

Guidance Note QGN14

Effective Safety and Health Supervision

Mining and Quarrying Safety and Health Act 1999

November 2008



Effective Safety and Health Supervision in Mining

Department of Mines and Energy

Guidance Note for Effective Supervision of Safety and Health

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1 INTRODUCTION

This Guidance Note has been issued by the Mines Inspectorate of the Safety and Health Division of the Department of Mines and Energy to assist in effective safety and health supervision of mining and quarrying operations.

A Guidance Note is neither a Guideline as defined in the *Mining and Quarrying Safety and Health Act 1999*, (the Act) nor a Recognised Standard as defined in the *Coal Mining Safety and Health Act 1999*. In some circumstances, compliance with this Guidance Note may not be sufficient to ensure compliance with the requirements in the legislation.

Guidance Notes may be updated from time to time. To ensure you have the latest version, either check the Department of Mines and Energy website at http://www.dme.qld.gov.au/mines/guide_notes.cfm or contact your local inspector of mines.

2 BACKGROUND

This Guidance Note was produced following recommendations from a coronial inquest into an incident at a Queensland metalliferous mine, the findings of which were handed down in May 2006. The coroner stated “*I recommend that the Mines Inspectorate investigate how meaningful supervision can be delivered to a heterogeneous workforce of skilled autonomous workers engaged on a disparate site and that they publish their findings and practical examples applicable to various mining activities*”. A Supervision Workshop with extensive input from the metalliferous mining sector was held in 2006.

Appropriate and effective supervision at any level of an organisation is critical in ensuring that risk to workers is at an acceptable level. The supervisor is the immediate interface between management and the workforce, and has the responsibility of interpreting senior management directions and the safety culture encompassed in the safety and health management system, and then interpreting and implementing the policies and procedures. This cannot be done effectively without significant organisational support, including resources.

3 PURPOSE and SCOPE

The purpose of this Guidance Note is to provide practical guidance to holders, operators, Senior Site Executives (SSEs), supervisors, contractors and persons generally who have obligations under the legislation, on effective supervision of mining operations in a safety and health context. This Guidance Note does not prevent other ways of achieving an acceptable level of risk from being adopted and followed.

4 TARGET AUDIENCE

This Guidance Note applies to all supervisory activities undertaken under the definition of ‘operations’ in the Act and *Mining and Quarrying Safety and Health*

Regulation 2001 (the Regulation). It applies to every supervisor on a mine or quarry site, or supervisor undertaking other mining related activities such as at exploration sites, including all persons appointed by the site senior executive at an operation to give direction to other workers, regardless of whether they are employees of the company or contractors. While this Guidance Note aims to clarify roles and responsibilities of 'supervisors' as required by the Act and the Regulation, the same principles also apply to other management relationships and levels.

Because this Guidance Note has a focus on general supervisory practice relating to safety and health, most of the information is applicable to all operations, including the coal mining industry. If using this Guidance Note in the coal industry, the relevant parts of the coal legislation relating to supervision will need to be reviewed. For specific coal supervisory competency requirements and the relevant legislation see Appendix B.

The only national competencies required by supervisors by mine safety legislation in Queensland are those published by the Advisory Councils established under the legislation. These competencies are commonly known as QMS1, QMS2 and QMS3 and relate to risk management, investigations and communications. As competencies for supervision can be reviewed and changed by the councils, it is important that the most current competencies are used. These can be viewed under 'Mining competencies' at www.dme.qld.gov.au/mines/board_examiners.cfm.

A range of questionnaires and key points for different levels of 'management' are available within this Guidance Note to assist in determining the effectiveness of current supervisory responsibilities and support.

5 LEGISLATION

The following are the key sections of the *Mining and Quarrying Safety and Health Act 1999* and the *Mining and Quarrying Safety and Health Regulation 2001* that are relevant to effective supervision. A more complete listing of relevant legislation can be found in Appendix A. Sections in **bold** are considered to be critical.

5.1 *Mining and Quarrying Safety and Health Act 1999*

s23. Meaning of supervisor

A supervisor at a mine is a worker who is authorised by the site senior executive to give directions to other workers.

s39. Obligations of site senior executive for mine

- 1) *A site senior executive for a mine has the following obligations in relation to the safety and health of persons who may be affected by operations—*

.....

d. to provide for—

- i. adequate planning, organisation, leadership and control of operations; and***

- ...
- iii. adequate supervision and control of operations on each shift at the mine; and*
 - iv. regular monitoring and assessment of the working environment, work procedures, equipment, and installations at the mine; and*
 - v. appropriate inspection of each workplace at the mine including, where necessary, pre-shift inspections.*

s51. Competencies of supervisors

A site senior executive must not assign the tasks of a supervisor to a person unless the person—

- a. is competent to perform the task assigned; and*
- b. if there is a safety and health competency for supervisors recognised by the council, has the relevant competency.*

5.2 Mining and Quarrying Safety and Health Regulation 2001

s96. Supervising workers

1) Without limiting section 95(2), the site senior executive must ensure the mine's activities and workers are supervised to the extent necessary to ensure each worker—

- a. is not likely to be exposed to conditions beyond the worker's capabilities; and*
- b. is not likely to be affected by the conditions in which the worker is working in a way that adversely affects the worker's fitness to perform critical tasks; and*
- c. has the resources necessary to carry out the worker's tasks without being exposed to an unacceptable level of risk; and*
- d. is working within the limits of the worker's fitness and competence; and*
- e. complies with the worker's safety and health obligations.*

2) The supervision must include communication, including direct contact, at appropriate intervals by the worker's supervisor.

6 EFFECTIVE SAFETY AND HEALTH MANAGEMENT

Management and supervisors attitudes have been identified as significant organisational factors affecting safety performance.

In any organisation that has a number of management levels, there will be different roles and budget responsibilities, as well as planning outlook for senior, middle and line management. Responsibility for the overall safety and health management is shared between management levels, with supervisors having a fairly short term

focus. Figure 1 illustrates the planning focus and key skills required at different management levels.

