

A Modern Management Operating System Handbook

For supervisors and superintendents

Supported by the Fewzion Electronic Work Management System





Statement of Intent

This booklet describes the tools & behaviours we need to manage our work and safely deliver on our business goals.

It is not intended to be a comprehensive manual, but should be used to guide your work within the Management Operating System framework and to help you exhibit the leadership behaviours expected of a Frontline Manager, Planner or Leader.

We expect you to understand and use these tools to assist us in maintaining both safe and productive operations.

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It has been created in collaboration with "The Right System" from TPS (www.therightsystem.com.au)

We want people to use this document to help improve the operation of their MOS on site.

Contact us to request the powerpoint version so you can edit it for your own needs.

Call Paul Moynagh on +61 431 74 84 94
Or visit our website and fill in a contact form. www.fewzion.com

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Management Operating Systems

A Management Operating System is a set of tools and behaviours that link the action and focus of the frontline teams with the plans of their leaders. In many operations it has

Produced safe improvements in productivity by

- Focusing the organization on meeting the plan.
- Creating a system that identifies and acts on variances to plan.
- Helping people plan and prioritize problem solving.
- Enabling improvements to be measured.

And helped to

- Improve transparency and decision making.
- Encourage objective feedback.

This document describes the management tools and behaviours that happen Weekly, Daily and throughout shifts.

It describes two critically important interlinked systems, the Weekly Planning and Review cycle and the Shiftly Leadership cycle. Successful management of the people and processes in your operation is not possible without a strong focus on these systems.

This document should only be used as a guide and should not be relied on as it is. We recommend you engage a consultant to develop a document like this specific to your organization.

We also recommend you use Fewzion to get rid of all your spreadsheets and whiteboards and bring your MOS into the 21st century...

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Management Operating System Tools The Fewzion System Constitution Con

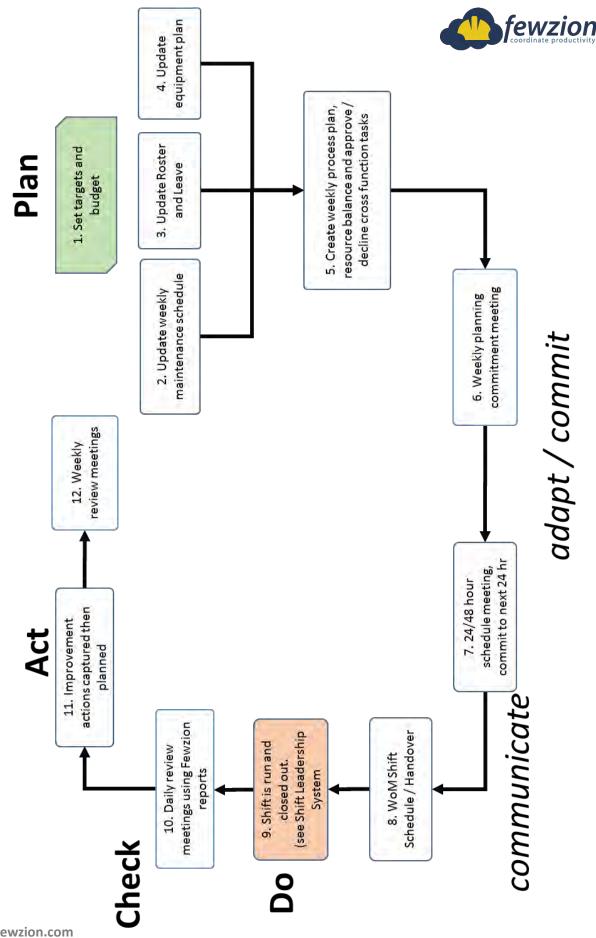


The Fewzion System consists of the following tools

Tool	When	Where	System	Description
Weekly Process / Production Plan	By 12pm Wed	Process Planning Board in Fewzion	Fewzion	Weekly Production Plan is a collation of shiftly plans for a week and is created by each of the production areas individually based on their targets, TARP, tasks, people and equipment. It may be linked to planning system such as your ERP or production, people and project planning tools
Weekly Planning Commitme nt Meeting	Wed afternoon	Planning area	Planning tools and Fewzion weekly schedule.	A 30 minute meeting attended by all coordinators and planners to commit to the weekly plan. All weekly plans, Fewzion warnings and resource constraints should have been resolved before this meeting.
24 hour Planning Commitme nt Meeting	Daily 2.30pm	Planning Room	Fewzion 24/48hr schedule on projector	Brief meeting between on duty frontline coordinators, planners, supervisors, production coordinators and maintenance planners to ensure the plan for the next 24 hours is good/feasible. Ensure all issues and warnings are resolved.
Whole of Mine Shift Schedule	Used by Shift manager during shift	Planning Room	Fewzion shift schedule, PC & Printed	Shows the work that needs to be completed, the people and machinery required in each process across the mine including site priorities, production targets, manning, equipment and work orders for the shift.
Supervisor Shift Plan	Printed by supervisor before pre-shift briefing	Supervisor room	Fewzion shift plan & attachments	A plan for the work that needs to be completed incl. people and machines required in the process, including hard and soft KPI targets, major tasks and work orders for the shift.
Shift Hand Over	30 min before Start of Shift	Face to face in the process	Fewzion shift schedule or plan	Transfer understanding of where the crew finishing is up to on the plan. Use Fewzion shift schedule to adapt plan for a process and discuss progress against KPIs using actual screens.
Pre-shift Briefing	15 min before Start of Shift	Planning Room	Fewzion shift schedule + shift plans & attachments	Shift manager to brief supervisors about whole of mine shift schedule and the plan for their area. Adapt plan to meet changes, confirm site priorities, answer any questions and give clear direction.
Prestart Meeting	Start of shift	Muster Area	Fewzion shift schedule (WoM tour)	Ensure crew are clear about hazards, incidents, plan for shift, recent performance and know what they are going to do during the shift.
Short interval control	Every 2 hours.	Process / work area	Fewzion actuals / shift plan	Regular update phone call from shift supervisor/manager to supervisors in order to follow up on work completed and progress against plan with problem solving to resolve variances.
Shift Debrief	End of shift	Planning Room	Fewzion actuals and shift reports	Shift manager to debrief supervisors against their shift plan and collect relevant statutory and production paperwork. Follow Plan, Actual, Variance, Action (PAVA) process. All variances have an action
Daily Review Meeting	Each Morning Weekdays.	Each area	Fewzion daily, weekly ops reports, touch screens	Managers, Superintendents, Coordinators and Planners review of performance over previous 24 hours. Follow PAVA. All variances have an action
Weekly Review Meeting	Thursday afternoon	Each process area	Production & Performance reports	To review performance each week, consider systemic issues that are affecting performance then establish and review progress of actions or projects to solve these issues.

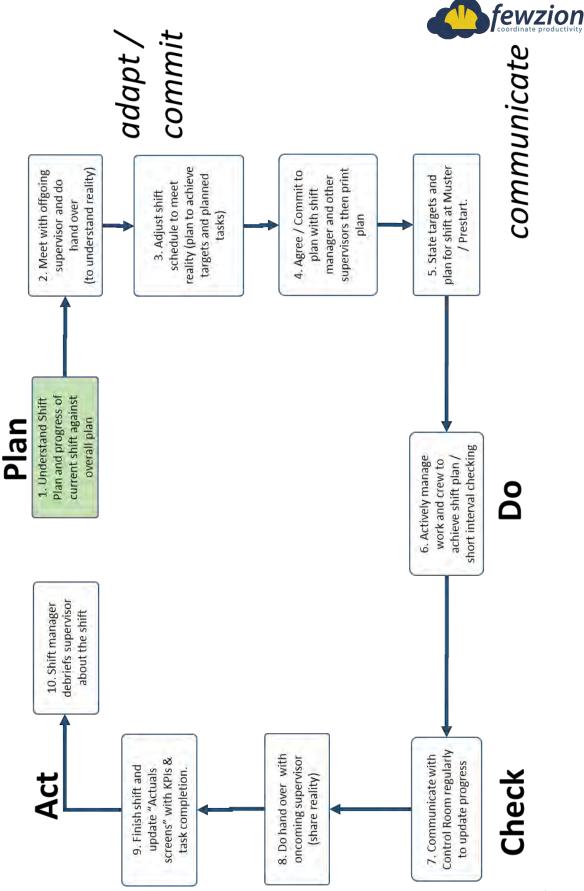
Weekly Planning and Review System

Fewzion enables effective planning behaviours so that work is ready to be executed on each shift



Shift Leadership System

Fewzion enables effective leadership behaviours throughout each shift to help hit targets.

