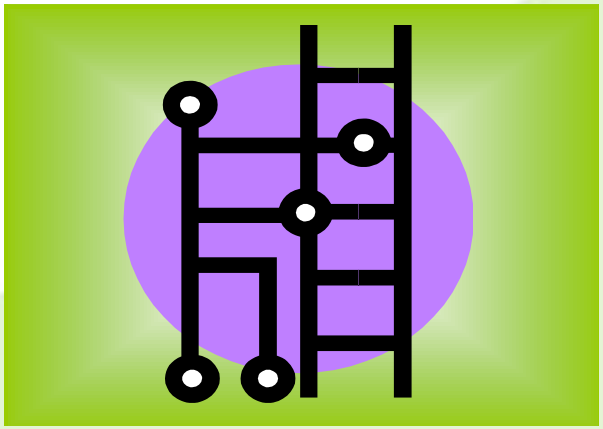
AB Risk Limited

Staffing Assessment

Modified Assessment Ladders



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Rung philosophy

A. High reliability organisation	
B. Good practices in place	
C. Some good practices in place, with scope for further improvement	
M. Evidence that the issue is being taken seriously and significant problems are unlikely to occur (minimum acceptable)	
X. Some progress, but more is required	
Y. Only the very basic issues have been addressed	
Z. No consideration has been given to the issue	

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1. Situational awareness

A. People spend a significant proportion of their time collecting and analysing data. They understand the safety envelope they need to work within and are successful at picking up minor disturbances very early on so that consequences can be avoided.	People never accept that everything is alright and believe there is always the potential for something to go wrong. They see the avoidance of all disturbances as a key part of their job.
B. People are not disturbed when they need to concentrate on the information presented to them, so that they have the time they need to determine what is happening and diagnose why.	Situational awareness is very good. Ensuring people know what is happening all the time is considered to be a high priority for the business.
C. Systems are set up so that groups can work together to develop an accurate, shared picture of what is going on in all situations. There is good consistency between different individuals/groups in the way they monitor and control the process	Situational awareness is very good. People share the same 'mental model' so are able to work together effectively when monitoring information and dealing with problems.
M. Systems are set up so that individuals can access the information they need to determine what is going on in all situations and pick-up deviations quickly enough to avoid significant problems	Situational awareness is generally good. This is demonstrated through experience showing that most problems are detected early and dealt with effectively. This is achieved by presenting process information clearly (e.g. well designed process graphics that are set up for normal monitoring, tasks and dealing with events).
X. People usually know what is going on when things are 'normal' but find it difficult to keep up when things are unusual or starting to go wrong	Situational awareness is OK when thing are normal. But the information people need when things are unusual are go wrong is not available in an appropriate form.
Y. People do monitor the process but are often unsuccessful at detecting deviations before something goes wrong.	Situational awareness is poor because little thought has been given to what information is needed to avoid problems.
Z. There is no attempt to keep track of what is going on. People only respond to events, alarms and other indications that things are going wrong.	Situational awareness is very poor because systems do not provide the data needed to monitor what is going on in an appropriate form or people do not have the time or opportunity to keep track of what is happening.

2. Teamworking

A. Individuals and teams communicate continuously to make sure everyone knows what is happening and what they need to do to fulfil short and long term goals. A person's role in the team at any time is determined by their skill and expertise not position/grade.	Teams are dynamic and evolve continually to ensure the available resources are used in the most effective way. Different team structures are used depending on the mode of operation (e.g. normal, abnormal, emergency)
B. There is a system in place to assess and manage changes that ensures the ability of the team to deal with all situations is not compromised by changes to plant, process, procedures and organisation .	Impacts on teamwork are addressed by the management of change system
C. The ability of the team to deal with workload and demands is reviewed in light of experience and periodically tested through scenario exercises	It is recognised that some situations can put significant strain on resources. Because many of these are unplanned and occur infrequently it is recognised that being able to handle normal situations is not a good indication of whether all situations can be dealt with
M. The systems in place make sure the people available at any time are deployed in the areas where they are most needed. This means support is usually available for people who are experiencing high workload/demand	There is a clearly defined mechanism or someone has the responsibility to allocate resources where they are most needed.
X. There are arrangements in place that allow teams to request support but no guarantee that it will be made available in time to make a difference	It is recognised that teams may not be able to cope with everything they have to deal with. However, the onus is left on the team to ask for assistance without a system being put in place to make sure this will occur and/or be effective
Y. Teams are expected to cope with every situation they encounter with no additional support	Teamworking is poor. If it is better than poor this is through luck rather than effective management or systems.
Z. People perform their own roles with no consideration of others or team objectives	Teamworking is very poor or non-existent. Individuals look after themselves and/or compete with others in a way that is detrimental to the business.

