



# Improving the Management of Change Control at a Top Tier COMAH Site

## Overview

### The Business Challenge

Improving the Management of Change Control / Plant Modifications on a top tier COMAH site.

### The Solution

FoCul developed and deployed a secure Lotus Notes application which allowed the Operations and Asset Management teams to quickly raise and process Plant Change Control ( Plant Modification ) requests.

This process allows each of the stake holders to assess and sign off on the risk assessments, the construction and commissioning steps and the final Modification review.

Actions are allocated to named people and are individually tracked to completion.

### The Key Benefits

Significantly improved control with clear visibility of the status for each modification.

Time ( and cost ) savings through immediate access to information for all team members including Permit to Work issuers.

Consistency of application of the change control processes.

Reduced time, rework and cost processing modifications correctly.

Cross site status reports allowing management by exception.



Lucite International is the world's leading producer of methyl methacrylate (MMA) and the only producer to have production facilities in the three major economic regions of Europe, Asia Pacific, and the US.

Lucite International's Cassel Works is a top tier COMAH (Control of Major Accident Hazards ) site and is the largest methyl methacrylate monomer production facility in Europe.

Although Lucite had a robust paper Plant Modifications system in place ( based on the ICI standard ) the system was very inefficient. FoCul worked with Lucite to develop a secure electronic system which combined the benefits of an IT system with the best practice processes used by Lucite.

The system was first introduced in 2002 and is now on its third major release processing over 300 plant modifications per year.

The system has a two tier approval processes with a rigorous approval process for high hazard changes and a fast track approval process for lower hazard changes. Temporary modifications are also tracked and revalidated periodically.

Actions associated with the plant modifications are allocated to named individuals and are individually tracked to completion. The actions can also be interlocked to specific stage gates in the process.

*“The system allows us to quickly and simply track all of our plant modifications—it is much more transparent and the risk assessment tool is far more detailed than the previous paper system”*

*Jamie Armitage, Cyanides Operations Manager*

*“The system ensures that each step of the process is properly completed at the correct time”*

*Mike Twigg, Asset Engineer*

## Key Features

- Modification approval is driven by a plant based authorisation matrix.
- The Risk Assessment processes can be configured by the system administrator to capture best practice and new learning.
- Temporary modifications are tracked and revalidated periodically.
- Users can easily see what they need to do and where their documents are.
- All actions arising from the assessment are tracked to completion and can be interlocked.
- Key Performance Indicators are collected automatically.
- The application runs on existing hardware - no hardware investment was required.

## Technical Specs

- Compatible with Notes 5,6,7 and 8.
- Configurable workflow processes.

## Change Control Process

The process described here has been tailored to Lucite Internationals requirements. We have also developed systems for other clients who have used variations of this process.

- **Concept Approval**  
The Plant Modification is described in technical and financial terms. Documents and links to other files can be attached. The concept needs approval from the Development Manager, Budget Holder, Ops Manager and Technical Engineers.
- **Specification, Technical Assessment and Risk Assessment:**  
The detailed specification is assessed against a configurable checklist and then a risk assessment is carried out. The risk assessment is carried out against an extensive checklist. Once the risk assessment has been completed modifications deemed to be high risk require additional approval steps at each stage.

The modification owner must also identify any actions and works records ( operating instructions etc.. ) that must be updated before the modification can pass through each stage gate. The application uses a system of interlocks to ensure that these have been completed before a stage gate can be passed

- **Construction Controls**  
Once the modification has been approved the system is used to control the construction phases. The application allows work to be broken into multiple construction phases with each being formally approved and completed.  
proceed past a certain point until that action has been completed.
- **Commissioning Controls**  
Similar functionality is used to control the commissioning phases of the work.
- **Records update**  
Any remaining records identified during the specification and risk assessment are completed.
- **Review**  
Each modification is reviewed to assess its technical and financial success against the criteria declared at the concept approval stage.
- **Actions and Interlocks**  
Actions identified during the life of the modification are each assigned an owner and are individually trackable. The actions can also be interlocked to the modification process so that a modification cannot

## About FoCul

FoCul is an Advanced IBM Business Partner specialising in the development and delivery of pragmatic, robust and effective collaboration tools for industry.

Our dual experience as Professional Engineers and IT Professionals allows us to develop systems that are not only very effective but are also good value for money.

Our solutions can be rented or bought out right and we can host them for you if required ( in Lotus Notes or on the web ).



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