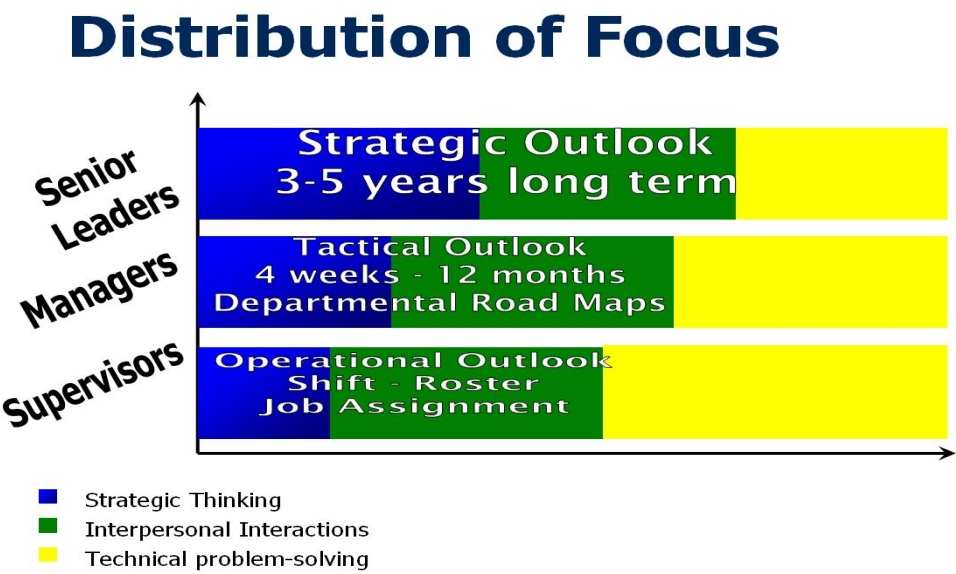


Figure 1: Distribution of focus for management levels

Although the focus of this Guidance Note is on effective safety and health supervision, it is important to note that the management levels above supervisors are equally important in overall safety and health management. The key roles and responsibilities, skills and values for positive safety and health outcomes have been identified from good practice in other industries, and these are presented in Table 1 below.

The factors listed in Table 1 can be incorporated into position descriptions, and included in roles and responsibilities for all levels of management within organisations.

The main roles and responsibilities at the supervisor level include the need to plan and allocate work, make decisions, monitor performance and compliance, provide leadership, facilitate communication and teamwork, and ensure workforce involvement. Principles for organisations to use as performance indicators (KPIs) are found on page 11.

Table 1 – Strategic Factors associated with positive safety and health outcomes (adapted from “The role of managerial leadership in determining workplace safety outcomes”)

Target group	Attributes	Behaviour and Action	Outcome
Senior Management	Attitudes to safety and health	Accepts overall responsibility for safety and health leadership. View safety and health as integral to competitiveness and profitability. Perceive statutory compliance as important	Proactive and adequately resourced safety and health management. Supervisors and workers able to raise safety and health issues without fear of ridicule or reprisal
	Leadership style	Demonstrate transformational leadership committed and engaging	Clear communication is achieved
	Trust	Committed to developing trusting relationships with subordinates	Two way relationships are achieved and generate motivation.
Management	Commitment to safety and health	Consistent expression of the value of the positive safety and health culture. Devote resources to safety and health. Implement safety and health programs, policies and procedures	Proactive and adequately resourced safety and health management
	Involvement in safety and health	Visible at the worksite. Engage in informal communications with workers. Retain personal responsibility for safety and health.	Safety and health commitment is felt at the workplace.
	Priority of safety and health	Undertake work planning and scheduling. View safety practices as intrinsic to production	Safety viewed as part of ‘doing business’
	Leadership style	Decentralise power Decisive Demonstrate transformational leadership	Workers and supervisors feel empowered to make safety decisions.
	Interactions	Demonstrate cooperation between workers and management. Engage in informal contact between workers and management. Use multiple communication channels.	Clear communication is achieved

	Communication	Demonstrate an open-door management policy Give feedback to employees	Clear communication is achieved
	Humanistic management practices	Appreciate employees Demonstrate concern for employees Implement health policies and practices, including Fitness for Work issues	Employees feel valued and can work effectively and raise safety and health concerns without fear of ridicule or reprisal

Supervisors	Involvement in and commitment to safety and health	Translates organisational values into practical safety and health activities Committed to regular safety meetings with workers Responsive to worker initiatives in developing engineering controls or solutions Commitment to safety and health programs and training Involved in job observations, inspections and investigations	Safety viewed as part of 'doing business'
	Risk management	Demonstrate skills and commitment in identifying hazards and controls Value and facilitate decisions for higher order controls Committed to participating in and reviewing JSAs, SWPs and procedures for high-risk activities	Risk is managed to ALARA levels
	Supportive supervision	Open about safety and health issues Initiate safety and health discussions Provide feedback Demonstrate fairness	Workers feel empowered to make safety decisions as well as raise safety concerns without fear of ridicule or reprisal.
	Supervisor autonomy	Have specific and reasonable responsibilities, authority and goals Influence decision making Demonstrate supervisory control	Effective H&S Supervision is achieved
	Participative supervision	Demonstrate a participative style Emphasise the importance of teamwork Value the workgroup Trust subordinates	Workers feel positively involved and empowered to control risk

Mine Worker	Worker involvement	Involved in safety decisions Willing to approach management Involved in safety and health programs	Workers feel positively involved and empowered to control risk
	Worker autonomy	Have specific and reasonable responsibilities, authority and goals	Workers can do the job safely
	Worker risk perception	Aware of risks Take individual responsibility Support safety and health management programs	Workers can make safe decisions.
	Worker cohesion	Committed to workgroup integration Committed to group safety norms Positive focus (mateship)	Teams can make safe decisions.
	Worker motivation	Support safety and health initiatives Comply with rules and procedures	Workers are committed to safety.

Further criteria for incorporating into roles and responsibilities for effective safety and health supervision are provided below. At an organisational level, the key criteria to address (from HSE, 2004a) include:

- Supervision is a critical management function that must be reflected in an organisation's safety and health management system and organisational structure.
- Supervisors must have a clear and realistic role and position description that reflects their accountabilities and responsibilities.
- Supervisors must have the time and resources to effectively supervise all of their workers and the tasks they undertake.
- Supervision has a key influence on the way teams perform. Therefore, the way supervision is delivered must be appropriate for the way the team functions.
- Individuals with any form of supervisory role must have the necessary competence and opportunity (including time to carry out supervisory roles, interaction with the people they are supervising and respect from those people) to fulfil their responsibilities.
- Supervisors must have adequate content knowledge to ensure they are able to identify hazards, assess risks and establish effective controls.
- The closeness of direct supervision must reflect the level of risk workers are exposed to and their skill level and experience. This is critically important where administrative controls such as procedures are the primary risk reduction method, i.e., a failure to follow a procedure results in exposure to an uncontrolled hazard.
- Contractors can have a significant impact on health and safety performance (positive or negative). Hence, supervision of contractors must be effectively managed.
- Organisational arrangements must ensure effective leadership in emergency situations.