3. Alertness and fatigue

A. Individuals and teams work flexibly so that everyone in a role requiring a high degree if alertness is able to achieve the requirement. A mature view is taken to people requiring fresh air, and change of scene or a power nap whilst at work	It is expected that people will suffer from fatigue. People are trusted to do what they need to minimise the risks.
B. People are willing to report concerns they have about their own and others fatigue. Issues requiring short and long term remedies are addressed.	Fatigue is seen to be a critical factor, the culture is open and evidence shows that the organisation learns from experience.
C. It is recognised that people may require additional rest days after periods of exceptional workload. Flexibility is built into working arrangements to allow this to occur. Demanding or overly passive tasks are avoided 1 – 5 am	Fatigue is predicted and pro-active action taken. Complicated tasks are scheduled for times when people are more likely to be alert. If someone has to do a passive job in the early hours of the morning, arrangements are made to minimise the risks of fatigue
M. Individuals' working patterns are monitored to ensure they comply with the standards set. Action is taken if an individual has worked excessive hours/days. The working environment minimises risks of fatigue.	People who have worked whilst they were likely to have bee suffering from fatigue are identified. Action is taken after the event with the aim of preventing reoccurrence. Heating, ventilation and lighting does not cause excess fatigue and helps people stay alert.
X. Actual hours/days worked by individuals is recorded	The information required to evaluate the actual risk of fatigue is collected.
Y. Limits are defined for the number of hours people can work in a day and the number of days they can work without a day off.	Fatigue has been recognised as a risk and control measures have been identified.
Z. Shift patterns have not been assessed for potential fatigue. There are no limits or controls on overtime, double shifts etc.	There is a high likelihood that people will be working whilst fatigued

4. Fitness for work

A. The organisation recognises how it is important that its employees are healthy. This is perceived by people positively and they take responsibility for arriving at work in a fit state.	The organisation wants its employees to be healthy but looks after those that are not. It demonstrates a genuine concern without any perception of ulterior motives or going beyond what is considered reasonable for an employer with regard to personal freedom.
B. The health of the workforce is monitored proactively and reactively. People are offered health assessments (medicals). Any health trends are analysed to determine root causes. Action is taken to prevent work-related health issues.	The organisation recognises it can influence the health of its employees and that this can have implications for the individual and the organisation. It does what it can to understand the cause of health issues and address them to prevent reoccurrence.
C. Fitness for work is considered beyond drugs and alcohol. Risks of working whilst suffering health problems including stress , fatigue, short and long-term illness are recognised. People have access to information about fitness for work.	It is recognised that people who are not fit for work can increase risks to themselves and others. It is not only alcohol and drugs that affect people's fitness.
M. Controls are in place for prescription and over-the-counter medicines. People understand them and know what to do if they are taking any.	The drug policy is not limited to recreational use of drugs.
X. There is a written alcohol and drugs policy	Expectations are clearly laid out in writing.
Y. People know that they should not be under the influence of alcohol or recreational drugs whilst at work	A common sense approach is taken.
Z. Employees are provided with no instructions or guidance about the state they should be when at work.	The organisation has made no attempt at ensuring people are fit and sober whilst at work.

