



Management of Change

*A Necessary and Required
Work Process for Alyeska*

API Pipeline Conference and Cybernetics Symposium

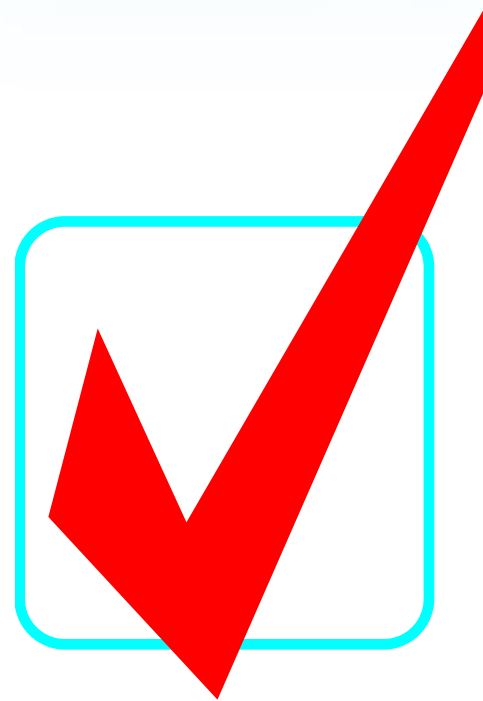
**April 21, 2010
New Orleans, LA**





Outline

- What is Management of Change (MOC)
- Why do we need MOC
- Recognizing Change
- The MOC Program





Management of Change

Procedures and work practices to ensure that changes are well understood and to ensure that the operation is maintained within established and safe operating parameters.





Why Do We Need MOC?

80% of all large scale incidents in industry trace their origins back to “Change”

vs.

Change is essential to Alyeska’s viability





Benefits of MOC

- Promotes planning and communication.
- Ensures the organization and the operation are prepared for the change prior to implementation.
- Eliminates surprises and unexpected operating scenarios.
- Prevents “shortcutting” and “workarounds”.
- Changes are documented and the information is archived...retrievable and auditable.





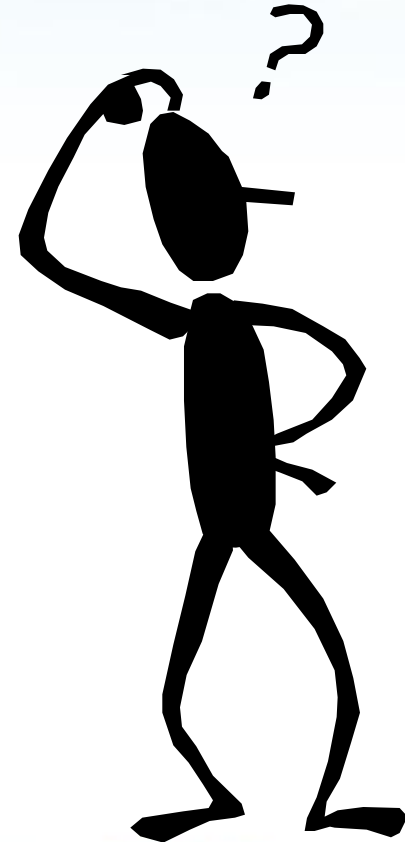
What Is a Change?

- Change is an alteration, adjustment or addition to any component, variable or property within an existing system (except those within clearly defined boundaries or responsibilities).
- Replacement-in-Kind or Fix-in-Kind is not considered a change.





Do we ever need to
Manage Change at
Alyeska's Control Center
or in the Automation
Group?





Everyday Alyeska Examples

- Changes to safety systems (SIPPS, Fire Systems, Relief and Vent Systems)
- SCADA downloads
- Patching or upgrading server software on control system computer
- Placing new systems into operation (project work)
- Changes to Alarms (outside of predetermined limits), HMIs, etc.
- Temporary configurations and/or installations





Focus of MOC at Alyeska

- Keep it simple and usable – Form Driven.
- Become Operations Centric not Project Centric.
- Involve controllers in every step of the change.
- Preplan, analyze, and communicate every change.
- Test before implementation – PSSR, SAT, point to point testing, development system, etc.
- Never proceed in the face of uncertainty...be certain of success before implementation.
- Drive action...the culture change will follow.





Stakeholder Involvement is Essential

We cannot perform our work in isolation; we need to gather input, communicate, and plan with the involvement of all stakeholders. Especially the Controllers.





Alyeska MOC Process and Form

- A MOC form is used by most companies to guide employees through the change process - a form driven process is simple and usable.
- The MOC form includes fields for the following:
 - Description, purpose, and tech. basis for the change
 - Safety, environmental, and regulatory impacts
 - Operational impacts
 - Necessary time period for the change (permanent or temporary)
 - Authorization to implement the proposed change
 - Method to ensure all areas impacted by the change are considered and that the change is fully documented





Specifics of the Alyeska Form

Page 1

Summary of Change

- Problem
- Scope
- Justification
- Major impacts to safety, environmental, compliance, and operations
- List of stakeholders
- Description of reviews that have been or need to be completed such as hazard reviews





Specifics of the Alyeska Form Cont'd

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Detailed Checklist to Identify Impacts and Considerations

- Process Safety
- Personnel Safety, Integrity, Compliance
- Process Technology
- Support Systems
- SCADA/DCS
- Operations and Maintenance
- Projects





Specifics of the Alyeska Form Cont'd

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Documentation and Backup Checklist

- Design documents and drawings
- Configurations; software, logic, etc.
- Process Models
- Operating instructions
- Training materials
- Leak detection
- Etc.