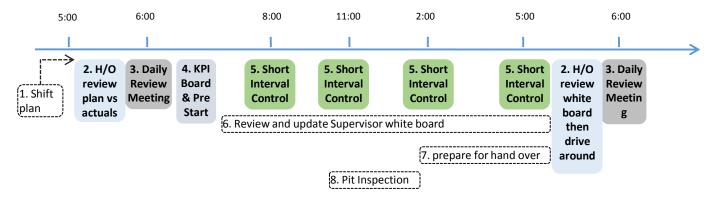




Supervisor's Perfect Shift

As well as helping the whole business to deliver on our plan the MOS tools should be key activities throughout each shift that help supervisors focus on safe and productive performance.

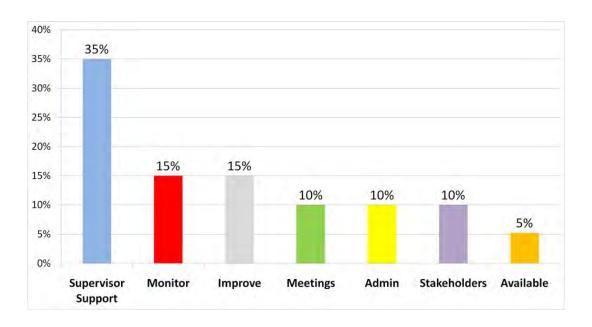
The key activities should be conducted throughout each shift in the following way.



Superintendent perfect week

The superintendent perfect week is a guide to help distribute effort and focus through each week. The key activities of a superintendent should be distributed in the following proportions. For more detail see page 9.

Ideal Proportion of Effort / Focus of Superintendents throughout a week.





Tools for Planning



WEEKLY PROCESS / PRODUCTION PLAN

Leader Behaviour Setting Clear Direction

Develop a plan for each shift that is realistic and meets our weekly production targets...

The Weekly Production Plan is the collation of shiftly plans for a week and is created by each of the production or process areas individually based on:

- 5 week outlook and work required next week to ensure success in future weeks.
- Planned maintenance shifts and site priorities. (set and communicated in advance by the operations manager)
- Production targets (set for the conditions)
- Tasks that need to be done (based to a large extent on a sequence plan).
- The people expected to be there
- Equipment that is available
- Supplies that are required to complete work.
- Tasks required by other departments.

Used properly, Fewzion enables planners and coordinators to see when they have planned too much or too little work for the people or equipment available. It therefore enables planners to adjust their plan to meet their constraints.

Fewzion will warn users when critical elements of the plan are incomplete or in error. Users must ensure all warnings and resource constraints are resolved before completing their weekly plan.

The weekly plan must be completed the day before the weekly planning meeting and reviewed by process superintendents for quality.

What does an effective weekly process plan look like?

Sets site priorities and maintenance shifts then communicates them a week in advance.

By shift, accounts for realities such as roof support TARP, sequence tasks, belt moves, maintenance, known issues, machine availability, planned work etc.

Updates the roster, leave and equipment plans before everyone begins planning.

Accepts, declines or replans all shadow tasks.

Addresses all warnings and resource constraints.

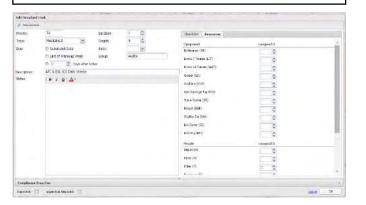
Attaches work orders and work instructions to tasks and shifts, where appropriate.

Users: Production Manager, Superintendents, Shift Managers, Coordinators & Supervisors

Timing: Weekly by CoB Wednesday

Add an Activity

Ensure all required resources, equipment, targets and notes are included.



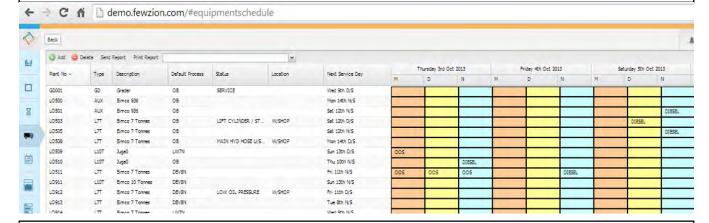
Manage Crew Roster and Leave

Ensure the roster is updated with all leave and any crew / roster changes



Equipment Planning / Schedule

Ensure all planned maintenance and breakdowns are recorded so that the plan can be adjusted.



Build the Weekly Plan

Drag and drop activities that need to be done and ensure roster and equipment constraints are met. Ensure all highlighted issues / warnings are resolved and tasks from other departments are either accepted or declined.





WEEKLY SITE PLANNING (COMMIT) MEETING

Leader Behaviour Setting Clear Direction

Review and commit to the weekly plan...

A 1 hour meeting attended by all coordinators and planners to commit to the weekly plan. All weekly plans, Fewzion warnings and resource constraints should have been resolved before this meeting

OUTCOME: All stakeholder commitment to the agreed weekly plan

The weekly planning meeting is a critical moment when key process stakeholders (superintendents, coordinators, planners) commit to the integrated schedule for the following week.

The meeting is chaired by the operations manager.

The process owners should present to the manager, for approval, the schedule that they have built.

The manager should test the quality of the schedule by asking probing questions to ensure:

- The planning and scheduling process disciplines were followed
- The schedule is aligned with longer term targets
- Everyone is clear about priorities, maintenance shifts, production targets and critical tasks.

What does an effective weekly planning meeting look like?

Starts on time with all process and planning roles represented.

Confirms the planning and scheduling process for the week was followed.

Confirms pit priorities and maintenance shifts and confirms all plans have been built on these terms.

Confirms all warnings and resource constraints have been addressed before the meeting.

Reviews critical tasks for the operation.

Reviews weekly plan for each process in order of priority and ensures any unforeseen issues are identified and addressed.

Makes simple changes to the Fewzion plan on the screen to ensure new plan is possible.

Develops and assigns to a person and plan actions to mitigate potential problems.

Everyone agrees that the plan is possible as documented and commits to achieving it.

Users: Operations Manager, Superintendents, available MSO, Coordinators, Planners.

Where: Planning room

Timing: Weekly, the day before the start of

the plan.