Principles for effective safety and health supervision at an organisational level include:

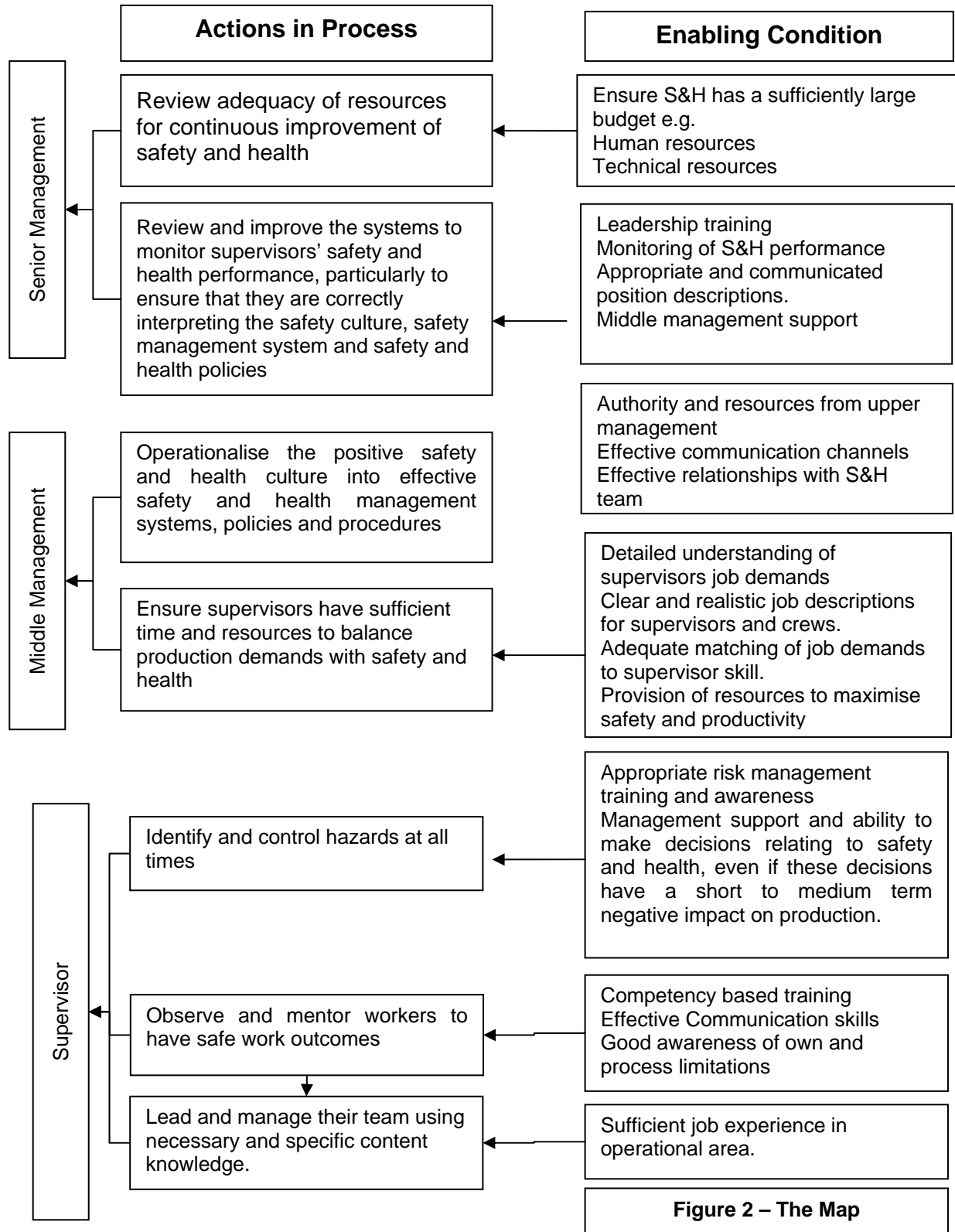
- Work teams and individuals need to know their limits of responsibility and must have adequate supervisory and technical support.
- Organisations are continually evolving and need to manage organisational change to ensure risks are managed.
- Bureaucratic and large organisations must ensure that sufficient resources are in place to carry out all supervisory activities. This includes sufficient non-direct supervision to ensure that systems and procedures are effectively managed and implemented.
- When establishing contracts, operating companies must ensure that effective safety and health supervision from both the company and the contractor is clearly defined in the contract.
- Organisations must ensure that, where contractors are providing self-supervision, these supervisors reflect the organisation's expectations for effective safety and health supervision. This should be reflected in the site senior executive's management structure.
- Leadership in emergencies is critical, and organisations must make arrangements that ensure all leadership roles are filled, and backed up, in all situations.
- People with supervisory roles must be selected because of their skills and aptitude to undertake supervisory activities.

Note: These principles can be used to develop internal audit tools for effective safety and health supervision as well as key performance indicators for the different levels of management. The above principles form the basis of the self assessment tools found in Appendix C as well as the benchmarks in Appendix D.

Organisations will also benefit from using the 'map' in section 7 to develop a plan to integrate these factors into existing HR, Training and Organisational systems, including safety and health management systems.

7 MAP FOR IMPLEMENTING EFFECTIVE SAFETY AND HEALTH SUPERVISION

Everyone in an organisation has part to play in the achievement of safety and health. Figure 2 below is a possible map for achieving this outcome.



8 THE ROLE OF SUPERVISORS

While everyone in an organisation has part to play in the achievement of safety and health, supervisors have a specific role in the *Mining and Quarrying Safety and Health Act 1999*. The Act recognises that supervisors represent management at a worker level.

The following subsections build on this definition to provide a more comprehensive view of the role of the supervisor and their functions in the mining industry.

