



10

PREREQUISITES

Prerequisites for achieving
operational discipline and
conformance



The mining industry has a vision of Zero Harm with clearly defined milestones. Unfortunately, industry is not achieving these targets and so leaders are looking for practical tools to help get mines on track. The Minesafe conference therefore chose *Driving Excellence through compliance* as the theme.

Most accidents in the mining industry are attributed to inappropriate human behaviour and non-conformance to procedure. Effective root cause analysis of accidents however revealed that the "conformance challenge" is primarily an organisational one and not only an individual worker one.

CONFORMANCE AND OPERATIONAL DISCIPLINE?

Conformance is the result of operational discipline, a key element of operation excellence. Du Pont defines operational discipline as, "the deeply rooted dedication and commitment by every member of an organisation **to carry out each task** the right way every time."

The mining industry will not achieve Zero Harm, or the milestones, without sustained operational discipline/conformance to safe operating procedures.

THE TEN PREREQUISITES FOR A CONFORMANCE ENABLING OPERATING ENVIRONMENT:

ONE

Practical Safe Operating Procedures and Standards



The 1st step to a conformance enabling environment is that every task, step and process needs to be defined and designed to be safe. Safe operating procedures, as a **minimum**, must include:

- the task and sequence in which the tasks and steps must be executed
- the specific harm associated with the tasks and steps
- the specific controls that prevent or mitigate against a specific harm
- the number of employees of different job roles (team complementment)
- the competence requirements of job roles
- special and general tools needed
- special and general materials needed
- all physical verifications required, prior to and after, executing the work, including minimum requirements for a team to proceed

Safe operating procedures must be **physically** verified and validated to be **practically** executable by competent team members and with the needed materials and tools.



Team member's involvement in procedure verification:

Team members must:

- ✓ be present during verification
- ✓ provide input
- ✓ **be satisfied** with the practicality of the procedure

The mine health and safety act requires mines to establish a **safe** operating environment, yet very few mines have **independently and practically verified** procedures that address the minimum requirements defined above. Despite procedures being reviewed on a regular basis, they are often not practical and this is only discovered when incidents and accidents occur.

TWO

Only competent team members to execute work



Management must ensure that teams and workers do not start a shift if the team is:

- ✓ **not complete**
(required staff complement)
- ✓ **all members are not competent**
(certified to be able to execute work)

Management must not transfer the responsibility to the team to make the decision to work or not and only when arriving at the workplace.

THREE

Availability of materials



Conformance is unlikely when the required materials to complete the task are not available when needed. The probability of teams taking risks or trying to “make a plan” is very high in these instances, especially when production output is financially incentivised.

Managers must ensure that:

- ✓ all materials needed at a specific place of work are available **well in advance**
- ✓ all materials are **confirmed** to be available and according to specification

FOUR

Availability of functional tools and equipment



The correct and fully functional (special and general) tools are essential for enabling conformance to safe operating procedures.

Management must ensure that maintenance and asset management systems include the requirements and specifications of special tools and equipment that must be maintained to ensure safe operation.

The **availability** of (special and general) tools and equipment must be **confirmed** prior to starting of a shift.

FIVE

No direct and indirect conflicting demands and messages



Workers must be 100% sure what is required of them in terms of the organisation’s values.

“**Management and supervisors** must communicate the same message, namely that conformance to safe operating procedures are not negotiable.”

When **management** sends mixed messages, workers are subconsciously unsure of what is really important and will be inclined to take decisions that benefit themselves financially.

SIX

Supervisors must be exceptional examples of conformance



Team leaders’ and supervisors’ conduct is **key** to achieving conformance. Leaders and supervisors influence their team’s culture by establishing the unwritten rules and norms of the work place. Supervisory conduct is the **real acid test** for management’s true priorities and the organisations true values. Supervisors have to lead by example without exception.

SEVEN

Workers must fully understand the risks in the workplace and the tasks to be done



Management must make sure that everybody completing a task understand:

- ✓ all the risks and hazards associated with a task
- ✓ the specific controls that are part of the safe operating procedure

Ensuring this will require reshaping existing training, communication and other organisational systems. Understanding the risks and controls provide the team members with the rationale (why) for executing tasks in a specific way.

EIGHT

Workers must fully understand expected behaviour and consequences



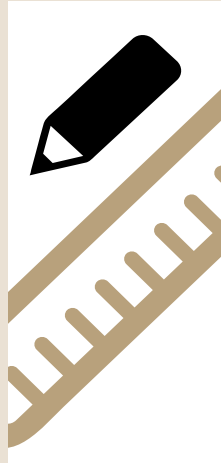
Management must ensure that team members know exactly what behaviour is expected to work safely. Therefore, as part of the enabling environment, expected behaviours must be defined for every task in clear and simple work ways.