5. Management of competence

A. Competence development is a continuous process with everyone striving to learn and improve; taking advantage of all opportunities to gain experience and develop skills. Competence is driven by the individuals, who are well supported by systems.	Everyone accepts they have a responsibility to continually improve their competence, even if they are staying in the same job. They recognise they can never know everything and they can learn from anyone. Systems are not needed to tell people they need training, but are useful for recording competence in a way that allows individuals to plan improvement.
B. Levels of competence are defined for all key roles. Management of change systems ensure training and competency requirements are identified and fulfilled when changes take place.	Having achieved the minimum requirement for a role, people still have further development stages mapped out. People expect to continually enhance their competencies.
C. There is a formal competence assurance system in place. It defines minimum requirements for specific roles. Individuals are formally assessed before being 'passed out' in the role and reassessed regularly on critical competencies.	Role requirements are defined according to the skills, knowledge and understanding required to perform a role (not what training has been provided). It is not assumed that someone who has been passed out will be competent forever, so they need to be reassessed. There is no need to reassess on every competence element.
M. There is a system in place to identify individual training needs. It is reviewed regularly and action is taken to fulfil needs. It includes the requirements for refresher training for routine, non-routine and emergency tasks.	The system makes sure people are maintaining the skills, knowledge and understanding they need to do their job safely and effectively. Everyone working with major accident hazards takes part in regular emergency exercises.
X. People receive information about major accident hazards, potential hazardous scenarios and related emergency response as part of their training.	Training does not just cover the basics to do the job, but also equips people with the knowledge they need to keep themselves safe during normal and emergency situations.
Y. People are put through basic training when they start a new job.	Whilst some training is provided, it only covers the basics of what is required to do the job. Everything else is covered by informal training.
Z. All training is done 'on the job' informally with peers. There is no plan or assessment	Training is very poor. It is totally reliant on informal methods.

6. Roles and responsibilities

A. Roles and responsibilities are continually evolving to match the requirements of the organisation, making sure the people most able to deal with the situation are where they need to be to do so. People are trusted but also feel fully accountable for their actions.	People realise that effective and efficient working requires them to be flexible and dynamic. They are willing to take on what needs to be done whilst recognising their limitations.
B. Requirements to change roles and responsibilities are identified through management of change, audit and review and incident analysis.	Roles and responsibilities are reviewed and updated regularly.
C. Systems ensure that all core competencies are fulfilled at all times. Potential gaps caused by absence (e.g. holiday, illness) are avoided by arranging suitable cover. Situations where core competencies cannot be fulfilled result in activities being modified	It is recognised that situations can arise where the ideal team is not available. Systems ensure the potential risks are managed effectively.
M. There is a system in place to make sure key roles and responsibilities can be fulfilled by the people working for the organisation. Any gaps are filled through training or recruitment.	Systems look at organisation/team requirements; and not just individuals. The organisation does not wait for a gap to appear before developing a plan to fill it.
X. A structured approach has been used to identify core competencies for key roles. People understand their role and responsibilities for normal and abnormal situations.	People know what tasks they are expected to perform and the situations they are expected to deal with.
Y. There are general job descriptions for each role.	The level of details in the descriptions is not enough for people to understand their specific roles and responsibilities
Z. There are no definitions of roles and responsibilities.	The understanding of roles and responsibilities is very poor.

7. Willingness to initiate emergency response

A. Costly events are expected. As a result arrangements make sure they are detected early and responded to quickly and decisively so that return to normal can be achieved as quickly as possible.	The organisation is continually considering what can go wrong. It uses this information to check that it is doing everything it can to prevent it; but also checks that it will be able to detect, contain and bounce back from events
B. Scenario exercises are used to test how potentially costly events would be assessed, diagnosed and responded to. Diagnosis and decision aids are provided. They are easy to access and use in a emergency.	Scenario exercises go beyond simple emergency procedures that check people know the procedures; but challenge arrangements to ensure they are robust enough to deal with all potential events.
C. The organisation is proactive in finding ways to reduce the 'cost' of events so that people are less concerned about making decisions when responding to events.	Whilst effort is put into preventing costly events, unless they can be totally eliminated there is advantage in mitigating their effects.
M. People are not fearful of reprimand if they initiate a costly response to an event (e.g. trip the plant, stops the job), even if it proves to be unnecessary in hind-sight	It is not just that the message about safety is given, but it is believed to be true. This is reinforced through the way events are handled (i.e. people have made mistakes but not been reprimanded because they were able to justify their actions)
X. The importance of safety is reinforced with all messages relating to production, performance, profit etc.	Safety messages are not given in isolation but in the context of the business. The message is that doing business safely is what matters.
Y. People are told that safety is the number priority and that they are empowered to act if they feel there is justification.	The message that safety is number one priority may not be reflected in everyday communication where production and/or profit may be talked about more often.
Z. People are reluctant to initiate emergency response because they are fearful of reprimand due to the costs to the business.	There is a significant risk that emergency response actions may be delayed. Consequences are likely to be worse as a result.