WEEKLY SITE PLANNING/COMMIT MEETING AGENDA

Agend	Agenda-Weekly Site Planning Meeting Agenda							
XYZ								
Purpose:		To establish a plan for the next 5 weeks and a detailed schedule for the next week that are effective and achievable.						
Date:		Start:		End:				
Venue	:							
Attend	dees:							
Apolog	gies:							
Chair:			Minutes:					
Agend	a Items				Lead	Time		
1.		tanding action items from previ in any missed actions	ous meetings		Chair	5 mins		
2.	Review of previous week for each panel - Where did we get to, compared to plan. - Did we complete all the tasks we planned to complete. 10 mins Coord.							
3	Review pre populated 5 Week plan ahead - Manage potential departmental operational conflicts. - Use planned operational non production time for preventative maintenance. 10 mins Coord.							
4.	Next Weeks Plan - Review of the pre populated plan, by shift. - Flag clashes with equipment allocation and allocate based on priority. - Highlight production limitations due to air/power/belts est.					30 mins		
5.	General business							
Curren	t Actions for I	Review						
No.	What By Who					When		
New Actions Arising								
No.	What	By Who When						
Completed Actions								
No.	What		By Who		When			

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WEEKLY SITE PLANNING (COMMIT) MEETING Example Questions (Manager to Supt)

- When your work crews reviewed the schedule, what were their main concerns?
- What changes did they suggest that you included?
- Have all your service providers committed to the schedule? What risks did they identify and how have you and they managed these?
- Is there any risk that any of the tasks cannot be done by your customer's Required Date?
- Will this plan deliver to my 3 and 12 month schedules?
- Explain the actions you have taken to ensure this is the most effective use of our resources?
- What allowance or contingency plan is in the schedule to cope if things go wrong?
- What are our options to share resources with other areas; what have you done about that?
- Which are the critical tasks?
- This job went badly last time what have you done so I can be confident it will go well?
- What tasks are most at risk of not getting done; what have you done to mitigate the impact?
- Are the schedule's projected costs in accordance with the budget?
- What obstacles did you overcome that we can learn from; have you shared that learning with the rest of the team; how will you build the learning into our processes for the future?
- What system issues have you identified for further investigation?
- How did this meeting go; what can we improve; what did we add/change today that could have been foreseen during the schedule development process?

WEEKLY SITE PLANNING (COMMIT) MEETING Example process support actions

Manager

- Mid-week, review with one stakeholder how development of the schedule for next week is progressing
- Mid-week, follow up with an Undermanager on one of the items identified at the Commit meeting as critical
- Once a week, review items on a visible schedule with a supervisor – in full sight of the supervisor's crew

Superintendent

- Once a month, have a supervisor bring a crew member to the Commit meeting and include them both in discussions
- Each week, hold conversations with supervisors and planners to ensure you hear about significant crew input, improvement ideas, risks and any schedule development process issues



24/48 HOUR PLAN (COMMIT) MEETING

Leader BehaviourSetting Clear Direction

Review, adjust and commit to the plan in time to solve problems before they occur...

Brief meeting between on duty frontline coordinators, planners, supervisors, production coordinators and maintenance planners to ensure the plan for the next 24 hours is good/feasible. Ensure all issues and warnings are resolved.

As each day goes by, the weekly plan becomes more inaccurate. It is therefore important to review the plan daily 24 – 48 hours before it is expected to happen to ensure we have the best chance of finding and resolving issues. To be successful we must ensure:

- ✓ Production targets are set for the conditions
- √ Tasks are based on the current chainage on the sequence plan
- ✓ That the people expected to be there will be there (i.e. all leave is accounted for)
- Equipment is available (i.e. any breakdowns have been allowed for)
- ✓ Supplies that are required are available.
- Tasks planned by other departments are known and possible.

The Fewzion 24-48 hour schedule screens should be used to review the plan in detail ensuring that all issues are resolved and actions to mitigate potential problems are developed and assigned to a person and plan.

What does an effective 24/48 hour schedule look like?

Considers in detail regarding the next 24 and 48 hours all realities such as roof support TARP, sequence tasks, belt moves, maintenance, known issues, supplies, machine availability, planned work etc.

Ensures roster, leave and equipment plans are up to date.

Accepts, declines or replans all shadow tasks.

Addresses all warnings and resource constraints.

Attaches to tasks and shifts, where appropriate, all work orders and work instructions.

All attendees agree that the plan, as it stands, is possible based on all known information.

Users: Production Manager, Superintendents, available Shift Manager, Coordinators

Where: Planning room

Timing: Daily at 2.30 pm



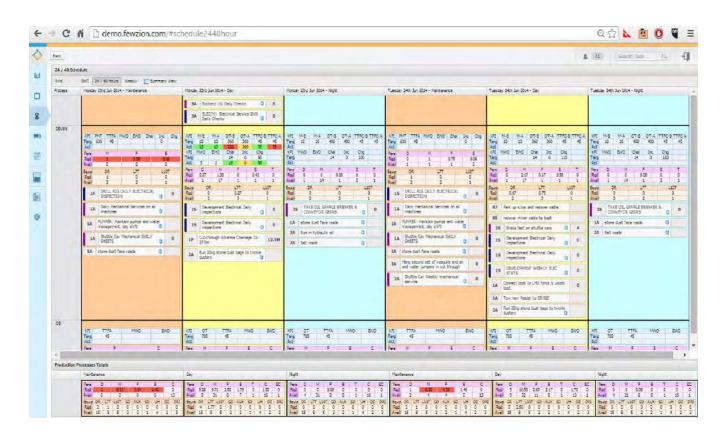
24/48 HOUR PLAN (COMMIT) MEETING AGENDA

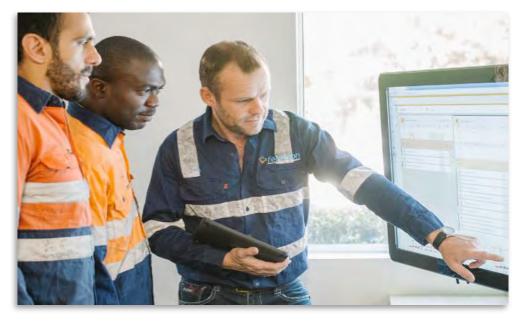
Agenda-24/48 HR Planning Meeting Agenda								
XYZ								
Purpo	se:	-	To ensure accountability and ongoing commitment in relation to activities within the next 24 /48 hours and resolution of any identified constraints.					
Date:		Start:	Start: End			d:		
Venue	:							
Attendees:								
Apolo	gies:							
Chair:			Minutes:					
Agend	a Items			Le	ad	Time		
1.		any issues highlighted within t, Community, People	Health and Safety,	-	perations anager.	5 mins		
2	Review plan for next 24 hours to identify and resolve 1. Priorities for the 24 hours 2. Critical tasks that must be completed 3. Confirm any actions to correct variances identified from area reports e.g. performance vs plan, maintenance compliance are planned for next 24 hours 4. Any reasonably foreseeable issues that may get in the way of completing the plan. 5. Ensure any equipment or labour constraints that need to be resolved are resolved All parties formally commit to plan for the next 24 hours Manager. 20 mins Manager.							
				J				
Curren	t Actions for	Review						
No.	What		By Who		When			
New Actions Arising								
No.	What		By Who	By Who		When		
Completed Actions								
No.	What		By Who		When			



24-48 Hour Report

Ensure immediate plans are adjusted to address known issues or constraints from plans executed in the last 24-48 hrs



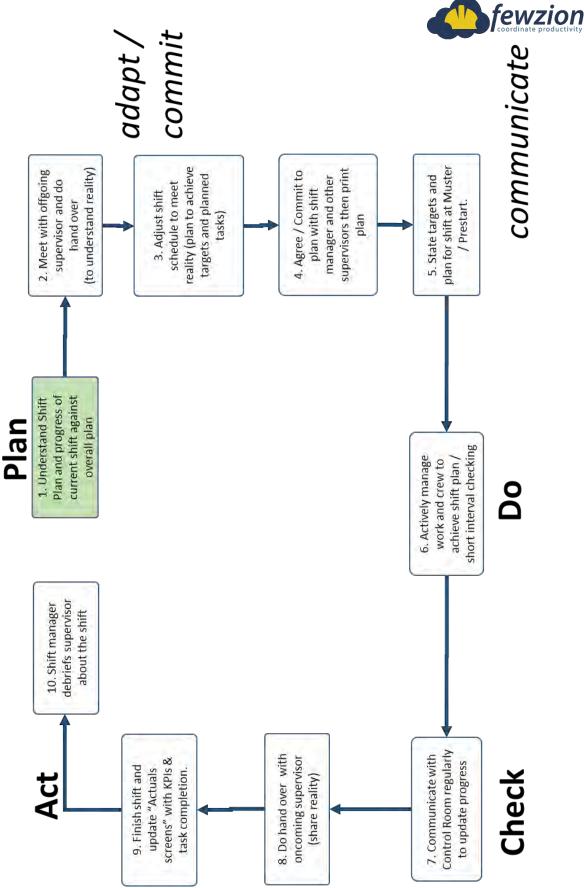




Tools for the Start to the End of Shift

Shift Leadership System

Fewzion enables effective leadership behaviours throughout each shift to help hit targets.



