Fatigue Management Guideline

Health, Safety & Environment

TABLE OF CONTENTS

1 Purpose and Scope 4
2 Guideline Requirements 4
2.1 Organisational and Individual Costs of Fatigue 4
2.2 Characteristics of an Effective Fatigue Risk Management System 5
2.3 Fitness for Work 5
2.4 The Causes of Fatigue 5
2.5 The Management of Fatigue 6
2.6 Pre-Employment Assessment of Individuals' Potential for Fatigue 7
2.7 Employee Induction and Leader Training 8
2.7.1 Induction of New Employees 8
2.7.2 Employee Fatigue Education 8
2.7.3 Leader Training 9
2.7.4 Assistance for Employees with Fatigue Problems 9
2.8 Shift and Roster Design and Management 9
2.8.1 Approval of Rosters 9
2.8.2 Assessment of Rosters 9
2.8.3 Hours of Work and Roster Design 10
2.9 Monitoring of Hours Work 10
2.9.1 Out of Hours Responses 10
2.10 Commuting 11
2.10.1 Daily Commuting 11
2.11 Fly In – Fly Out Employees 11
2.11.1 Travel Schedules 11
2.11.2 Commute plans 11
2.12 Management of Employees who are Fatigued at Work 12
2.13 Guideline to Manage Napping During Night Shift 12
2.14 Management of Alcohol and Drugs 12
2.15 Incident Investigation 13
2.16 Contractors 13
2.17 Data Collection 13
3 Accountabilities 13
3.1 General Manager 13
3.1.1 Site Wide Implementation and Management 14
3.1.2 Provision of Resources 14
3.2 Managers and Leaders 14

3.2.1 Fostering Active Cooperation with the Guideline....14
3.2.2 Assessing fitness for work....14
3.2.3 Action required when an individual is fatigued and not fit for work....14
3.2.4 Minimising the Impact of Fatigue....15
3.3 Individuals....15
3.3.1 Participating in Fatigue Management Training....15
3.3.2 Reporting for Work in a Fit Condition....15
3.3.3 Notification of any Actual or Potential Impairment of Fitness for Work....16
3.3.4 Appropriate use of Medication....16
4 Abbreviations....16
5 Definitions....16
6 References....17
6.1 Interfaces with Other Systems and Procedures....17
6.1.1 ACOEM Guidance Statement....17
6.1.2 Interfaces with Legislation and Standards....18
7 Review....18

TABLES

Table 1: Abbreviations....16
Table 2: Definitions....17

1 Purpose and Scope

The purpose of this Guideline is to ensure a safe working environment will be met by addressing the following objectives:

1. Ensure that, whilst at work or undertaking activities on the company's behalf, employees, contractors and others are alert and not suffering from the impairing effects of fatigue.
2. Ensure that the company meets its obligations to employees, contractors and to the general public to carry out all its activities safely.
3. Provide assistance through a range of preventative, educational and rehabilitative measures to address fatigue related problems that could impair individuals' fitness for work.
4. Ensure that all employees who are deemed unfit for work as a result of fatigue and related issues are dealt with in an effective, fair and constructive manner.

Roy Hill has a duty of care to ensure that all individuals are alert and fit for work whilst on its sites or whilst undertaking activities on its behalf. This document:

Outlines the responsibilities of all individuals on site or conducting activities on its behalf;

- Provides guidance to reduce and address the causes of fatigue; and
- Provides guidance to deal effectively and appropriately with individuals who may be unfit for work due to fatigue.

This Guideline applies to all individuals whilst on the Roy Hill sites or whilst carrying out activities on the company's behalf. This includes employees and contractors that are directly employed by Roy Hill and company visitors.

2 Guideline Requirements

2.1 Organisational and Individual Costs of Fatigue

If not managed correctly fatigue can have considerable impact on organisations and individuals. The direct costs to organisations include:

- Increased rates of incidents,
- Loss of productivity,
- Higher damage costs, and
- Higher levels of absenteeism and turnover.

Fatigue may have adverse effects on the health of individuals. Research indicates that fatigue may lead to;

- Increased accident rates both at work and in employee's private time,
- Increased levels of medical disorders, (gastrointestinal, cardiovascular etc.)
- Higher levels of stress and complaints associated with stress (e.g., anxiety, depression), and
- Higher rates of personal and marital problems.

