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Systematic Risk Management: Completing the Journey

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The challenge

- Coal mining WHS legislation and the mining industry have moved substantially towards risk based OHS regulation and management.
- However, there remain obstacles to *effective* risk based regulation, because:
 - (i) Some mines inspectors;
 - (ii) industry middle management and
 - (iii) the CFMEU safety leadership; all prefer prescription.*And* (iv) some/many companies are not effectively implementing a systemic risk based approach to safety

Accordingly, this ACARP project examines

- (a) what is going wrong**
- (b) how can it be fixed**



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Methods

- 70+ interviews with operator management at all levels, inspectors, CFMEU, industry consultants and others
- Additional interviews with comparable OHS and other regulatory agencies (NOPEMSA, Major Hazards Unit, Vic, Health and Safety Exec etc)
- Desktop research, literature review etc



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Prescription vs Risk Based Regulation

Problems with prescription

- Regulatory overload,
- Many OHS problems fall in the cracks between regulations
- One size does not fit all –different mines have different problems
- prescriptive standards do not allow duty holders to seek alternative solutions, may stifle innovation and may be less cost-effective
- Many risks are transitory- need to engage with constantly changing hazards



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The alternative: systematic risk based regulation

This involves

- (i) general risk management approaches
- (ii) obligations to establish principal hazard management plans and
- (iii) managing WHS through the creation of safety and health management systems

- Advantages: providing flexibility to enterprises to devise their own least-cost solutions
- being applicable to a broad range of safety challenges.
- prioritizing these challenges on the basis of risk significance,;
- Considerable evidence this approach can work better than prescriptive regulation (although prescription is still necessary in some circumstances).



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An Industry Half-Pregnant : the interrupted journey from prescription to systemic risk-based regulation

Because

- Some mines inspectors
- Industry middle management
- CFMEU safety leadership
- Some companies themselves

Are not effectively implementing a systematic risk based approach



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Limited buy in from inspectors

- (i) recognised standards – sometimes interpreted prescriptively
- (ii). A systemic risk-based approach to inspections?

Three approaches identified

- 1 substantial engagement in systemic risk-based inspection and audit
- 2 some engagement with this approach, but only at a relatively superficial level,
- 3 predominantly prescriptive in its approach.



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Why are some inspectors prescriptive

- it is easier to administer than a risk-based approach
- if something goes wrong it's difficult to blame an inspector who simply followed a rule
- Its hard for older inspectors to adjust to a different approach

Why are some risk based inspections superficial?

- a lack of resources - probing the OHS management system for deficiencies and gaps between the paper system and how it plays out in practice, can be time consuming.
- some inspectors lacked the specialist skills to engage effectively with this approach.



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Reforming the Inspectorate

- Recruitment
- Training
- Secondment to other risk based regulators
- Constraining discretion – *scorecards and risk oversight tools*
- Removing prescriptive regulation- *Qld RIS*
- Changing inspectors' interpretation of recognised standards *training and oversight*
- Cultural change – *change the mindset - leadership, vision, measure and reward success, tangible goals*
- Resources – *shifting the balance from reactive to proactive inspection,*



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Engaging Middle Management

- Middle management commonly prefer prescription – especially statutory office holders
- Risk assessment involves management judgement and taking responsibility
- Following prescriptive rules avoids risk of external or internal blame if things go Wrong

“some engineers like to sleep easy. They have a compliance mentality. They are not interested in managing risk”



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What needs to change?

- Minimise prescriptive regulation
- Take greater responsibility for shaping regs, standards, guidance material
- Risk based inspectors should ask questions, not tell management what to do
- Establishing a blame free culture (think commercial aviation)
- Ensure risk assessment is not just an add on, and ensure all management adequately trained
- Provide adequate time and resources for risk assessment
- SSEs "the level of safety you get is the level the boss wants"



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Systemic Risk Management and the CFMEU

Scepticism of CFMEU WHS leadership as to value of systemic risk based regulation

- doubts whether the mining industry is mature enough to implement a risk based regulatory regime (especially in open cut mines)
- doubts whether some mines inspectors have the skills and capacity to ensure that mines are undertaking appropriate and effective risk assessments
- risk-based regulation is seen as indeterminate- (“its my opinion against theirs, whether a risk assessment is adequate”) and accordingly more difficult to enforce,
- But there is constructive engagement with some SSHRs and ISHRs on risk assessments and systems
- But operator engagement with worker safety reps is variable.