8. Written procedures/instructions

A. Procedures/instructions and job aids are used continually to support people in working at high level of performance. They do not just tell people how to perform tasks, but are effective at challenging them to be mindful to what can go wrong.	People consider the use of written procedures/instructions to be an integral part of them doing their job to the best of their ability. They will challenge any situation where a procedure/instruction would be useful but one has not bee generated. Also, where the procedures/instructions are not as useful as they could be.
B. Procedures/instructions are reviewed and updated to reflect experience. That experience can be from performing the task, walking through the task, incident reports and information from other plants, sites or companies.	Procedures/instructions are continually evolving to reflect current practices and learning from experience
C. Only the procedures/instructions that are needed are provided. People know when they need to use them and they are in the most appropriate format for use. As a result, procedures/instructions are used effectively.	The requirement for a procedure/instruction is determined using a systematic method based on task criticality and risk. The number of procedures/instructions is minimised to make it easy to administer the system.
M. The people who perform the task are involved in writing procedures/instructions. This means that they reflect how tasks are carried out in practice and are presented in a usable format, including the use of job aids where appropriate.	Being involved in writing procedures/instructions involves more than simply reviewing what has been written by others. Job aids such as checklists, flow charts, diagrams are used where they add value.
X. Procedures/instructions are easy to access when required and there is a system to make sure they are updated when required.	It has been recognised that procedure/instructions will not be used if they cannot be accessed easily.
Y. There are lots of written procedures/instructions. They are wordy and complex. They are not always up to date and people find it difficult to find the one they need.	Emphasis has been on writing procedures/instructions without considering their use. The result is poor procedures/instructions that provide minimal support to people doing the tasks.
Z. There are no written procedures/instructions or the ones that do exist are rarely used in practice	Procedures/instructions are very poor. They provide no support to the way tasks are performed

9. Management of change (human and organisational factors)

A. The organisation recognises that change is occurring continuously. Maintaining an up to date and accurate understanding of how the organisation functions is considered to be essential to managing risks effectively.	Change does not just occur as a result of planned interventions. Change by stealth means that lots of small and subtle changes can result in significant changes over time.
B. Changes are reviewed before implementation, during transition, immediately after implementation and some time afterwards to ensure risks have been properly identified, assessed and controlled.	It is recognised that there is always uncertainty when implementing change. It is not assumed the change will be successful. As well addressing any unexpected risks, the reviews of changes will result in improved management of change processes.
C. The people most likely to be affected by changes are involved in the assessing the change. Also, changes are assessed by people who have competence in assessing human and organisational factors.	Involving people in assessing change requires more than simply telling them what is happening. Involving them means they achieve a better understanding of what is happening and have the opportunity to influence plans based on their knowledge and experience of what really happens.
M. The impact on human and organisational factors is considered for all types of change. Transitional arrangements are made for implementing changes.	It is recognised that even changes to plant and process can have implications for human and organisation factors. The transition from old to new arrangements can include risk and so needs to be considered when managing the change.
X. Management of change systems apply to organisational changes. The effort put into assessing and managing the changes is determined by the scale of the change taking place.	Organisational changes can range from the very minor (e.g. change of an individual in a role) through to major reorganisation. All levels of change need to be managed, but the effort should be commensurate with the potential risk.
Y. Management of change systems cover plant, process and procedures.	Although there may be good systems in place for managing some types of changes, they are poor at managing changes to human and organisational factors.
Z. Changes to plant, process, procedures and/or organisation occur without assessment, control or review	Management of change is very poor. There is no effective procedure for managing change.