8.1 Who are supervisors?

- are the 'lens' through which the workplace views the greater organisation
- personify what the organisation is about
- are critical to the success of the organisation
- are the members of the management team who are closest to the workforce
- include company supervisors and contractor supervisors
- are individuals who make work more efficient, and
- are a resource and support for workers and contractors.

8.2 What do Supervisors do?

1. perform direct and indirect supervision
2. supervise activities at an appropriate level based on the risk of the task
3. problem solve and make decisions
4. manage time and control hours of work
5. implement direction from senior management
6. manage people
7. monitor, control and are accountable for work output and quality
8. organise people and resources
9. investigate, and report incidents
10. implement corrective actions
11. undertake risk assessments, including developing and reviewing procedures, job observations, JSAs, SWIs, etc.
12. perform planned job or behaviour observations
13. plan
14. manage performance
15. communicate, mentor, coach, train and assess workers, or arrange training
16. perform administrative functions, manage human resources and complete documentation, including
 - a. shift handovers
 - b. safety meetings, including toolbox talks
 - c. plan and authorise leave, including sick leave, recreational leave, etc
 - d. incident reviews and reports
 - e. performance review paperwork
 - f. supply ordering and receiving, and
 - g. general communication, including e-mail, updates, etc.

These functions and activities can be grouped as represented in Figure 3.

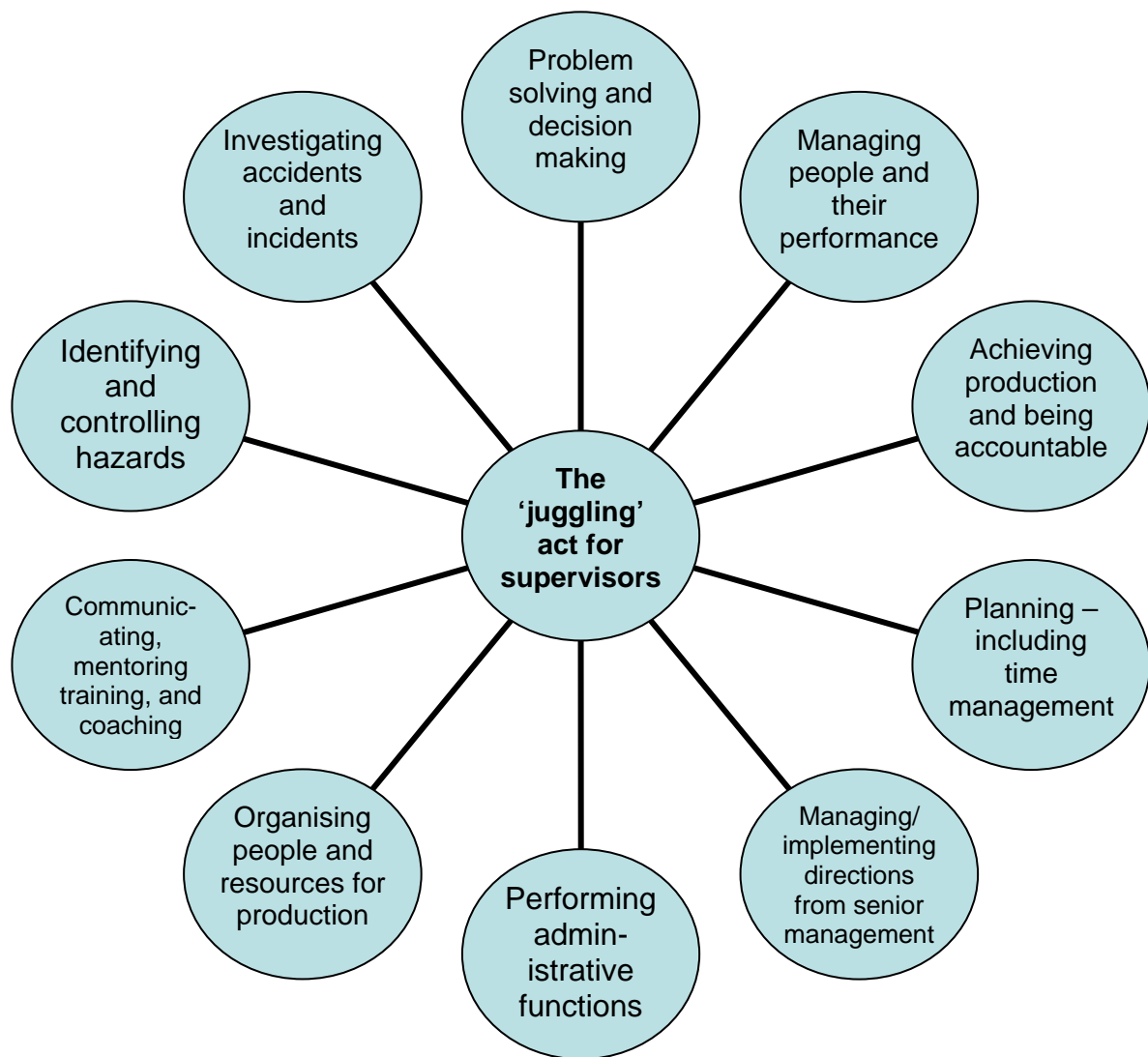


Figure 3: Supervisor functions and activities

9 THE KEY ISSUES FOR EFFECTIVE SUPERVISION IN MINING

9.1 Determining key skills and competencies for effective mining supervisors

Key skills and competencies for supervision will generally vary due to the specialised nature of each part of the mining operation. In general, the following abilities are considered important for a competent supervisor in the mining industry and might warrant inclusion in the supervisors' position description.

9.2 The competent and effective supervisor

The competent and effective supervisor is able to:

- communicate clearly
- motivate and lead
- delegate, plan and organise
- empower
- develop teamwork
- work cooperatively
- train, coach and mentor
- solve problems
- manage information
- understand the crew, including their strengths and limitations, and
- manage oneself

Most of these could be addressed in current competency training and ongoing professional development

Furthermore, the competent and effective supervisor:

- is focused
- has the stamina and strength to do the job
- understands the organisation and its goals
- has role confidence
- understands the work they supervise
- is fair, predictable and consistent
- balances the competing demands of safety versus production, and
- has presence.