Individuals suffering from digestive disorders, diabetes, heart diseases, psychological problems and chronic sleep problems are at higher risk from these issues when fatigued.

The fatigue and disruption that may result from shift work or excessive hours of work often makes a normal family life and social commitments difficult for employees, families and communities. This results in pressures

on relationships, domestic workloads and community activities. It has implications for safety and health, productivity, morale, absenteeism and turnover rates.

2.2 Characteristics of an Effective Fatigue Risk Management System

Fatigue Risk Management System (FRMS):

1. It is based on science.
2. Decisions are based on the collection and objective analysis of data.
3. It is designed in cooperation with relevant stakeholders.
4. Is fully implemented across the organisation with tools, systems and procedures.
5. It is integrated into the safety and health management systems.
6. It is subject to continuous improvement through feedback, evaluation, and modification.
7. Is budgeted for and justified by an accurate return on investment business case.
8. Senior leadership accepts responsibility for the FRMS.
9. Employees are accountable to manage their fatigue so they present fit for work and able to maintain the required level of fitness throughout the shift.

These principles should guide the development of a site based FRMS.

2.3 Fitness for Work

"Fit for Work" means that an individual is in a physical, mental and emotional state that enables them to perform assigned tasks competently and in a manner that does not compromise or threaten the safety or health of themselves or others. An individual may be unfit for work for a variety of reasons including the adverse effects of fatigue, stress, alcohol or other drugs or a range of physical and mental health issues. Definition of Fatigue. For the purpose of this document fatigue is defined as: *"The loss of alertness and capacity to perform safely that results from insufficient or poor quality sleep, working at times you would normally be asleep or engaging in mentally or physically demanding activities."*

2.4 The Causes of Fatigue

The level of fatigue for both individuals and work groups is determined by a wide variety of interacting variables. The following diagram sets out an overview of the major causes of fatigue.