WHOLE OF MINE SHIFT SCHEDULE

The whole of mine shift schedule is where planning and reality meet...

Shows the work that needs to be completed, the people and machinery required in each process across the mine including site priorities, production targets, manning, equipment and work orders for the shift.

This schedule is used for

- Reviewing the plan for previous, current and future shifts across the whole mine.
- Adapting the plan for changes so that it may be executed effectively.
- Recording issues and actions that need to be addressed or escalated.
- Communication of important messages to supervisors
- ✓ It is an important part of the shift handover, Shift Manager Briefings and Shift Manager Debriefs.

What does a good Whole of Mine Shift Schedule look like?

The shift schedule has been balanced across the mine by sharing people and equipment to ensure the best use of resources to meet the plan.

Actions or tasks that need to be moved or escalated have been reviewed and understood.

Incomplete tasks have been reviewed and rescheduled where appropriate.

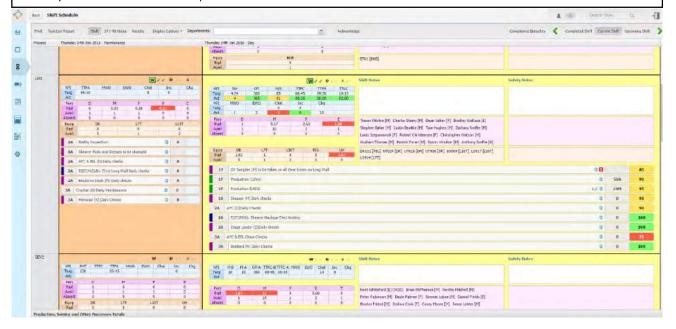
Users: Superintendents, Shift Managers and Supervisors

Timing: Start, End and Throughout the shift



Whole of Mine Shift Schedule

Bird's eye view of all the committed planned tasks and allocated resources across current and future shifts.





SUPERVISOR SHIFT PLAN

Leader Behaviour

Setting Clear Direction

Prior preparation prevents poor performance...

A plan for the work that needs to be completed incl. people and machines required in the process, including hard and soft KPI targets, major tasks and work orders for the shift.

The Supervisor must review the plan for his shift and consider it in light of information received from the Shift Manager, Control Room Operator and his off going Supervisor (during handover).

He may then adapt his plan for the shift in Fewzion to ensure that he and his crew can do their best to meet production and activity targets within the constraints identified in the plan and the handover.

Once he has adapted his plan in Fewzion he must print the plan and all attachments for discussion in the Shift Manager briefing.

He must ensure his plan is achievable based on his knowledge of the status of his area. He must understand the resources and equipment he has to use and be focused on the relevant KPIs.

What does a good Supervisor Shift Plan look like?

Reviews actuals board for status of current shift targets and tasks.

Understands planned tasks and available resources / equipment for the shift.

Uses handover to identify risks to his plan.

Adjusts shift plan in Fewzion to resolve issues and ensures crew has a safe and productive shift.

Prints shift plan and attachments for use in Shift Manager briefing and for briefing crew.

Reprints shift plan if major changes have been made during briefing

Briefly commits to plan in front of crew during muster / pre-start meeting.

Uses shift plan throughout the shift to distribute and follow up on work.

Ticks off work as it is completed

Users: Shift Managers and

Supervisors

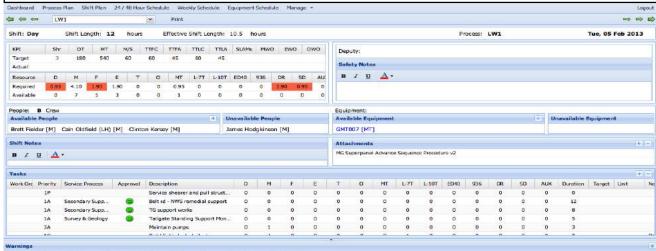
Location:

Timing: End of shift



Shift Plan Screen

Helps Supervisors conduct concise Shift Manager and Crew briefings



The task of DRS062 - MG110 21ct on Tue, Feb 5, 2013 Day shift has not been assigned to a Production Process.

The task of DRS112; MG112 GC 2 on Tue, Feb 5, 2013 Day shift has not been assigned to a Production Process.

Conveyor Installation requested that Install combi and extend belt to 83ct be carried out Tue, Feb 5, 2013, Day shift - this task is still pending approval/rejection from You. This notification has also been sent to the Kains Flanner(s).

Conveyor Installation requested that Install combi and extend belt to 93ct be carried out Tue, Feb 5, 2013, Day shift - this task is still pending approval/rejection from you. This notification has also been sent to the Conveyor Installation Fla...

Development 2 Shift Plan 13 January 2016 05:24 PM Thu 14 Jan - Day Crew: Blue Deputy: Matthew Irelandes Hours: 12h Effective Hours: 12h Week 3 2016 M-B M-A OT-A TIFG-B TIFG-A MWO EWO Chal Inc Chg Notes, issues and actions 10 10 360 8:45 8:45 14 0 Target Actual Notes, issues and actions D M 1(126) 15(1806 2(244) 1(126) Allocated 0.83 12 0.08 · O Kent Whiteford Brian McPherson Neville Mitchell Peter Robinson [M] Dayle Palmer [F] Simmie Loban [M] Daniel Fields [E] Brodyn Friend [M] Joshua Cnok [T] Casey Moore [M] Jason Lester [M] Duncan Clark [M] □ Jared Bennet [M] □ Matthew □ William Hitchcock □ David Agus [M] Damien Pope [M] David Mulitalo Notes, issues and actions 4 3 1 9 0.83 1.67 2.17 10911 [1107] 10511 [177] 10912 [177] LO913 [L7T] UH04 [UH] UH02 [UH] UH01 [UH] UH03 [UH] UH02 [UH] UHO1 [UH] UH02 [UH1 UH01 [UH1] UH01 [UH1 UT016 [DRI Unavailable UHOS TUHT (Process, Priority) Task Description [Workorder] Locations Resources Hrs Target % Comp DEV2 15 DRILL RIG DAILY ELECTRICAL INSPECTION [3] 1 1xD, 6xM, 1xL7T 1P CM009 3rd pass face rd widening 5 M Notes of some sort that describe the task to a supervisor. DEV2 1P Production B HDG 6xM, 1xDR, 2xUH 10 M 10 Mine to sequence plan DEV2 1A Muck 56E and 56-57D 3MM, 2xL7T 8 40 M notes of some sort

SHIFT HAND OVER



Leader BehaviourSetting Clear Direction

Smooth handovers improve safety and increase productive time...

Transfer understanding of where the crew finishing is up to on the plan. Use Fewzion shift schedule to adapt plan for a process and discuss progress against KPIs using actual screens.

