



# *Tahmoor Colliery uses PMO2000™ on new equipment halving vendor recommended maintenance program.*

## Background to the assignment

The Tahmoor coal mine was replacing a 30 year old longwall mining system. Progressive Project Manager wanted an RCM based preventive maintenance program and commissioning schedules from the start

This aspect was built into the contract of supply. The contract also had performance penalties associated with availability below 96% and the prescribed PM for the asset was 4% by itself.

## Assets Analysed in 25 Days

Armoured Face Carrier/ Conveyor  
Beam Stage Loader  
Boot End  
Cables  
Crusher  
Distribution, Protection and Isolation  
Electrics

Gas Monitoring  
Hydraulics and Jacks  
Monorail  
Shearer  
Shields  
Structure  
Substation

## How we went about it

### The Project Plan

3 days of data preparation – obtaining the vendor recommended maintenance schedules and arranging them in a manner suitable for analysis.  
1 day of PMO2000™ training,  
25 days of Workshops,  
5 days of schedule grouping and resource balancing,  
Approval by owner and vendor, and  
Implementation

### The Project Team

Facilitator - OMCS International  
Project manager - Vendor  
Service technicians Vendor  
Mechanical supervisor- Tahmoor  
Electrical supervisor - Tahmoor  
Operator.- Tahmoor

## Results

Figure 1 shows how the vendor recommended schedules for the longwall system changed when PMO2000™ was applied.

Vendor recommended schedule was estimated as 4% total time. PMO2000™ found that this was double the required amount. This amounts to ½ hour per day or extra week of production. In addition to the more focussed PM program, numerous simple modifications introduced to improve maintainability and early fault detection.

After the analysis, the approved PM program was estimated to be between 1% and 2% of total time – less than half of that which was initially specified.

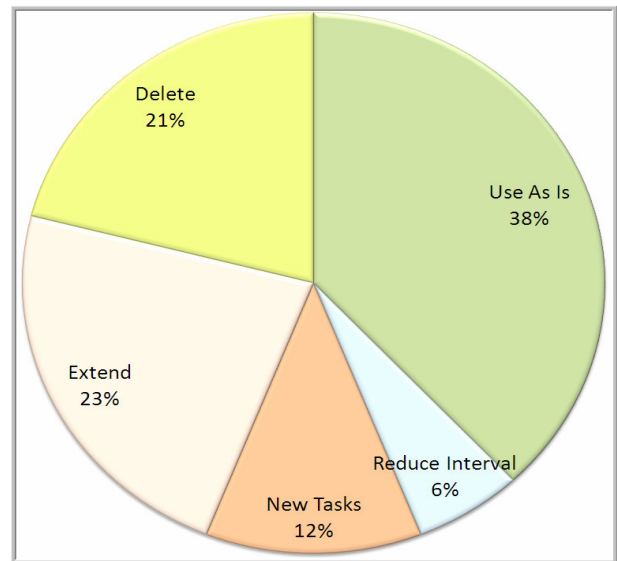


Figure 1 - Results of PMO2000 Review

### Other benefits

The other benefits of the assignment were included:

- Reduced conflict between vendor and owner regarding warranty or performance obligations
- Better acceptance of PM procedures and the elimination of tasks that were not cost effective
- Ability to modify PM's if assumptions in the analysis found to be incorrect.
- Better vision of spares requirements.
- Engagement of the site personnel in defining what maintenance is needed.
- Well defined budgeted manning requirements.

## What the maintenance manager said

The project manager for the acquisition became the maintenance manager after commissioning. When questioned after commissioning he made the following comments:

“I believe the approach was right and would be happy to recommend the application to other organisations. I would reinforce the requirement to have the OEM resources specified in the contract documentation. Furthermore I would specify the specific individuals or positions required during the analysis.

## Summary

Many people think that PMO2000™ is not suited to new assets and that RCM must be used in these circumstances. The reality is however, that few new assets are in fact “new”. Almost all “new” assets are improvements on models already in existence or in a new process, they are a new configuration of existing assets. Sure, they may be bigger or faster, but the DNA of these assets is essentially the same. This project illustrates how effective PMO2000™ can be when applied to new assets before commissioning.

In order to achieve this benefit for your new plant, it is a very good idea to write this analysis into the tender or the contract of supply. While that step is important, even when this has been done, many assignments fail due to lack of resources to conduct the review. This aspect must be planned and resourced well ahead of the execution. Often such good intentions to not come to fruition because projects become delayed and resources get consumed by more urgent needs.