Although these are the qualities of an 'ideal' supervisor, it's important to remember that:

**It's not about being perfect, being excellent, being great,
being good or bad, or right or wrong...**

IT'S ABOUT BEING EFFECTIVE!

9.3 The Supervisor role in preventing incidents

One critical function of a supervisor is to ensure that risk is at an acceptable level by identifying hazards, assessing associated risks, establishing controls (barriers) and monitoring their effectiveness.

Supervisors' actions and behaviours will influence the safety and health of workers, as well as the work environment. Based on work by Wiegmann and Shappell, a number of supervisor specific attributes in mining give rise to unsafe acts and conditions. These are:

1. Inadequate supervision;
2. Planned inappropriate actions;
3. Failure to correct problems; and
4. Supervisory violations.

Inadequate Supervision

Some specific examples of inadequate supervision include:

- failed to provide proper training
- failed to provide guidance/oversight
- failed to provide current publications/technical data and/ or procedures
- failed to provide adequate rest breaks
- lack of accountability
- perceived lack of authority

There are many examples in mining when one or more of these factors have resulted in an incident or compromised safety and production.

Planned Inappropriate Actions

In some operations, the need to achieve production targets and deal with contingencies such as equipment breakdowns means that decisions are made that may put workers at risk. A list of potential issues is:

- poor matching of work teams for jobs
- failure to provide adequate pre-start information/supervision
- planning to take risks that outweigh benefits
- failure to plan in adequate opportunity for rest periods in heavy/difficult conditions
- assigning an excessive workload or tasks for shift crew

Failure to Correct a Known Problem

This includes those instances when deficiencies among individuals, equipment, training or other related safety areas are “known” to the supervisor, yet are allowed to continue unabated. Examples include:

- failure to correct inappropriate behaviour/identify risky behaviour

- failure to correct a safety/health hazard
- failure to initiate corrective action
- failure to place appropriate priority on needed repairs

Supervisory Violations

The last category describes situations when existing rules and regulations are willfully disregarded by supervisors. Examples of supervisory violations include:

- failure to enforce rules and regulations
- violation of procedures
- authorisation of unqualified workers to perform specific activities
- wilful disregard for authority by supervisors
- inadequate completion of documentation
- fraudulent completion of documentation

For further information on the above, please consult “A Human Error Approach to Aviation Accident Analysis” listed in the references.

10 CONCLUSION

The information presented and the current legislation reinforce that supervision is a complex task. To be effective in the role, a supervisor is dependent on support from all levels of management above them, as well as involvement with workers and contractors they direct. Some of this support from management is stipulated in legislation, especially in the areas of adequate resources, sufficient time to undertake the role, and role in the management structure.

In most operations, ‘everything’ is channelled via the supervisor as show in Figure 4. The supervisor must have the skills, time and support to ensure these channels are not becoming blocked.

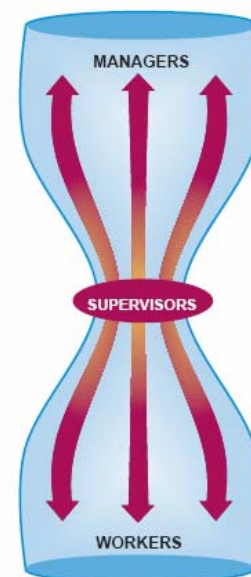


Figure 4: Information is channelled via the Supervisor

Based on the input of industry participants and other research and guidance, there are some fairly generic skills, attributes and competencies that are needed by an effective supervisor. The general skills and training of supervisors is also prescribed in section 51 of the *Mining and Quarrying Safety and Health Act 1999*, but, as always, it is important to note that the legislative requirements are a minimum.

To effectively supervise and meet the intent of the legislative references to supervision, the number of supervisors and their level of training and skills needs to:

- reflect the operation's hazards and activities, and
- provide regular direct supervision for high-risk activities. **This is critical when organisations rely on administrative controls such as procedures to control the risk.**

As operations include everything from exploration, small mines and quarries to large diverse multi-site operations with contractors, each site must determine their specific resourcing, training and skill needs for effective supervision.

Key points for most sites to consider in resourcing include:

- the number of people reporting to the supervisor
- the geographical spread of persons and activities
- allocation of activities that take him/her away from supervising persons, and
- overall time to undertake the 'complete' supervisor role effectively

Questions 1.4, 1.5, 1.6, and 1.12 on the self assessment will assist with obtaining supervisors' input into their resourcing.

As the coroner had identified "supervision of skilled autonomous workers" as an area of concern, those operations where supervisors are responsible for workers that are autonomous or independent must have measures in place to keep the risk to persons as low as reasonably achievable.

Questions Q1.6, Q1.16, Q1.17, and Q2.1- Q2.3 will assist with obtaining supervisors' input into their understanding and ability to manage skilled autonomous workers including contractors.

Finally, this Guidance Note provides information on some aspects of safety and health management; however, compliance with this Guidance Note may not be sufficient to ensure compliance with the requirements in the legislation.

11 ACKNOWLEDGMENTS

The following mines are acknowledged for their input and support during the workshop:

Cannington (BHP Billiton)
Weipa Comalco (Rio Tinto)
Phosphate Hill (Southern Cross Fertilisers)
Century (Zinifex)
Ernest Henry (Xstrata Copper)
Bohle Quarry (Readymix)
Carpentaria Gold (Resolute Resources)
Warrior (Citigold)
Collingwood Tin (Bluestone Tin)
Pajingo (Newmont)
Twin Hills (BMA)
Mount Isa Mines (Xstrata Zinc and Xstrata Copper)
Eloise (Barminto)
Mount Gordon (Aditya Birla)
Osborne (Barrick), and
Mount Garnet (Kagara Zinc).

We also acknowledge Carmel Bofinger and Jenny Krasny (Prospect Consulting Group) for facilitating the workshop.

12 REFERENCES AND FURTHER READING

Mining and Quarrying Safety and Health Act 1999

Mining and Quarrying Safety and Health Regulation 2001

Coal Mining Safety and Health Act 1999

Coal Mining Safety and health Regulation 2001

Health and Safety Executive (2004a). *Different types of supervision and the impact on safety in the chemical and allied industries: Research Report 292*. Colgate: HSE Books.

Health and Safety Executive (2004b). *Different types of supervision and the impact on safety in the chemical and allied industries: Assessment methodology and user guide research report 292b*. Colgate: HSE Books.