A consistent, planned, and documented hand over process ensures that the preparation and understanding necessary to run a safe & productive shift is transferred between shift deputies.

Good hand overs follow a consistent process as outlined:

- Review the actuals screens and the plan for your shift.
- Call the off going Supervisor and discuss their progress and your plan.
- Adjust your plan for the shift in consultation with your Shift Manager

TIP: It's the Control Room Operator's responsibility to set the incoming Supervisor up for a successful shift by keeping Fewzion up to date with what's happening in each production area. The incoming Supervisor should clarify, ask questions and make their own notes during the handover.

What does a good Shift Hand Over look like?

Control Room Operator updates Fewzion with information gained during regular shift updates from the off going supervisors before the oncoming supervisor arrives.

Reviews information on the actuals board and shift plan.

Calls off going supervisor, asks about progress to their plan and clarifies/asks questions.

Identifies and captures required actions / jobs.

Considers issues to escalate, tools, equipment and work to be done before going underground.

Users: Supervisors

Location:

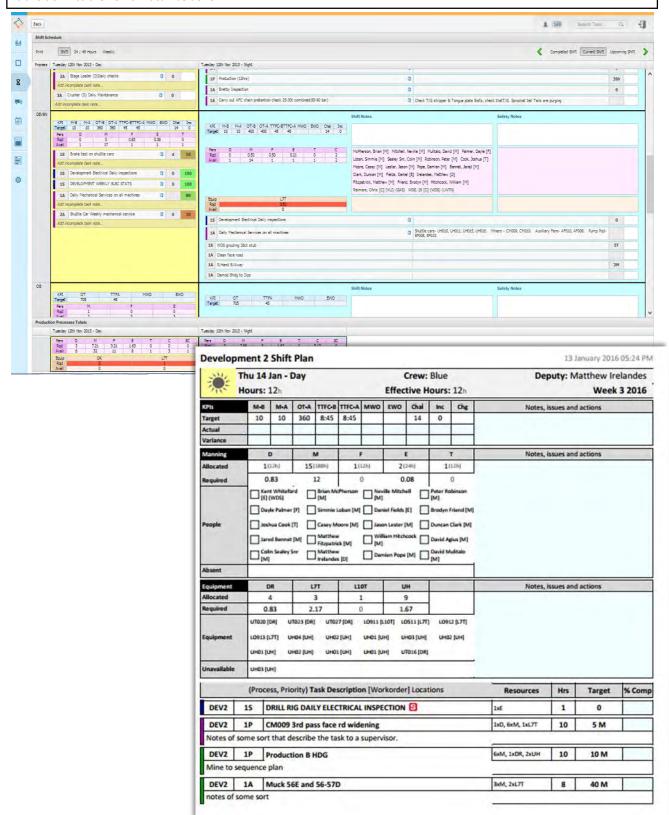
Timing: 45 min before start of

shift



Shift Schedule

Helps oncoming Supervisors have a clear idea of how the previous shift went so a proper adjustments for a good hand-over and transition into the new shift can be done





PRE-SHIFT BRIEFING

Leader Behaviour Setting Clear Direction

Accountability and leadership drive performance...

A 30 minute meeting for the Shift manager to brief supervisors about whole of mine shift schedule and the plan for their area. Adapt plan to meet changes, confirm site priorities, answer any questions and give clear direction.

Setting clear expectations of the team of supervisors and ensuring that they and the Shift Manager know that what each other are doing is critical to a successful shift.

The Shift Manager must run a short focused meeting to align the team to the critical objectives of the shift. The Whole of Mine Shift Schedule should be used as the basis to adapt plans making necessary trade offs where resource or equipment constraints exist.

Shift Managers should ask questions that get their Supervisors thinking about their plans for the shift and ways that they can ensure they meet targets and complete all the work assigned.

What does a good pre-shift briefing look like?

Supervisors and Shift Managers come prepared with edited shift plans after a handover with their offgoing shift.

Follow Shift Manager Brief agenda.

Use Fewzion Whole of Mine Shift Schedule

Make trade offs to balance resources and equipment against production priorities.

Identify and capture in Fewzion any new actions / jobs for Supervisors and production areas.

Gain commitment from attendees that the adapted plan is optimum and achievable.

Reprint shift plans for any processes that have had their plan changed during this meeting.

Users: Shift Managers and

Supervisors

Location: Planning room

Timing: 30 min before start of shift



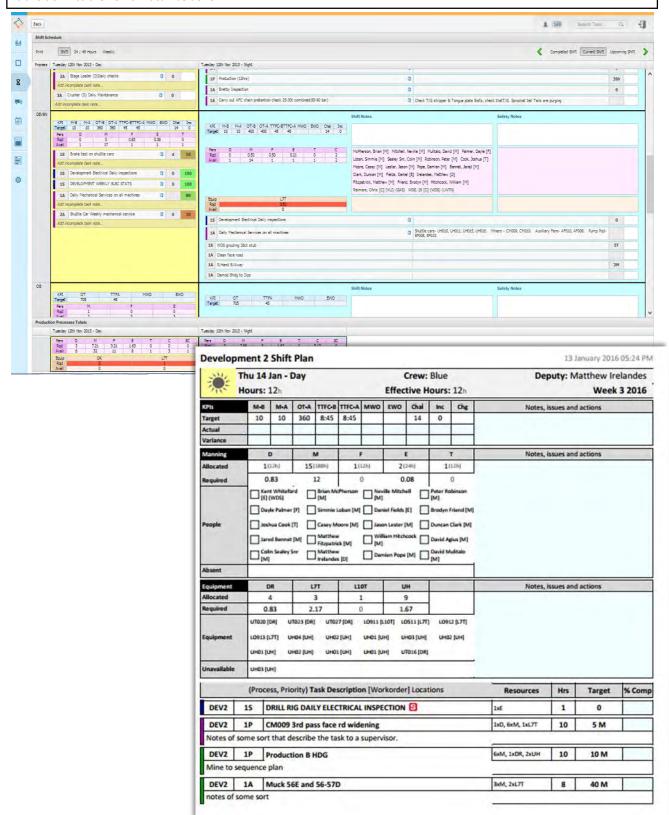
PRE-SHIFT MEETING AGENDA AND TOOLS

Agenda-Pre-Shift Meeting										
XYZ										
Purpo	se:	To ensure accountability and ongoing commitment in relation to activities pertaining to the commencing shift and resolution of any identified constrains								
Date:			Start:		End	End:				
Venue	::									
Attend	dees:									
Apolo	gies:									
Chair:			Minutes:							
Agenda Items						Lead		Time		
1.	Whole of mine plan briefing and discussion of any safety issues or hazards and safety requirements					Shift 10 mins Manager		10 mins		
2.	Highlighting any issues raised having to do with shift planning, production and assigned resources during shift handover					Superv	isor	10 mins		
3	Review of maintenance tasks planned for Electrical, Mechanical, Production, Secondary, Sequence control					Shift Manag	er	5 mins		
4.	Review of Sequence control				Shift Manag	er	5 mins			
5.	General Business				Superv	isor	5 mins			
Current Actions for Review										
No.	What			By Who		When				
New Actions Arising										
No.	What			By Who	When					
Completed Actions										
Na	VA/h o ÷			By Who		Whe				
No.	What			by Wno		vvne	en .			



Shift Schedule

Helps oncoming Supervisors have a clear idea of how the previous shift went so a proper adjustments for a good hand-over and transition into the new shift can be done





PRE-START MEETING

Leader BehaviourSetting Clear Direction

Setting clear expectations for your crew and ensuring they know exactly what to do for the shift...

Ensure crew are clear about hazards, incidents, plan for shift, recent performance and know what they are going to do during the shift.

Pre-starts are an important tool for briefing the crew on shift expectations so that they are able to work safely towards achieving their plan.