It is also important that appropriate and consistent consequence management is applied to observed behaviour. Despite having a negative connotation, consequence management could be both:

1. actions to discourage at-risk behaviour
2. positive reinforcement of ideal behaviour

NINE

Management must measure and act



Management's role is to:

- ✓ provide direction
- ✓ create the enabling environment
- ✓ measure conformance
- ✓ act on deficiencies

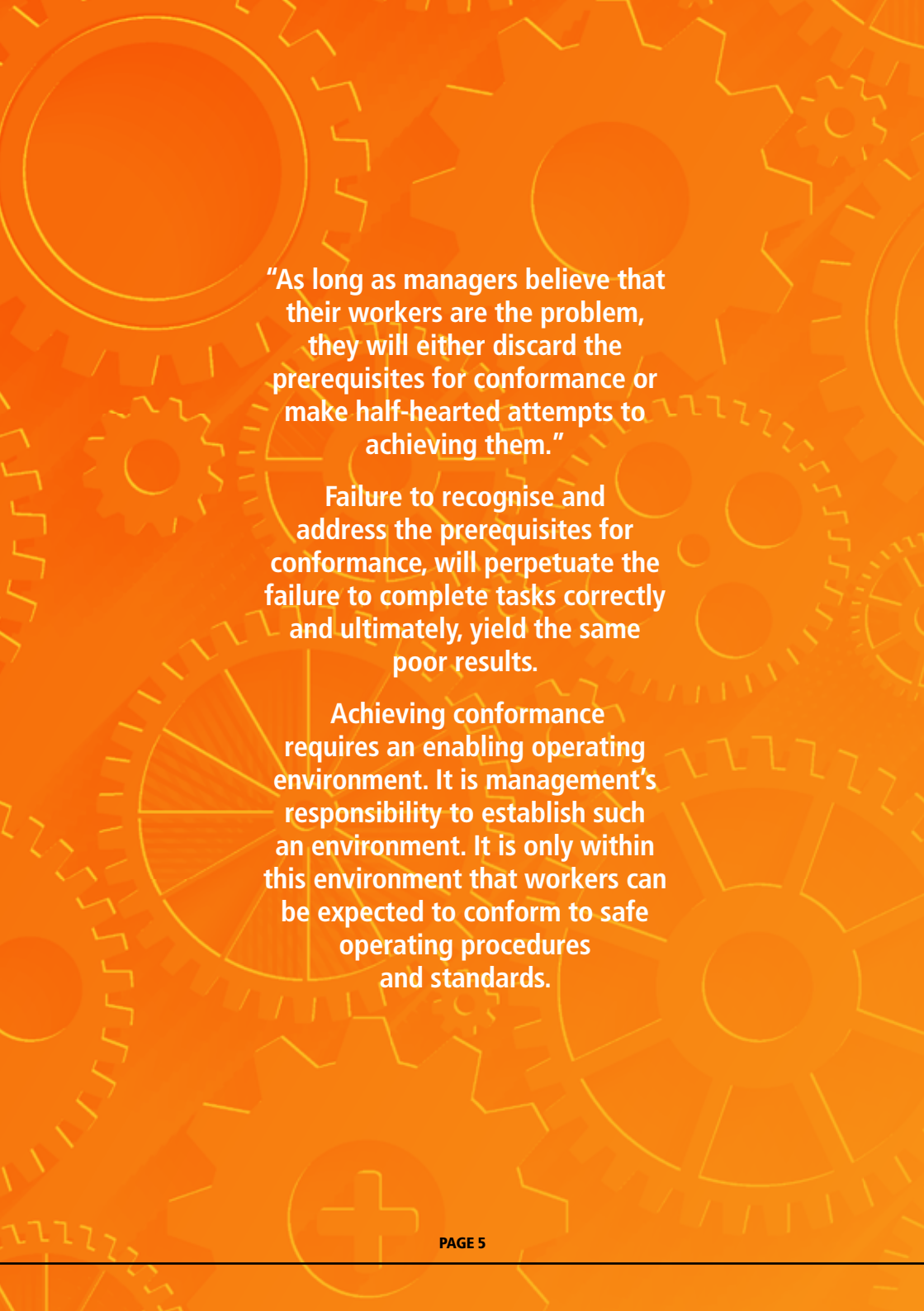
Management execute their responsibilities through **internal audit and assurance** of conformance to the safe operating procedures. Independent verification and monitoring remains critical to sustain the enabling environment.

TEN

Practical leadership



The **mine manager** leads the mine's conformance by **establishing** the enabling environment. Their leadership is demonstrated by the **budgets and resources** provided to ensure that the nine other aspects of the enabling environment are well established and fully operational and effective. They further demonstrate leadership by ensuring that conformance forms part of the business strategy and establishes **leading indicators to monitor** all the aspects of the enabling environment.



“As long as managers believe that their workers are the problem, they will either discard the prerequisites for conformance or make half-hearted attempts to achieving them.”

Failure to recognise and address the prerequisites for conformance, will perpetuate the failure to complete tasks correctly and ultimately, yield the same poor results.

Achieving conformance requires an enabling operating environment. It is management’s responsibility to establish such an environment. It is only within this environment that workers can be expected to conform to safe operating procedures and standards.



**MINING INDUSTRY
OCCUPATIONAL
SAFETY & HEALTH**



**CHAMBER OF MINES
of South Africa**

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CONCLUSION

The ten prerequisites are practical elements of any mines' enabling operating environment. It is evident that conformance is predominantly a management challenge and responsibility. Workers' responsibility plays a smaller, yet challenging role and can only be achieved once the enabling environment is in place and fully functional.