Health and Safety Executive (2003). *The role of managerial leadership in determining workplace safety outcomes: Research report 044*. Colgate: HSE Books.

Wiegmann, D, and Shappell, S.A. (2003) *A human error approach to aviation accident analysis: The human factors analysis and classification system*. Aldershot: Ashgate Publishing Ltd.

Appendix A: Legislation applicable to Effective Safety and Health Supervision

From the *Mining and Quarrying Safety and Health Act 1999*

Note: the sections in **bold** below are considered critical in developing and supporting the role of the supervisor.

38. *Obligations of operators*

- 1) *An operator for a mine has the following obligations—*
 - a. *to ensure the risk to workers while at the operator's mine is at an acceptable level, including, for example, by—*
...
 - d. *to ensure the site senior executive for the mine—*
...
 - i. *develops, implements and maintains a management structure for the mine that helps ensure the safety and health of persons at the mine;*
...
 - f. *to provide adequate resources to ensure the effectiveness and implementation of the safety and health management system.*

39. *Obligations of site senior executive for mine*

- 1) *A site senior executive for a mine has the following obligations in relation to the safety and health of persons who may be affected by operations—*
 - a. *to ensure the risk to persons from operations is at an acceptable level; performance of work by someone other than the site senior executive's workers is at an acceptable level;*
...
 - e. ***to develop, implement and maintain a management structure for the mine that helps ensure the safety and health of persons at the mine;***
 - f. ***to train workers so that they are competent to perform their duties;***

50. *Management structure for safe operations at mines*

- 1) ***The site senior executive must—***
 - a. ***develop and maintain a management structure for the mine in a way that allows development and implementation of the safety and health management system; and***
 - b. ***document the management structure.***
- 2) ***The document must—***
 - a. ***state the responsibilities of the site senior executive; and***
 - b. ***state the responsibilities and competencies required for senior positions in the structure; and***
 - c. ***state the names of the persons holding the senior positions and their competencies; and***
 - d. ***provide for a competent person to perform the duties of a supervisor while the supervisor is absent.***

- 3) *For subsection (2)(b), an inspector may by notice given to the site senior executive declare a position to be a senior position.*

For the most current copy of the *Mining and Quarrying Safety and Health Act 1999* see www.legislation.qld.gov.au/LEGISLTN/CURRENT/M/MiningQuaSHA99.pdf

From the *Mining and Quarrying Safety and Health Regulation 2001*

95. *Time and resources for carrying out tasks*

- 1) ***The site senior executive must ensure time is allocated, and the mine's resources are distributed, to enable each worker at the mine to carry out the worker's tasks without creating an unacceptable level of risk.***
- 2) ***Without limiting subsection (1), the site senior executive must ensure the worker is given the supervision and assistance from other competent persons, necessary to achieve an acceptable level of risk.***

- 3) *In this section— **resources** includes the following—*

- a. *access and transport;*
- b. *communication methods;*
- c. *facilities, materials and plant;*

Examples for paragraph (c)— Consumable items, spare parts and personal protective equipment.

- d. ***leadership, guidance and training;***
- e. *procedures, including procedures for coordinating activities, and standard work instructions and other relevant information.*

.....

98. *Checking work quality*

- 1) ***This section applies to work carried out at a mine and for which checking the quality of output from the work is necessary for managing risk at the mine.***
- 2) ***The site senior executive must ensure the output is checked by a person other than the person who carried out the work, to confirm the output is suitable for use.***

99. *Entering a workplace*

Each supervisor for a workplace at a mine must ensure a person does not enter the workplace unless the supervisor reasonably believes the person is capable, having regard to the conditions prevailing in the workplace and the person's level of supervision, to respond appropriately to—

- a. ***the normal activities in the workplace; and***
- b. ***any incident or emergency likely to occur.***

www.legislation.qld.gov.au/LEGISLTN/CURRENT/M/MiningQuaSHR01.pdf

Appendix B: Selected legislation relating to supervision from the *Coal Mining Safety and Health Act 1999*

Following is some legislation relevant to supervision under the *Coal Mining Safety and Health Act 1999*. Operations need to refer to both the *Coal Mining Safety and Health Act 1999* and the *Coal Mining Safety and Health Regulation 2001* for the most recent and relevant legislation on supervision. Legislation can be found at: www.legislation.qld.gov.au/OQPChome.htm

26 Meaning of *supervisor*

A ***supervisor*** at a coal mine is a coal mine worker who is authorised by the site senior executive to give directions to other coal mine workers in accordance with the safety and health management system.

56 Competencies of supervisors

A site senior executive must not assign the tasks of a supervisor to a person unless the person—

- (a) is competent to perform the task assigned; and
- (b) if there is a safety and health competency for supervisors recognised by the council, has the relevant competency.

Appendix C: Assessment of supervisory effectiveness in Safety and Health (from HSE, 2004b)

Self assessment of supervisor role and support

The following is an example of a self assessment tool that the mining industry could use to develop a plan for effective supervision that includes a focus on safety and health.

This questionnaire should be completed by anyone with supervisory responsibilities, with the answers compared to the suggested responses in Appendix D. This process should facilitate a gap analysis of effective supervision outcomes.

Note: Those with supervisory responsibilities are not only people with job titles like Supervisor or Team Leader, but can include any team member. This is especially the case for Self Managed Teams, where everyone has similar roles and responsibilities.

Name of person interviewed
Team title - how long have you been in the team?
Job title/role - how long have you had that role?
What have you done in the past?

