



MANAGEMENT OF CHANGE (MOC)

1.0 Scope and Authority

This element identifies Petsec's Management Of Change (MOC) procedure as part of its Safety and Environmental Management System (SEMS) Program and applies to all Petsec operations. Petsec is responsible for the development and implementation of written MOC procedure for changes and modifications to facilities and operations personnel that occur on Petsec facilities.

2.0 Operations

The Management Of Change (MOC) procedure applies to changes in facilities (equipment, operating procedures, materials and operating conditions) as well as changes in operating personnel. Whenever these changes are planned or if they occur out of operational necessity, the Management Of Change procedure is implemented **prior to the change**.

2.1 Changes in Facilities

Changes in facilities arise whenever the process or mechanical design is altered, changes in produced fluids occur, process additives are obtained, product specifications change, by-products or waste products are generated, design inventories change, instrumentation and control systems are modified, or materials of construction change. Refer to API RP 75 for a complete detailed description of these changes (below).

- 2.1.1 Projects that involve production or process tie-ins to existing facilities, reconfigurations or modifications.
- 2.1.2 Modifications of existing facilities that result in changes to facility or equipment design, structural support, layout or configuration.
- 2.1.3 Projects to increase facility through-put or accommodate different produced fluids.
- 2.1.4 Significant changes in operating conditions (flow rates, pressures, liquid levels, temperatures or process conditions).
- 2.1.5 Equipment changes, including the addition of new equipment or modifications (alarms, instrumentation, control schemes, etc.).
- 2.1.6 Modifications of the process or equipment that causes changes in the facility's pressure relief (PSV) requirements.
- 2.1.7 Bypass connections around equipment that is normally in service.
- 2.1.8 Mechanical changes that would not normally appear on a process or instrument diagram: replacements, temporary installations, temporary changes in operating procedures, alternate set-ups, temporary electrical equipment or utility connections (other than emergency situations).

NOTE	Construction of new production or process facilities are covered by the Pre-Startup Review and Hazards Analysis elements.
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- 2.1.9 Operations outside the scope of current operating procedures.

- 2.1.10 Changes made in the process or mechanical design or in operating procedures that result from a hazards analysis, audit or annual review.
- 2.1.11 Introduction of new or different process chemicals (corrosion-control agents, anti-foulants, anti-foam, etc.).
- 2.1.12 Modifications to drilling diverter systems, blowout preventers (BOP) or drilling top drives that have not been previously approved.
- 2.1.13 Temporary changes in production installations and procedures.

2.2 Changes in Personnel

Changes in personnel, including contract personnel, occurs whenever there is a change in the organization or in personnel that supervise or operate the facility. Routine personnel vacancies and replacements, rotation and shift or tour changes do not require MOC action.

- Supervisory changes of the platform.
- Changes in contract operators (one company to another).

NOTE	Organizational changes, particularly those brought about by acquisition or purchase of a facility (company or platform).
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2.3 Replacement-In-Kind (RIK)

- 2.3.1 Replacement-In-Kind (RIK) for *Changes in Facilities* is the exchange or replacement of one piece of equipment or component by another of similar specifications and performance characteristics (size, pressure rating, temperature rating, flow rating, metallurgy, etc.)
- 2.3.2 Replacement-In-Kind (RIK) for *Changes in Personnel* is the substitution of one person for another of similar qualifications, training and experience (vacancies and replacements, rotation, shift or tour).
- 2.3.3 Situations involving replacement-in-kind require no further action or documentation.

2.4 Procedure

This MOC procedure and associated Form address the technical basis for the change; the impact the change will make on health, safety and the coastal and marine environments; the time period to implement the changes; and the management and field approval process. Refer to **Attachment A: Management Of Change (MOC) Form.**

When preparing the MOC, consider the effects of the proposed change on unrelated upstream and downstream facilities; revisions on operating procedures, safe work practices and training; revisions of the safety and environmental information; the communications required for that change; and the impact the change will make on affected personnel.

2.4.1 Initiator of MOC (may be the Facility PIC) completes Heading information:

- MOC Type: write in either Facilities or Personnel.
- Platform or Location name.
- Name of person initiating MOC.
- Field name/identifier.
- Date initiated.

2.4.2 Initiator of MOC (may be the Facility PIC) completes Section 1:

- Description of change; what is the change?
- Reason for change; why are you making the change?
- Enter start and end dates and times (estimate times).
- Impact change will make on health, safety and coastal and marine environments: explain.