A great pre-start will help the crew get underway quickly and without confusion. It will help improve utilisation and help meet the daily production targets.

To be successful a pre-start must include

- Preparation before the pre-start plans must be updated and ready prior to start
- ✓ Safety update
- ✓ Plan for each process area, using the Fewzion actuals screens.
- A review of any road blocks that might stop the team from meeting the targets
- ✓ Reference to KPIs and targets for this shift

Pre-starts will be held in the muster area and use the actuals screens for each process area to communicate plans and progress.

What does a good Pre-Start Meeting look like?

Prepares for pre-start meeting by ensuring all supervisor plans are completed and reviewed in the Pre-Shift briefing.

Refers to progress against weekly plan for each process.

Each Supervisor briefly mentions progress of current shift and targets for their shift using Fewzion actuals screens.

Shift Manager communicates clearly, and checks for understanding / issues to follow up on.

Finishes with a safety message and enthusiasm for a good, safe shift.

Users: All crew, Supervisors and Shift Managers

Location: Muster Area

Timing: Shift Start



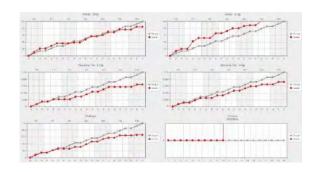
PRE-START MEETING AGENDA

1.Safety

Mention elements to the right and recent incident performance from the KPI board

2. Shift Performance Chart

Mention the performance of each process vs. target over the last shifts.



3. Production and Excavator Targets / Tasks.

Describe dig & dump locations (using plan images) for each digger. Clarify the go line and crib hut to use and anything that will help the crew get going and stay safe.



4. Manning Board & Equipment Location

Read through the manning board to make it absolutely clear who is on each machine



SHORT INTERVAL CONTROL

Following Up
Problem solving

Keeping on top of your performance to ensure you meet target...

Regular update phone call from shift manager to supervisors in order to follow up on work completed and progress against plan with problem solving to resolve variances.

Short interval follow-up is about having quick, focused reviews of performance throughout each shift to enable corrections and immediate (small) fixes that keep you on track and add up to big improvements in performance.

It provides us with early visibility of issues/challenges so they can be managed appropriately or avoided.

To achieve this we need Supervisor's to

- ✓ Set clear work plans for their shift
- ✓ Follow up at regular intervals throughout each shift
- Establish the status of each job and whether it is on target.
- Help get it back on track if there is something that is taking it off track.

TIP: It is important that the crew and the supervisor are both **looking back at what has happened** (issues and actions) and **looking forward** to anticipate future issues and corrective actions.

What does a good Short Interval Follow-up look like?

Communicates with Control Room Operator every 3 hours.

Hands out work and sets expectation of the time it should take to complete it.

Regularly reviews (every 2-3 hours) progress against plan to determine how the team is tracking.

Takes timely action to address variances so targets can be hit.

Looks for opportunities to minimise lost time.

Completes 5 whys for delays over 1 hour long.

Determines any issues that need escalation.

Users: Shift Managers and Supervisors

Timing: every 2-3 hours / during work orders.



SHIFT DEBRIEF

Leader Behaviour Setting Clear Direction

Accountability and leadership drive performance...

Shift manager to debrief supervisors against their shift plan and collect relevant statutory and production paperwork. Follow Plan, Actual, Variance, Action (PAVA) process. All variances have an action

Holding your crew accountable for their performance, finding improvement opportunities and providing leadership is a critical element of a Leader's role

Regular review meetings each day between Supervisors and Superintendents enable safety, targets and planned tasks to be reviewed. Issues and opportunities to improve should be identified and escalated where necessary.

This should be a brief, focussed meeting using the Fewzion actuals screen, supervisor shift reports and statutory reports.

Shift Managers should ask questions that get their Supervisors thinking about their performance and ways that they can improve next shift.

What does a good Shift Debrief look like?

Does the debrief as each Supervisor comes in from their shift and completes their actuals screen.

Follows EoS Debrief Agenda.

Uses supervisor's actuals screen, shift reports and statutory reports.

Considers improvements and issues to escalate.

Identifies and captures in Fewzion all actions / jobs for Supervisors and production areas.

Users: Shift Managers and Supervisors

Timing: end of shift



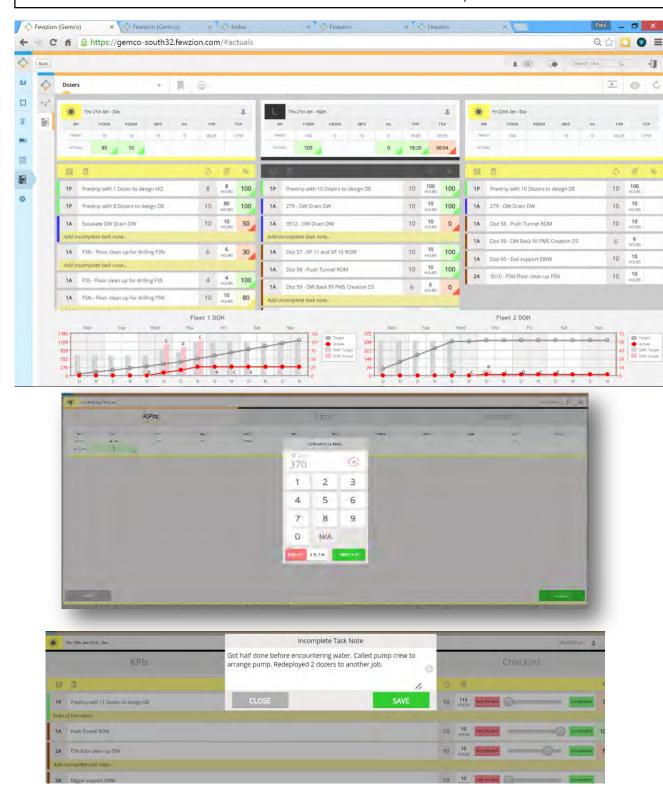
SHIFT DEBRIEF MEETING AGENDA

Agenda-Snift Debrief Meeting									
XYZ									
Purpo	se:	To provide perform	To provide performance feedback and highlighting issues to be resolved						
Date:			Start:		End:				
Venue	: :								
Attend	dees:								
Apolo	gies:								
Chair: Minutes:									
Agend	la Items					Lead	Time		
1.	Performance feedback and reporting on Safety, Production, Each 5 mins Maintenance work orders completed, MOS compliance (actuals updated into Fewzion, Sequence controls updated with tasks completed and position of equipment and miners*)								
2.	General Bus				5 mins				
Current Actions for Review									
No.	What			By Who		When	When		
New Actions Arising									
No.	What			By Who		When			
Completed Actions									
No.	What			By Who		When			



Shift Actuals Screen

Used to have a clear idea of how the previous shift went so a proper adjustments for a good transition can be made Actuals are entered into the screen and notes can be made about tasks that remain incomplete at the end of shift.



Tools to Review Performance and Identify Opportunities to Improve



DAILY PROCESS OR AREA REVIEW

Leader Behaviour

Setting Clear Direction

OUTCOMES: Actions to ensure

- learning and improvement from last 24 hours' variance
- 2) success of the next 48 hours' plan

Holding team members accountable for their own performance and inspiring them to improve are critical elements of a leader's role.

Daily process review meetings ensure that the plan is being managed effectively and opportunities to improve are identified and actioned or escalated where necessary.

This should be a brief, focussed meeting using Fewzion daily reports and production reports.

Coordinators should come prepared to explain variances to schedule for the last 24 hours, why, and what needs to be done to eliminate such future variance.

Superintendents should ask questions that get coordinators thinking about the performance of their area and ways that they can improve this in the future.