Q1.1 How do you perceive your position in the team?			
a) At a relatively 'high' position in the team hierarchy	b) Equal to the majority of the team	c) At a relatively 'low' position in the team	d) All members of the team are at the same level
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer			

Q1.2 Who allocates and plans your work?			
a) You identify what needs to be done and plan your own work	b) Some of your work is allocated and or planned by someone else	c) Most of your work is allocated and or planned by someone else	d) All your work is allocated and planned by someone else
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer			
Q1.3 How would you describe the way your work is planned?			
a) Mostly proactive and well planned	b) Mixture of proactive and reactive, but well planned	c) Mixture of proactive and reactive, but not well planned	d) Mostly reactive
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer			

Q1.4 How are your supervisory responsibilities defined?			
a) Specifically defined as a responsibility and included in your performance appraisal	b) Specifically defined as a responsibility, but not included in your performance appraisal	c) Not defined as a responsibility, but you do feel you perform a supervisory role	d) You do not have a supervisory role and/or any supervisory responsibility
Record your comments or explanation here. Also, any relevant references or evidence to			

explain your answer.			
Q1.5 Do you understand what is expected of you with regard to supervision?			
a) Strongly agree	b) Agree	c) Disagree	d) Strongly disagree
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			
Q1.6 What responsibility do you have for the team's health and safety performance and compliance with rules and procedures?			
a) Ultimately responsible for all aspects of performance and compliance	b) Responsible for some of aspects of performance and compliance	c) Involved in monitoring or performance or compliance	d) Only responsible for your own performance and compliance
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.7 What role do you have in leading continuous improvement for your team?			
a) Formally appointed coach/mentor for the whole team	b) Formally appointed coach/mentor for some members of the team	c) Not formally appointed as a coach/mentor, but feel you do perform that role to some extent	d) Do not act as coach mentor
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.8 What opportunity do you have to communicate with the team?			
a) You are able to communicate with the team almost all the time	b) For much of the time	c) For some of the time	d) Have little opportunity to communicate with the team
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			
Q1.9 What opportunity do you have to communicate with management?			
a) Frequent opportunities to communicate with management (at least weekly)	b) Infrequently (at least monthly)	c) Reasonable, but rarely take the opportunity	d) Little opportunity
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.10 What role do you have in decision making?			
a) Ultimately responsible for making decisions on behalf of the team	b) Responsible for some specific decisions made on behalf of the team	c) Contribute to decision making	d) Little opportunity to contribute to decision making
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.11 Do you feel you are adequately supervised?			Not applicable
a) Strongly agree	b) Agree	c) Disagree	d) Strongly disagree
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			
Q1.12 Do you believe you have enough time to contribute to supervision of the team?			Not applicable
a) Strongly agree	b) Agree	c) Disagree	d) Strongly disagree
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			
<p><i>If you answered c or d why do you not have enough time and what is the consequence?</i></p>			

Q1.13 What supervisory training and experience have you received?			Not applicable
a) Extensive training and experience	b) Extensive training, but not very experienced	c) Experienced, but not received much training	d) Little training or experience
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.14 Do you feel sufficiently competent to contribute to supervision of the team?							Not applicable
a) Strongly agree		b) Agree		c) Disagree		d) Strongly disagree	
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.							
Q1.15 Do you feel you receive enough support from others? i.e. management and/or team members in fulfilling your supervisory role?							
a) Strongly agree		b) Agree		c) Disagree		d) Strongly disagree	
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.							
Q1.16 Do you have direct responsibility for supervising other people? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, how much operational experience do you have?							

a) Fully competent in the operation of all areas of responsibility	b) Have worked (briefly) in all areas of responsibility	c) Have only worked in some of the areas of responsibility	d) Have not worked in any of the areas of responsibility
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.			

Q1.17 Do you believe you understand enough about the operational conditions and constraints for the areas you supervise?					Not applicable
a) Strongly agree		b) Agree		c) Disagree	d) Strongly disagree
If you answered c or d — why is this and how could it be improved?					
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.					

The following questions relate to the supervision of contractors or subcontractors			
Q2.1 What role do you have in supervising contractors or sub-contractors?			
a) Frequently involved in supervising contractors or sub-contractors (at least	b) In-frequently involved in supervising contractors or sub-contractors (at least	c) Sometimes work with contractors or sub- contractors, but not formally responsible for	d) Very little contact with contractors or sub- contractors Go to Q3.1

once a week)	once a month)	supervising them.	
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Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.

Q2.2 Do you understand what is expected of you in the supervision of contractors or sub- contractors?

Not applicable

a) Strongly agree		b) Agree		c) Disagree		d) Strongly disagree	
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Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.

Q2.3 Do you believe contractors and sub-contractors are adequately supervised?

a) Strongly agree		b) Agree		c) Disagree		d) Strongly disagree	
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If you answered c or d is this because of company or contractor failing?

How could they be improved?

Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.

The following questions relate to leadership in an emergency

Q3.1 Do you have a leadership role in an emergency?

a) Allocated a specific role		b) Allocated as a deputy for a specific		c) No allocated role, but expected to 'jump-in' if		d) Not expected to take any leadership role	
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		role		required		
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.						
Q3.2 What training and practice do you receive for your role in an emergency?						Not applicable Go to Q 4.1
a) Receive refresher training and take part in emergency exercises at least annually		b) Receive refresher training and take part in emergency exercises less than annually		c) Received training in the past, but not refreshed		d) Received no training
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.						
Q3.3 Do you feel confident to perform your role in an emergency?						Not applicable
a) Strongly agree		b) Agree		c) Disagree		d) Strongly disagree
Record your comments or explanation here. Also, any relevant references or evidence to explain your answer.						

The following questions are an opportunity for you to record any further comments about supervision

Q4.1 How does the current approach to supervision differ from your previous experience?

This includes previous experience in this company and in other companies or

situations.

Q4.2 In what ways has supervision improved over recent years?

Appendix D: Scoring the Self Assessment: Assessors guide for Supervisor Self assessment

	Guide for when asking/explaining the question (for interview situations)	Guide to assessing result
Q1.1	This depends on the structure of the organisation, the persons job and their perception of their position in the organisation.	This sets the scene for the remainder of the assessment. Do people answering 'b' or 'c' have any supervisory role?
Q1.2	How is work to be done identified, and by whom? Is there a 'master plan,' and how this generated? Are jobs allocated one at a time, or does the individual choose when they get done?	Benchmark answer depends on the circumstances. Is there an appropriate balance between autonomy for the individual, control of work priorities and business needs?
Q1.3	How is work planned? What is done to avoid reactive work? What happens when reactive work has to be done, is it possible to also complete the planned work?	Benchmark answer is 'a' or 'b.' Anything less suggests work is performed inefficiently.
Q1.4	How much of the job is supervision? Is it more or less important than other aspects of the job? How are appraisals carried out?	Benchmark answer is 'a.' Answer 'b' suggests insufficient attention is paid to supervision, whilst 'c' suggests role descriptions are not current and have not kept up with the changing responsibilities. Most people have some supervisory responsibility, even if it is only keeping an eye on colleagues and other working on the mine/quarry/site
Q1.5	How were expectations communicated at first, and what is done to update these (if necessary)? How much is dictated by management and how much evolves from custom and practice?	Benchmark answer is 'a.' Anything less could lead to confusion and possible omissions.
Q1.6	What do you do to ensure the health and safety performance and compliance? Are you in a position to monitor and control adequately? Are you comfortable with the responsibilities you have? What are you uncomfortable about?	For anyone in a defined supervisory role, benchmark answer 'a.' Most individuals have some responsibility, even if it is only monitoring colleagues and other working on the plant/site/area.
Q1.7	Is continuous improvement an aim, and how is it achieved? What activities do you perform that may be considered to be coaching or mentoring? Does this include existing personnel and trainees?	Benchmark answer depends on the circumstances. Answer 'c' suggests role descriptions are inaccurate and have not kept up with the evolving organisation.