This is unfortunate because there is compelling evidence that:

- i) worker participation in how OHS is managed is good for health and safety;
- (ii) participation also through elected representatives with sufficient rights is even better;
- (iii) support for safety representatives and worker participation achieves the best result



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Are we there yet?

Is the mining industry sufficiently mature to rely upon systematic risk based regulation?

- Risk assessment is like torturing a spy- if you do it for long enough you get the answer you want
- Our systems are clogged with useless paperwork that doesn't control risk.
- People without the technical competencies and knowledge of the OHSMS are appointed to supervisory positions. Its like pulling people of the street and making them brain surgeons
- G2 and G3 training alone is not sufficient for effective risk management
- Corporate develops a management system but it should be developed at site level and when it isn't there's no ownership
- Some mines are woeful. God help us if we don't overview them.
- Risk management is only as good as the people doing it. If you don't have the right input from the right people, its useless
- There is an unwillingness to delay production to put in place the necessary safety measures
- Risk management is not well applied. I can train my dog but he doesn't know why he's doing it. It needs education and this is lacking in the industry
- We skirt mining disasters on a regular basis. Do not think for a moment that the recent history that reflects the lack of a disaster means that there is an absence of risk and an absence of near misses.



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Where next?

Is it worth completing the journey? effective management of OHS nearly always requires employers to develop measures to address OHS risks.

The need for industry leadership: “we’ve come a long way but the last couple of years has been a plateau. We need another step change”

- “There is a lack of leadership at senior levels when it comes to safety – we did one step change with zero harm but now we need another and it’s not happening.” (Senior Inspector).
- “There’s a feeling the risk assessment tools have grown stale., *the danger is we don’t think something can happen when it can, so I question our judgement.*” (Electrical Engineer, emphasis added).
- “There is a lack of leadership. There is no engagement with the CFMEU or with the inspectorate about the big picture stuff.” (Senior Manager).
- “The industry has not set a clear direction. It has not provided leadership on this and so you can’t expect the inspectorate to have a clear direction either.” (Senior Inspector).
- “If we have no leadership and drive then you can’t expect the blokes to have commitment – it will become the lowest standard set by management.”



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Problems at senior management level

- Many respondents, felt that senior management did not understand the problems confronting risk management or how to address serious flaws in the way it is currently being implemented.
- Some speculated that senior management were only being fed the good news and so were unaware of these problems.
- Others felt that chronic unease was giving way to complacency – its a long time since the last disaster
- mantra: “all really good organisations” have one thing in common “an expectation that shit happens”, was going unheeded.

a lack of leadership has been a major factor in many past disasters: inquiries into the Fukushima, Pike River, Deepwater Horizon, West Virginia and Montara disasters all emphasised leadership failings.



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Key issues

- That systemic risk management, has too rarely focused on issues of leadership, professionalism, competence, experience and judgement
- it is the extent which mine management has the perceived competence and integrity to risk manage OHS effectively that is key to workforce perceptions
- Workers are more likely to “take on board” risk management if they have ownership and accordingly must be active participants in risk assessment
- So need positive support for regulatory arrangements on worker representation from the leadership and management of the organisations
- systemic risk management is unlikely to be effective unless the OHS culture of the organisation and of the mine is supportive
- building trust between the stakeholders, and in particular between unions, regulators and companies, is crucial to the successful development of any step change in safety.



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What's needed?

- Industry leadership and a new Step Change
- Better understanding by Head Office of risk management challenges at site level-
- More education, training and awareness at mine site level- both crew and middle management
- Culture eats systems for breakfast

“it needs to become a way of life. You need to breath a safety culture into everyone, and you need to audit and review everything you do”.



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Bottom lines



- The approach most likely to ensure high standards of OHS in the mining industry is systemic risk management, effectively implemented.
- For those who are mature in terms of implementing systemic risk management, then regulation should be mainly about scrutinising how effectively they have implemented that approach.
- But mines that are not yet mature will need to be given more direction by inspectors having regard to regulations, codes and guidance material,
- currently, “the industry is not half as good as it thinks it is”. Senior management seems, at least in a number of organisations, to be unaware of either the nature or the extent of these problems.
- it is over two decades since Moura. It may be that, as the inquiry into the *Deepwater Horizon* put it: “time without a harsh reminder of what can happen [has] dulled in some places, the careful edge essential to hazardous work”.
- While the industry has emphasised the importance of systemic risk management, the reality is that efforts to implement this approach are sometimes superficial and inept/ “rituals of comfort”.

Pike River was, amongst other things, a failure of systemic risk management. Many warning signs were ignored (Jim Joy).

