4.1 Initiator (Applicant)

The initiator can be any person who wishes or needs to put forward a proposal for the modification of a process. The initiator could be someone associated with the work area, such as an operator or instrumentation engineer, or it could be someone in a central operating or engineering role. The initiator of a change shall describe the reason for the change and provide sufficient information to adequately describe the change to a person not familiar with that particular situation. This can be done in an electronic format. It is best practice that the initiator also describes the plan for implementation of the change.

4.2 Owner

The owner has ultimate accountability for the process or system where the change is being proposed and for the implementation of the change. The owner has the responsibility and experience to evaluate the need of a change and decide on its technical and practical merit. The owner also defines the required assessments to obtain technical approval. The owners further responsibility is to decide on the readiness for implementation. In the final step of the MOC process the owner signs off the closure of the change.

For many changes the owner's role may be taken by the plant or facility manager.

4.3 Change manager

The change manager's role is to ensure and to verify that all items identified during the assessment process are in place and complete. These items may include a risk assessment, technical details of the change and supporting documents such as piping and instrumentation diagrams (P&IDs) and other drawings.

It should be ensured correct risk analysis has been used and the results are valid. In some cases, this can involve the application of a check list. The assessment of change includes an analysis of the impact on safety, health, environment, reliability, security and quality and also identifies the applicable standards, local mandatory regulations, codes and laws. Additional requirements can apply to high risk sites under the Seveso Directive [3][4].

The role of the change manager and the role of the owner can be combined in one.

4.4 Technical approver(s)

Depending on the complexity of the change, a technical review of the change is conducted by one or more technical approvers in their area of competence. This (these) role(s) can be located onsite or within a central function.

When the product involved is under regulatory control, additional specialists may be required to support the other technical approvers.