

Management of Change

MOC-Management Of Change

- **SCOPE & OBJECTIVES**
- The purpose of the Management of Change (MOC) system is to verify that changes in facilities, documentation, personnel and operations are evaluated and managed to ensure that the safety, health and environmental risks arising from these changes are controlled.

SCOPE of an MOC

- The management system is intended to satisfy the requirements for the Operations Integrity Management System (OIMS) and OSHA Process Safety Management (PSM) systems.
- This document describes the management system for the control and management of temporary, permanent, and emergency changes, including the linkages with other systems, processes or procedures.

MOC Change Classifications

- There are two primary classifications of changes to be controlled and managed by this system when no other process already exists to facilitate changes to **facilities and/or operational changes**. Additionally, changes managed by this system include significant updates to Control Documents, which are communicated to Controllers through training sessions and acknowledged by documentation (sign-off sheets) of each change affecting their area of responsibility.
 - Facility Change
- A facility change includes a revision, rearrangement, addition or deletion of an asset at an existing facility, as well as the installation of any new facility.
 - Operations Change
- An operations change is any facility change that could result in changes in operations, facility changes and/or a pipeline utilization change.

Changes covered by the MOC System

The facility or operational changes listed below require the use of an MOC.

- A change which involves a revision to Control Room Operating instructions.
- A change that will affect product quality.
- A change in the logic of control, safety or monitoring systems.
- A shift in operations parameters (pressure, temperature, level, flow rate, etc.)
- A change in operations flow path including storage tanks, pumps, piping or injection points outside of normal operations.
- A change that will increase the environmental, health, safety or human factors within operations.
- Any deviation from a Global Practice or established procedures / processes.
- A change involving abandonment of facilities.
- A change that will affect existing permits or require new permits.
- A change that will affect security of the location from third parties or introduce new hazards.
- An addition, deletion, modification of equipment or component other than a “replacement in kind”.
- A change in materials used in the process, such as raw materials, products, additives, catalyst, desiccant or chemicals.

Objectives of an MOC

- One of the primary objectives of the MOC process is to systematically involve Control Room personnel with the appropriate knowledge, skills and tools in the design, analysis, execution, and documentation of changes. Proper utilization of this process will ensure:
 - Appropriate reviews and approvals are obtained prior to making changes as defined in this system; and
 - All affected documents are updated and communicated to Controllers reflecting the change, with training, with hard copies of the changes on the console for each Controller to review before each shift and with e-mail notification of the changes.

Objectives of the MOC system

- All personnel will identify changes & initiate the MOC process when required.
- Changes are designed so that the safety, health, environmental, and security risks remain acceptable. Changes are analyzed for safety, health, human factors, environmental, and product quality impact using methods appropriate to the hazards associated with the change.
- Changes are described in documentation that includes the reasons for the change and the potential impact to safety, security, human factors, health, environment, and product quality.
- Changes are communicated to employees and third parties before the employees become involved in operating the equipment or processes that have changes.
- When training is needed in addition to communication of the change, it will be provided before an employee becomes involved in operating the change.
- Documentation that is necessary for authorizing the change will be updated and available for use in implementing the change.
- Control Document updates are completed before closeout of the MOC, including Control Room Operating instructions and Control Room screens with programming changes.

Change Classifications

- **Permanent Change-** A change is considered long term and durable. Any change which is not categorized as a Temporary Change.
- **Temporary Change-** A change which has a defined lifetime and which will be removed before a defined date (*usually no more than six months*).
All temporary changes must have a specified removal date that is documented on the approved MOC form.
- **Emergency Change-** the emergency change path allows the change to be implemented and commissioned immediately in order to address an immediate safety, operational, health, environmental, or product quality situation.

Review and Approval of an **MOC**

- The levels listed are minimum reviews.
- **Level 1 Review/Approval:**
- OCC Control Room Supervisor (Approver);
- D4 Controller/Crude and/or Products Analyst, Monthly Analyst.
- **Level 2 Review/Approval:**
- OCC Area Supervisor (Approver) - for teams without an Area Supervisor, the Area Manager must approve;
- Subject Matter Expert (SME) - refers to any of the following engineering functions: Field or Project Engineer and Engineering Specialist, and OCC Controllers.
- Level 1 Members
- **Level 3 Review/Approval:**
- OCC Manager (Approver)
- Level 1 & 2 Members

Review and Approval of an MOC (cont.)

- The following types of changes require specific reviews as described below.
- **Deviation from Engineering Design Practices**
- Subject Matter Expert
- **Electrical Engineering (EE) Council**
- EE Council review should be designated whenever an MOC involves electrical, instrumentation or control system modifications that impact the Operations Control Room, including PLC, flow computer & loop controller program, and operating instruction changes. If applicable, completion of the EE Council design review/operating instruction modifications are required prior to start up.

Control Documents affected by the MOC

- The Control Documents covered under this system are listed on Page 2 of the MOC Form.
- Document Update Owners as specified on the MOC Form are to revise their Control Documents and distribute the revisions in accordance with their established procedures.
- Some Control Documents, as determined by the Document Owner, and as described in OIMS System 4A, are essential to the safe operation of a system or location. When a change requires a modification to a Control Document designated with an asterisk (*) on the MOC Form, an updated red-line must be kept on site and a copy sent to the Document Owner until it can be replaced by a revised version.

Closing Out an MOC

- Upon completion of the change, the Implementer fills in the revision dates for Control Documents that have been permanently updated, and then red-lines the remaining Control Documents affected. The Implementer will then sign and date the MOC Form and forward it to the appropriate CMC who will obtain the Field Supervisor's signature.
- The CMC will then send the MOC Form to CIC (keeping a copy locally for records) and any remaining red-lined documents, along with a copy of the MOC Form for reference, directly to the Control Document Owners for revisions.
- Control Document Owners shall notify CIC when revisions to Control Documents are completed, CIC will update the MOC Database and log the date of revision.