2.4.3 Approval Process

Personnel authorized to approve *changes* include the Production Superintendent and Facility Engineer.

2.4.3.1 Production Superintendent completes Section 2:

- Checks approved or denied box; if approved, completes Section.
- Checks if operating procedures need editing.
- Signs name and dates.
- Checks other boxes appropriate to the change.
- Writes comments: details, stipulations, etc.
- Sends to Director - Production Operations for review and approval (or denial).
- If denied, explains in Comments and returns to Initiator.

2.4.3.1 Facility Engineer completes Section 3:

- Checks approved or denied box; if approved, completes Section.
- Signs name and dates.
- Writes comments: details, stipulations, etc.
- Sends to Operations Manager for handling and action.
- If denied, explains in Comments and returns to Superintendent.

- 2.4.3.2 Production Superintendent sends MOC to Facility PIC; the Facility PIC takes the following actions:
- Verifies the MOC is complete and approved.
 - Attaches all documents and/or drawings related to change to Form.
- 2.4.3.3 Once MOC has been approved, affected personnel are made aware of and/or trained in the operation of the equipment or system associated with the change prior to the startup of the equipment or system.
- 2.4.3.4 Once work is done, a Hazards Analysis may be required to identify any new hazards resulting from the work; refer to *Hazards Analysis* element.
- 2.4.3.5 If MOC results in a change in the *Operating Procedures* element, changes are made and documented on the cover sheet of the element.

NOTE	An MOC may be required for edits to Operating Procedures.
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- 2.4.3.6 The Facility PIC places the MOC Form and related documents and attachments in an SEMS file on the facility; the MOC Form must be available for inspection upon request.

3.0 Training

- 3.1 Train all affected employees and contract personnel every five (5) years on the contents of this element; refer to the Training element.
- 3.2 Train all affected, newly-hired employees and contract personnel within 30 days after date of hire on the contents of this element; refer to the Training element.
- 3.3 Train or inform affected employees of any changes to this element within 30 days after the element changes have been approved and completed.

4.0 Recordkeeping

- 4.1 Copies of the MOC are maintained on the facility for 30 days, then placed in the SEMS file and retained for six (6) years.

5.0 Attachments

- 6.1 Attachment A: *Management Of Change (MOC) Form*.

Attachment A



Management Of Change (MOC) Form

M.O.C. Type: (Facilities or Personnel) _____
 Platform (Facility): _____ Initiator (Name): _____
 Field: _____ Date: _____

Section 1: <i>To be completed by Initiator/Facility PIC.</i>		
DESCRIPTION OF CHANGE (explain): _____		
REASON FOR CHANGE (explain): _____		
WORK STARTS DATE: (mm/dd/yy) _____	WORK ENDS DATE: (mm/dd/yy) _____	
WORK STARTS TIME: _____ AM or PM	WORK ENDS TIME: _____ AM or PM	
IMPACT CHANGE WILL HAVE ON HEALTH, OPERATING PROCEDURES, SAFETY, COASTAL AND MARINE ENVIRONMENTS (explain): _____		
Section 2: <i>To be completed by _____.</i>		
Approved <input type="checkbox"/>	Denied <input type="checkbox"/>	Edit Operating Procedures <input type="checkbox"/>
Signature _____		Date _____
Permit Required <input type="checkbox"/>	BOEMRE Notification Required <input type="checkbox"/>	BOEMRE Submittal Required <input type="checkbox"/>
Qualifications Verified <input type="checkbox"/>	Training Verified <input type="checkbox"/>	Other (explain) _____ <input type="checkbox"/>
Comments: _____		
Section 3: <i>To be completed by _____.</i>		
Approved <input type="checkbox"/>	Denied <input type="checkbox"/>	Hazards Analysis Required <input type="checkbox"/>
Signature _____		Date _____
Estimated Costs:	Downtime:	Permit Required <input type="checkbox"/>
Capital \$ _____	Days _____	BOEMRE Notification Required <input type="checkbox"/>
Expense \$ _____	SI (MSCFD) _____	BOEMRE Submittal Required <input type="checkbox"/>
Total \$ _____	SI (BOPD) _____	
AFE REQUIRED (Yes/No): _____	BOEMRE Approval (name and number) _____	
Billable to (AFE/Project No.): _____	Work Completed (date and time) _____	
Documents/Drawings Attached _____		
Comments: _____		
Initiator/Facility PIC Name _____ Signature _____ Date _____		