Q1.8	How do you communicate with others? If you don't spend much time with them, do you have continual access to telephone, two-way radio; and are these reliable?	Benchmark answer is 'a.' What consequences could there be if communication is poor?
Q1.9	How often do you meet with members of management, and do they talk to you. How does information from management get through to you, and how do you get information to them? Is there someone you use as a channel of communication with management, and how well does this work?	Benchmark answer is 'a.' Anything less suggests key messages may not get through.

Q1.10	What decisions have to be made on a routine and non-routine basis? How many of them are critical, and what are the consequences of making the wrong decisions? Who is involved in making decisions?	Benchmark answer depends on circumstances. Answer 'd' may suggest decisions are made without all necessary information.
Q1.11	Who supervises you? Are they a good supervisor? Do they have enough time to fulfil their supervisory role? Does this vary depending on events or workload? How would you prefer to be supervised?	Benchmark answer is 'a.' Anything less suggests the individual does not feel adequately supported.
Q1.12	Have you been told how much time you should be spending on supervision? Do you have too many people to supervise? Does the time available vary? Are you able to fulfil your responsibilities within your normal working hours, or do you have to work beyond shifts?	Benchmark answer is 'a.' Anything less suggests that the person has too many other responsibilities, supervises too many people or that supervision is not given sufficient priority.
Q1.13	What supervisory training has been provided? Was this for the current job or for a previous job? How useful was the training? Is it refreshed? Was training provided before starting the job, or has it been picked up over time? Are people competent when they start supervisory jobs (i.e. receive training before starting) or does this take time to develop? What experience has been achieved?	For experienced people benchmark answer is 'a.' For less experienced benchmark answer is 'b.' People new to supervisory jobs should receive training before they take over the job. Relying on experience alone means new starters will take time to become effective, and may mean best practices in supervision are not followed.
Q1.14	How has your level of competence been achieved (training and/or experience)? Can it be demonstrated? How long has it taken you to reach this level of competence, and what was it like in the past?	Benchmark answer is 'a.' Recognise that, even with good training, full competence also requires experience, which can take time to develop.
Q1.15	Who provides support for supervisory activities (e.g. team members, people in other teams, management, technical personnel)? How do they provide support? Are they proactive, or only respond when asked? Do they take a hands-on approach?	Benchmark answer is 'a.' Anything less suggests individuals may sometimes be in positions where they do not have the competence, time or influence to make the appropriate supervisory interventions.

Q1.16	Has the individual done all the jobs that they supervise? How long ago did they do those jobs, and for how long? Did they achieve the necessary level of competence and would they still be deemed competent?	This is a lead into Q1.17. Answers 'c' or 'd' may lead to the situation where the person in a supervisory role make inappropriate decisions because they do not know the operational constraints.
Q1.17	How does the individual know and understand operational conditions and constraints (especially if they have not worked in all the jobs)? Are they required to get involved in the detail, or only give direction? Are the people working for them competent to self-manage, and do they communicate well to ensure the supervisor knows what is going on?	Benchmark answer is 'a.' Anything less suggests that the way supervisory activities are performed sometime will not reflect operational conditions and constraints. Refer to Q1.16

Q 2.1	When are contractors and sub-contractors used, and for what types of task? Do they have their own supervisors? What type of interaction is there (direct supervision, liaison with contractor supervisors, monitoring)?	This is a lead into Q 2.2
Q 2.2	What is expected, and how has this understanding been achieved? Is it the same for all contractors (different companies, activities the performing, other events on site)? Is this a lot of responsibility, and how much time does it take?	Benchmark answer is 'a.' Anything less suggests confusion and inconsistency, that may result in inadequate supervision of contractors.
Q2.3	Does the individual have sufficient time and opportunity, and what is the general situation? Any examples of good or bad practice? Does it vary, and why?	Benchmark answer is 'a.' Anything less suggests insufficient consideration is given to supervision when contractors are used. Use of contractors can have a significant impact on health and safety performance, suggesting supervision is particularly critical

Q 3.1	What is the role? What emergency events does this apply to?	This is a lead into Q 3.2 and Q 3.3
Q 3.2	What training is provided and how often is it refreshed? What type of training is provided (table top exercises, full emergency exercises)? How useful is the training?	Benchmark answer is 'a.' Anything less is insufficient to maintain competence in a critical role that people do not get to practice on a routine basis.
Q3.3	What gives confidence and how is this achieved? Any experience of real emergencies, or is this based on training exercises? Any examples of where it has gone well or badly?	Benchmark answer is 'a.' However, need to avoid over confidence. Anything less means people feel they do not receive enough training, or that it is not realistic enough to give them confidence.
Q 4.1	Where have people worked in the past? What jobs have they done? Have they experienced more 'traditional' or 'dictatorial' approaches, and how do they compare? Are there more or	This is a 'catch-all' question to allow people to make further comments if they wish.

	less supervisors now than there was in the past? Are the supervisors better or worse?	
Q 4.2	Is it the systems, organisation or individuals that have improved? Are supervisors closer to their teams? Has management attitude improved? Is there a common approach, e.g. working together? What was the driving force and how was it achieved?	This is a 'catch-all' question to allow people to make further comments if they wish.
Q 4.3	Is it the systems, organisation or individuals that have got worse? Why is this? Is lack of time to supervise an issue? Are there too many roadblocks? Is there petty rivalry or competition? Have terms and conditions got worse?	This is a 'catch-all' question to allow people to make further comments if they wish.