What does a good Process Review look like?

Starts on time at 7.30 am with relevant process coordinators and superintendent present.

Follows Area Review Meeting Agenda.

Uses shift reports, Fewzion daily report, 5 whys, MSO debrief reports.

Identifies variances from plan and reasons why.

Considers continuous improvements and issues to escalate.

Records actions for coordinators and superintendents.

Users: Production superintendents and coordinators

Timing: 7.30 am week days



DAILY AREA OR PROCESS REVIEW Meeting Agenda

- 1. Any Incidents or injury?
 - ✓ Actions from Safety Interactions.
- Review performance of each miner vs plan using Fewzion reports, shift reports, 5 Whys. Consider
 - ✓ Were appropriate actions taken by supervisors, shift managers, crews.
 - ✓ Are there any issues and/or actions that need escalation.
 - ✓ Record actions in action log (Fewzion).
- **3. People and Equipment** status, e.g. unplanned leave / training, servicing or breakdowns.
- **4. Plan for the next shift,** adapt plan where necessary based on constraints above.
- 5. Support needed from other departments?
- 6. JRA's required, where / why.



DAILY PROCESS REVIEW MEETING Example Questions (Supt to Coordinators)

- What is the impact of that variance and when will we be back on schedule?
- What did you learn in the last 24 hours?
- What did we learn from this variance (or, why did we have a good day and how can we repeat it)?
- Have you captured that learning and when will everyone who isn't here (e.g. crew out on break) also get to know? Is that action recorded for tracking?
- Could that variance have been foreseen? If so, what is the action to stop it happening again?
- Are the right level people involved to solve that problem and take action?
- Who did you involve in determining the cause of the variance and the improvement action?
- [With any variance] How do you know that the process before/during task execution was correctly followed? (e.g. Was a JSA conducted prior to the task being undertaken? Was equipment scheduled for maintenance handed over from and back to Production at the scheduled time and agreed condition? How far ahead of time was this task identified and shown on the schedule? Was a Planning Checklist used to plan this task?)
- [If there was unscheduled work] Why was that missed? What is the action to identify it in advance next time?
- [With overruns] Tell me the main delays in the process? (e.g. waiting on parts, getting a tradesperson to a breakdown, waiting for a machine to be washed.)
- How can you be sure the schedule for the next 48 hours is achievable?
- How did this meeting go; what can we improve; what did we add/change today that we should have foreseen during the schedule development process?



DAILY PROCESS REVIEW MEETING Example process support actions

Superintendent

- Every day, review with one stakeholder what they learnt during the shift and what actions they would take to improve
- Every day, follow up with an Undermanager on one of the items identified at the daily review meeting as critical

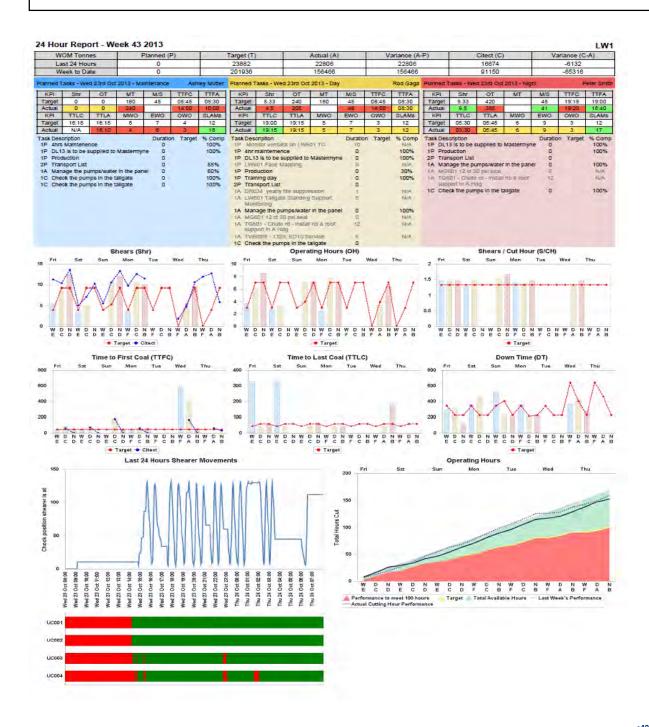
Coordinator

- Once a week, have a supervisor bring a crew member to the daily review meeting and include them both in discussions
- Every day, hold conversations with supervisors and planners to ensure you hear about significant crew input, improvement ideas, risks and any foreseeable variances to the schedule



DAILY PROCESS REVIEW MEETING

Daily Performance Reports





DAILY WHOLE SITE REVIEW MEETING

The Review Meeting is a forum for the identification and monitoring of problems relating both directly and indirectly to production...

Managers, Superintendents, Coordinators and Planners review performance over previous 24 hours. Follow PAVA. All variances have an action

The meeting process requires the relevant information, data and activity recorded in a way that is easy to read, understand and make judgement on the condition of the process and what is being done about it.

The location of the DOP board allows it to be used as a means of communicating actions to a wider audience.

The meeting should be no longer than 15 minutes duration, to achieve this we must

- Insist that the preparation work is carried out;
 KPIs filled in.
- Ensure the meeting is properly attended and starts punctually. Regularly reinforce rules & protocols.
- ✓ Follow a logical flow on the board usually topto-bottom / left-to-right to set the pace & rhythm. Be consistent!
- ✓ Insist that the facilitator is in charge. They control all aspects of the meeting.
- Review by exception. Anything in RED should be reviewed and a concern raised. Insist upon this!
- ✓ Celebrate success where applicable.
- Ensure all attendees have had opportunity to voice their concerns.

Leader Behaviour

Reviewing Performance Setting Clear Direction

What does a good Production Meeting look like?

Starts on time with relevant superintendents present.

Follows Production Meeting Agenda.

Uses DoP board, with all data completed for the period.

Succinct, targeted session. Focuses on action and progress, not about solving problems in the meeting.

Finishes on time with clear outcomes, actions, responsibilities and timeframes.

Users: Superintendents and Ops

Managers

Location: Planning Room

Timing: 9.30 am, Mon to Fri.



DAILY WHOLE SITE REVIEW MEETING Meeting Agenda

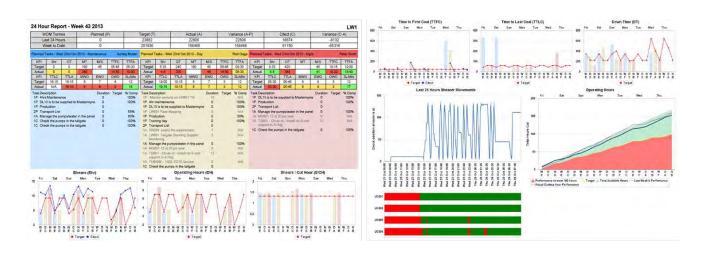
Agenda

- 1. Any Incidents or injury?
 - ✓ Actions from Safety Interactions.
- Review performance of each process vs plan using Fewzion reports, shift reports, 5 Whys. Consider PAVA
 - ✓ Does the superintendent understand WHY for each variance?
 - ✓ Are there any issues that need escalation?
 - ✓ Are the recommended actions reasonable?
 - ✓ Support needed from other departments
 - ✓ Record all actions in action log process (Fewzion).
- 3. Review Absenteeism
- 4. Review all actions in the Action Log
 - 1. Expect all to be closed on due date
 - 2. Ask why if not on schedule and reschedule.



DAILY WHOLE SITE REVIEW MEETING Tools

Daily Reports







WEEKLY REVIEW MEETING

Leader Behaviour

Reviewing Performance Continuous Improvement

Improving the system to improve future performance...

To review performance each week, consider systemic issues that are affecting performance then establish and review progress of actions or projects to solve these issues.