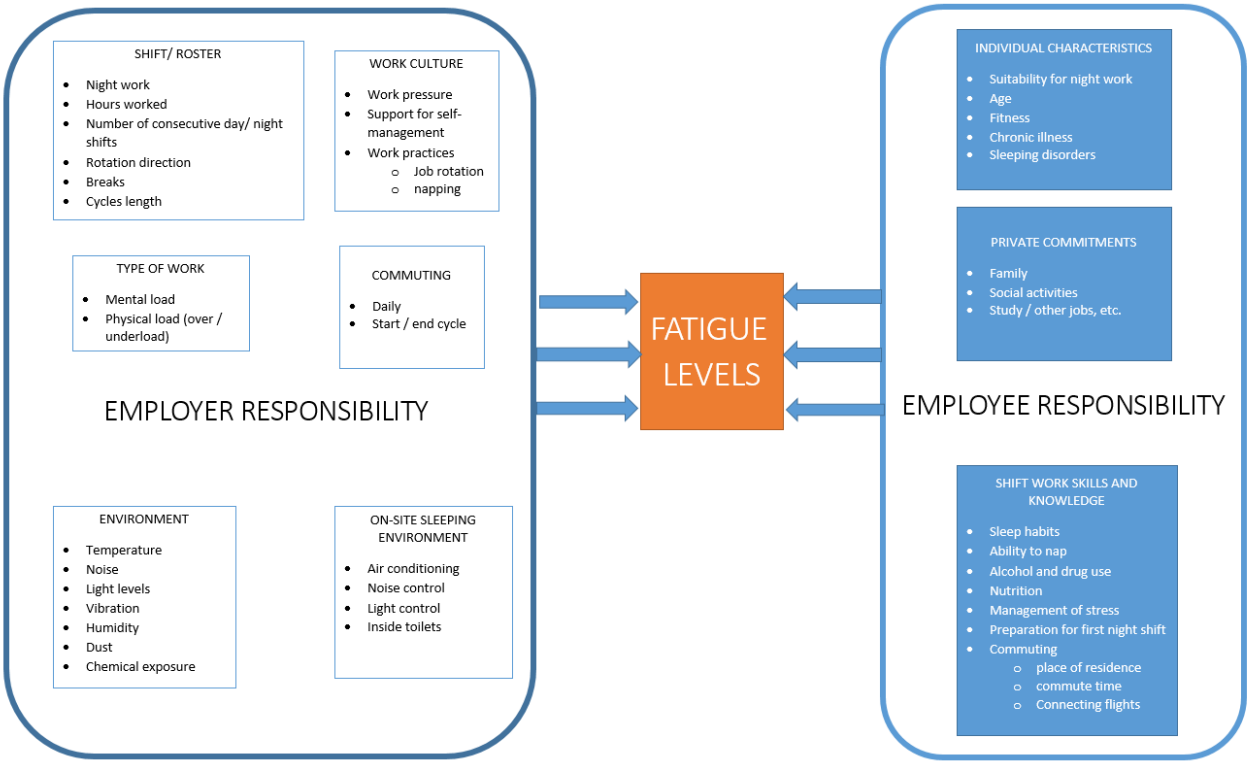

Figure 1 - Major causes of fatigue

2.5 The Management of Fatigue

Whilst the above model may not be a complete representation of all the causes of fatigue, it points towards a need for a broad effort to manage this issue. To effectively manage fatigue requires a comprehensive and integrated strategy and the main aims of such an approach are to ensure that;

- Recruitment processes identify candidates with a potential for fatigue (e.g., those with sleeping disorders),
- Employees develop the knowledge, attitudes and skills necessary to manage their sleep and minimise fatigue,
- Employees are willing to monitor and intervene when a work colleague appears fatigued.
- Leaders have the knowledge, skills and mandate to;
  - Actively monitor and manage fatigue,
  - Foster a culture that supports employee self-management, and
  - To take early and appropriate action where doubt exists about an individual's capacity to carry out his or her assigned tasks safely because of been effected by fatigue related issues
- There is an ongoing and effective strategy to promote employees' capacity to manage fatigue,
- There is an ongoing and effective strategy to manage other issues that could impact employees' fitness for work including alcohol and drug use and physical and mental health issues,
- Effective strategies are in place to assist and manage employees' whose fitness for work is compromised by fatigue or other causes, and

- Where requested or a need is identified psychological support can be made available to assist employees with fatigue or other fitness for work issues.

This approach can be seen in the diagram below.

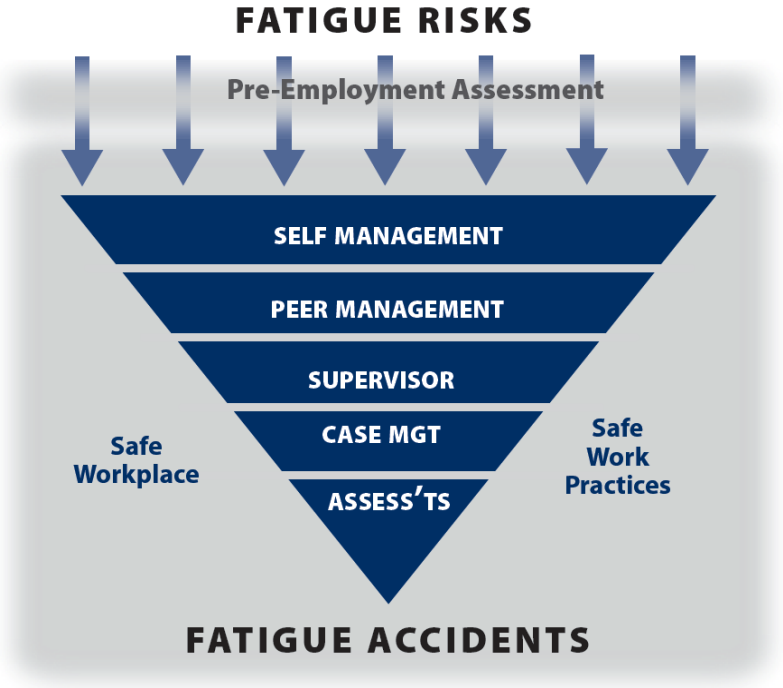

Figure 2 – Effective strategies for fatigue

Good management practices (e.g., appropriate structure of shifts and rosters, correct shift rotations, prevention of excessive call-outs, management of exposures etc.), and promoting employee self-monitoring supported by Senior Leadership is the single most effective strategy to manage fatigue.

However Leaders also have an important role in managing fatigue. This includes:

- Monitoring employees under their control at the start of and during the shift and taking action to ensure safety if there is any concern that a person is fatigued. To do this they need to be able to recognise when employees may be fatigued for any of the reasons set out in the next section,
- Promoting a culture in the workplace where employees are encouraged to bring up issues about their own or others' fatigue. To do this, a Leader has to deal constructively with any issues that arise and help the affected person to resolve the problem and ensure that he or she can work safely,
- Ensuring final determination of "Fit for Work" is based on the assessment of the individual's Manager or Leader, if necessary, with appropriate advice from Roy Hills medical and / or Injury Management Advisor.

