OpsPilot

MOC Module — User Manual

Management of Change · AI Engineering Co-Pilot

What this guide covers — what Management of Change is, how the OpsPilot module runs a change through a disciplined assessment and approval workflow, what to have ready, and the document you receive.

1. What is Management of Change?

Management of Change (MOC) is the disciplined process for assessing and approving any change to a plant — equipment, process, procedure or organisation — before it is made. Its whole reason for existing is that changes which skip this process cause incidents: a removed protection, an unreviewed substitution, a “small” modification with a hazard nobody thought about.

The cost of skipping MOC is not abstract. In the RCA worked example elsewhere in this library, Pump P-101's catastrophic seal failure traced back to a 2024 change that *removed minimum-flow protection without a hazard review* — exactly the failure MOC exists to prevent.

2. What the OpsPilot module does

Role	Responsibility
🎯 **AI Coach (OpsPilot)**	Classifies the change correctly, identifies every hazard the change introduces, checks impacts across nine categories, and confirms the right approval authority is engaged. It treats classification seriously — a major change dressed as minor is how protections get removed quietly.
👷 **Change Initiator / Engineer (you)**	Know what is being changed, why, and what the plant looks like now. You validate the hazard and impact assessment against your specific plant context.

3. How it works — the guided process

#	Stage	What happens
1	Change description & type	What is changing, and whether it is temporary or permanent.
2	Classification	Like-for-like / Minor / Major — which sets the rigour required.
3	Risk assessment	The new hazards the change introduces.
4	Impact assessment	Checked across nine categories (safety, environment, operations, documentation and more).

#	Stage	What happens
5	Approval authority	Confirms the correct sign-off authority for the classification.
6	Implementation & rollback	The plan to implement, and the plan to reverse if it goes wrong.
7	Close-out	All documents updated and all training delivered before the change is closed.
8	Generate	Unlocks the Word MOC document.

4. What you will be asked — have this ready

- A precise description of the change and exactly what will be different afterwards.
- Whether it is temporary or permanent, and why the change is needed.
- What the plant looks like now — the systems, equipment and procedures the change touches.
- The documents, drawings and training that will need updating to close it out.

Tip — classify honestly. The temptation to call a major change “minor” to avoid the paperwork is precisely the behaviour that causes incidents.

5. What you receive — the output

A complete Management of Change document (Word) containing:

- Change description, type and classification.
- Risk assessment of the hazards introduced.
- Impact assessment across the nine categories.
- Approval authority and sign-off.
- Implementation plan with rollback, and the close-out checklist of documents and training.

6. Worked example (illustrative)

A site wants to remove a recirculation line that “never seems to be used.” Run through MOC, the change classifies as Major because it removes a protective function. The risk assessment surfaces the hazard: without recirculation, the pump can run below minimum flow and dry-run its seal. The impact assessment flags that a low-flow trip would need to be configured, the P&ID and SOP updated, and operators retrained. Approval escalates accordingly. The rollback is simple — leave the line in. That is the entire incident in the P-101 example, caught on paper before it happened instead of investigated afterwards.

7. Getting the best result

- **Classify by consequence, not convenience.** If it removes or alters a protection, it's probably Major.
- **Check all nine impact categories.** The hazard you miss is usually the one outside your discipline.
- **Always plan the rollback.** Knowing how to reverse a change is part of approving it.

- **Close it out fully.** A change isn't done until the drawings and training catch up.