10. Continuous improvement in safety (human and organisational factors)

A. The organisation does not wait for something to go wrong. It continuously looks for things that may represent a safety weakness and investigates these to determine what can be done to reduce risk and increase resilience	The organisation assumes there are always weakness in its systems and that failures are occurring all the time.
B. The organisation looks for trends in direct and root causes of accident, incidents and abnormal events. It uses this information to identify fundamental system changes that can make significant safety improvements	The organisation does not only respond to single events or consider reports in isolation. It recognises that systems and organisational failures are likely to impact on the safety of all aspects of its business.
C. The organisation reviews accident and incident reports published in the public domain. It is proactive in sharing its learning with others.	The organisation recognises it can learn from other organisations, even if they work in different sectors. It 'networks' with other organisations including neighbours, industry and/or safety groups.
M. The results of accident and incident investigations are communicated to the workforce so that everyone is aware of the root causes and actions taken to prevent reoccurrence	There is good use made of accident and incident reports. They are used to help people learn more about safety.
X. Accidents and incidents are investigated with the aim of identifying human failures and determining their root causes. People carrying out investigations are trained in evaluating the causes of human failures and are provided with suitable guidance	The role of human failures in accident causation is understood. The approach taken to evaluating human failures is consistent with human factors theories and so some learning is achieved
Y. Improvement actions relating to human and organisational factors tend to be restricted to requiring individuals to change their behaviour	Incident and accident reports often suggest the root cause was 'human error' or actions require people to 'be more careful in future.' As a result, learning about human failures is poor.
Z. Accidents and incidents may be reported but are rarely investigated to identify their cause	Very little is done to improve safety.

11. Management of safety (human and organisational factors)

A. Safety is rarely talked about in isolation and is seen as an integral part of the business. Bad news is shared across all levels of the organisation. Unplanned events are seen as important opportunity to learn. Information is retained for future reference	Doing business safely is fully understood by everyone. Any safety issue is seen as a serious concern for the business. There is no filtering of information, which can lead to people having an incomplete picture of how the organisation works. The organisation aims to retain everything it learns so that it does not repeat mistakes.
B. The organisation is effective a sharing good practices between teams, departments and sites. Also, with other organisations.	The organisation is open to ideas from all sources. It allows new ideas to be tried and avoids aiming for the lowest common denominator, which can be the result of setting centralised standards. Competition between parts of the organisation is only used where it will have a positive impact on safety performance.
C. The workforce participates in continuous safety improvement. Their ideas are asked for and used to plan improvements.	Workforce participation is viewed as a essential in improving safety. It ensure proposed actions are practical, based on the reality of what happens in the organisation, and ensures the actions are understood and accepted.
M. Human and organisational factors are included in safety improvement plans. They are discussed at safety meetings. Actions for improvement are assigned, tracked and closed out effectively.	Safety improvements are prioritised according to the potential to reduce risks. Actions that can improve human and organisational factors are seen as beneficial in improving safety performance.
X. Human and organisational factors are considered in risk assessments. Suitable control measures are specified to manage the associated risks.	The role of human and organisational failures in risk is understood.
Y. The is a clear reference to human and organisation factors in the organisation's safety policy and the documents that make up the safety management system.	Human and organisational factors are recognised as important in the management of safety
Z. Although the organisation has a written safety policy, it has little influence on the way it conducts its business	The organisation has done the minimum to comply with legal requirements

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12. Automated plant and equipment

A. The organisation recognises that automation increases the complexity of its operations. It makes sure it fully understands all the implications whilst always ensuring there is redundancy in the system to fall back on if something fails.	The organisation assumes that automation will increase the problems it experiences. The organisation knows its limitations and makes sure it works within them.
B. Indicators of performance have been developed that address technical and human aspects of an automated system. These are reviewed regularly and action is taken to optimise performance.	Objective, subjective, leading and lagging indicators are used to evaluate performance. Action is taken to address problems before consequences occur.
C. The impact on human performance is considered during the design of automated systems. Jobs are redesigned to counteract any negative impacts of introducing automation.	Allocation of function is considered during design to ensure appropriate decisions are made about whether a function should be automated or left under human control. Training is provided as part of the implementation and additional training over the long term is planned to address any of the potential 'ironies of automation.'
M. The use of automation has been proven to be beneficial to the business. This assessment has taken into account any potential negative affects on human and organisational factors.	There is evidence of short and long term improvements. The 'ironies of automation' include loss of skill by the operator because they have less opportunity to interact with the system on a regular basis and reduced motivation because the job changes from operating to monitoring.
X. The automated system responds to abnormal situations as intended. People are happy to leave it in automatic mode in most cases.	The automation has been set up of a range of modes of operation.
Y. The system is usually operated in automatic mode during normal operations. However, it is usually switched to manual mode as soon as something unusual or unplanned occurs.	The automation has only been set up for a limited number of modes of operation.
Z. Systems run in automatic mode only some of the time. It is perceived to be not much better than when operated in manual mode.	Automation has been provided but considered to be poor.