Holding your team accountable for their performance and finding improvement opportunities are critical to improving the performance of your team in the medium to long term.

The weekly review meeting is an opportunity to step back from the detail (symptoms) and look at the performance of the system as a whole. To do this effectively you need good quality data analysis to see what has been happening and to explore / answer "why" questions.

A weekly review meeting should be a brief, focused meeting that reviews past performance, looks for trends and identifies improvement projects that intend to improve the system.

What does a good Weekly Review Meeting look like?

Starts on time with relevant superintendents present.

Follows Weekly Performance Review Meeting Agenda.

Uses effective reports / data analysis to demonstrate performance of the "system."

Focuses on understanding why and looking for root cause solutions.

Considers / prioritises continuous improvement projects and reviews progress of any current projects.

Finishes on time with clear outcomes, actions, responsibilities and timeframes.

Users: Production Area
Superintendents and Ops Manager

Timing: 30 min – 1hr, regular

weekly slot.

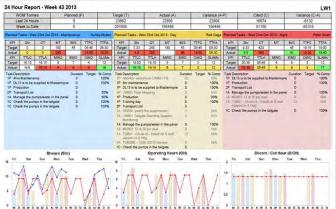


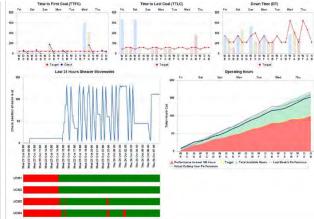
WEEKLY REVIEW MEETING PROCESS AND TOOLS

Agenda-Weekly Performance Review Meeting														
XYZ	XYZ													
Purpos	se:	To review our performaffecting our peform		n week and conside	er syst	ematic iss	sues that are							
Date:			Start:		End	:								
Venue	:													
Attend	lees:													
Apolog	gies:													
Chair:				Minutes:										
Agend	a Items					Lead	Time							
1.	Outstanding	g action items from pro	evious meet	ings		Chair	10 mins							
2.	using weekl	perform last week an y ops report) ssues that arise for dis	k	Each Supt	15 mins									
3	Understand priorities ar a) Unders sympto b) Agree r c) Assign do to si		Each Supt	30 mins										
4.	Review agre	eed actions and due da	ites			Chair	5 mins							
Curren	t Actions for	Review												
No.	What			By Who		When								
New A	ctions Arising	3												
No.	What By Who When													
Compl	Completed Actions													
No.	What			By Who		Whei	1							



Weekly Mine Schedule





Weekly Actuals Summary

WeeklyActualsReport (Sunday 25th Jan - Saturday 31st Jan)

Demo Colliery

05 March 2015 01:03

KPI	PTO	VFLs	SLAMs	M	Ton	DOH	m/DOH	VDOH.	Maint	TTFA	TTLA	FS	LS	SS	CC	Chk	HPH
Planned (P)	19	19	37	569	23758	70	6.23	278	2	21	21	21	21	33	17	102	14
Target (T)	19	19	34	569	23681	70	6.23	260	2	21	21	21	21	33	17	102	14
Actual (A)	19	22	53	408	17123	47.45	8.04	338	2	11	9	9	9	40	18	95	10
Actuals / Target	16/21	16/21	16/21	16/21	21/21	16/21	16/21	16/21	5/7	16/21	16/21	16/21	16/21	16/21	16/21	16/21	16/21
Variance (A-P)	(0.00%)	(15,79%)	16 (43.24%)	-161 (28.30%)	-6635 (27.93%)	-22.55 (32.21%)	1.81 (29.05%)	(21.58%)	(0.00%)	-10 (47.82%)	-12 (57.14%)	-12 (57.14%)	-12 (57:14%)	(21,21%)	(5.88%)	-7 (6,86%)	(28.57%)
Citect (C)										0	0	0	0				
Variance (C-A)										-11 (100.00%)	-9 (100,00%)	-9 (100.00%)	-9 (100.00%)				

Sect 3

KPI	PTO	VFLs	SLAMs	M	Ton	DOH	m/DOH	VDOH	Maint	TTFA	TTLA	FS	LS	SS	CC	Chk	HPH
Planned (P)	17	19	42	530	22133	70	5.76	241	2	21	21	21	21	33	17	105	17
Target (T)	16	19	40	530	20302	70	5.76	221	2	21	21	21	21	33	17	105	17.
Actual (A)	26	24	85	489	18703	60	7.83	300	1	-11	12	12	-11	41	14	94	5
Actuals / Target	16/21	16/21	16/21	16/21	21/21	16/21	16/21	16/21	5/7	16/21	16/21	16/21	16/21	16/21	16/21	16/21	16/21
Variance (A-P)	(52.94%)	(26.32%)	(102.38%)	-41 (7.74%)	-3430 (15.50%)	-10 (14.29%)	(35.94%)	59 (24.48%)	(50.00%)	-10 (47.52%)	-9 (42.86%)	-9 (42.86%)	-10 (47.62%)	(24.24%)	-3 (17.65%)	-11	-12 (70.59%)
Citect (C)										0	0	0	0				
Variance (C-A)										-11 (100.00%)	-12 (100.00%)	-12 (100.00%)	-11 (100.00%)				

Sect 6

KPI	PTO	VFLs	SLAMs	M	Ton	DOH	m/DOH	t/DOH	Maint	TTFA	TTLA	FS	LS	SS	CC	Chk	HPH
Planned (P)	42	63	63	700	25585	105	6.67	244	3	21	21	21	21	63	63	105	63
Target (T)	32	48	48	550	21159	75	5.89	227	3	21	21	21	21	48	28	51	21
Actual (A)	32	48	55	577	22196	63.25	8.59	330	3	12	- 11	9	10	46	27	76	27
Actuals / Target	16/21	16/21	16/21	16/21	21/21	16/21	16/21	16/21	5/7	16/21	16/21	16/21	16/21	16/21	16/21	16/21	16/21
Variance (A-P)	-10 (23.81%)	-15 (23.81%)	-8 (12.70%)	-123 (17.57%)	-3389 (13.25%)	-41.75 (39.76%)	1.92 (28.79%)	(35.25%)	(0.00%)	-9 (42.86%)	-10 (47.62%)	-12 (57.14%)	(52.38%)	-17 (26.98%)	-36 (57.14%)	-29 (27.62%)	-36
Citect (C)										0	0	0	0				
Variance (C-A)										-12 (100.00%)	-11 (100.00%)	-9 (100.00%)	.10 (100.00%)				



5 WHYS

Leader Behaviour

Understanding Variances and Finding Solutions

Find and fix root causes to improve performance

<u>A.5.</u> Whys must be completed for any delay over 1 hour in duration

The supervisor must ensure a 5 whys has been completed either by the tradesmen that attended to the delay or by himself before the end of the shift.

5 Whys must be handed in to and reviewed by the Shift Manager at the end of shift.

Maintenance planners must review 5 Whys each day to identify issues and corrective actions for their machines.

5 Steps to Problem Elimination:

- 1. Define the problem what happened.
- 2. Short term solution get it running.
- 3. Identify the root cause(s) what caused the issue (RCA/5 Whys).
- 4. Take corrective action (long term solution) engineer problem out.
- 5. Evaluate & follow up did it work?

Name:	Date:										
Day MTWTFSS	Shift	D	Α	N							
Area of work:											
Define the Problem:											
Why?											
Why?											
Why?											

What does a good 5 Whys look like?

Does 5 Whys for each delay between 1 & 4 hours.

Completes tool correctly with quality thinking.

Implements quick fix to get machine going asap.

Identifies effective action / solution from 5 whys.

Hands in completed 5 Whys to Shift Manager with production report.

Users: Supervisors, Crew, Superintendents, Coordinators

Timing: N/A



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