The remainder of this document sets out the Roy Hill approach to managing fatigue.

2.6 Pre-Employment Assessment of Individuals' Potential for Fatigue

Applicants for employment in safety critical positions (including those that involve shiftwork) shall be assessed to determine their risk factors for and capacity to cope with fatigue. This will include an assessment of;

- Current health and physical status,

- Risk of common sleeping disorders such as insomnia, sleep apnea, narcolepsy, gastro-esophageal reflux and restless leg syndrome,
- Outside commitments such as second jobs, demanding hobbies or study may significantly contribute to fatigue levels,
- Consideration of residual location
- Alcohol and other drug use, and
- Previous work history especially a past record in successfully managing hazardous or shift work.

These processes form part of a person's interview and pre-employment medical examination.

Where any serious medical concerns are raised about an individual's ability to undertake the required tasks safely, Roy Hill will refer the person for further assessment.

2.7 Employee Induction and Leader Training

All individuals regularly working on the site shall be provided with the education and training necessary to understand and manage fatigue.

2.7.1 Induction of New Employees

As part of the induction process, new employees will be made aware of Roy Hills approach to managing fatigue and associated documents through the following means:

- An explanation of the strategy will be provided to all new employees as part of the induction process. This will include a summary of the relevant documents and the availability of assistance to address fatigue were appropriate.
- All Operational Leaders will be provided with appropriate education in managing fatigue within 6 months of commencing, for the rest of the Operational employees it will be within 12months of employment.

2.7.2 Employee Fatigue Education

The employee education program shall include information on;

- Signs of fatigue in themselves and others,
- Risks involved in working in a fatigued state,
- Common risk factors for fatigue,
- Causes of fatigue, particularly the disruption to the body caused by working at night,
- Signs of common sleep disorders,
- The impact of inappropriate alcohol or other drugs on sleeping and fatigue,
- Ways to improve their sleep,
- Ways to improve managing fatigue and alertness when working at night,
- The impact of shift work on family life,
- Consideration of residual location,
- Strategies to address situations where there is an increased risk of fatigue, and
- The sources of help to address any causes of fatigue.

These training programs shall;

- Be carried out by a trainer with the appropriate qualifications and where required certified. The trainer will also have an expert understanding and knowledge of sleeping, shiftwork and fatigue issues, and
- Provide appropriate opportunity for employees to evaluate their own level of fatigue and risk factors and seek information about their specific issues.

2.7.3 Leader Training

In addition to the above, Leaders shall receive training in managing fatigue including;

- An understanding of relevant industry standards and guidelines,
- Key organisational strategies for managing fatigue,
- The impact of shift and rosters patterns on individuals' fatigue levels,
- Encouraging employees to notify when they or others' are fatigued,
- Strategies to assess and monitor employees' fatigue levels both in specific circumstances and on an ongoing basis,
- Assisting fatigued individuals access appropriate assistance for fatigue issues,
- Managing specific situations (such as call outs, shut downs etc.) where there is a high potential for fatigue,
- Effectively managing employees with ongoing fatigue issues,
- Assessing the possible contribution of fatigue in incidents and accidents, and
- Ensuring contractors manage fatigue appropriately.

2.7.4 Assistance for Employees with Fatigue Problems

Roy Hill shall ensure that all individuals have access to confidential and professional assistance to address and resolve work and personal issues that might contribute to fatigue in the work place.

2.8 Shift and Roster Design and Management

2.8.1 Approval of Rosters

The General Manager and their HR Business Partner shall approve all rosters in their area. Approval for the roster shall be based on a risk assessment that uses the information set out in 2.8.3 below.

2.8.2 Assessment of Rosters

All rosters should be assessed using the Roy Hill roster design criteria (see 2.8.3 below) prior to implementation.

Where proposed or existing rosters do not comply with these requirements, an independent risk assessment involving a recognised fatigue expert shall be undertaken. This review shall consider the availability and adequacy of strategies to mitigate any additional risks. The General Manager shall review these findings and submit the risk assessment to the General Manager HSE and the COO for approval.

2.8.3 Hours of Work and Roster Design

Roy Hill will be guided by the Working Hours - Code of Practice (2006) when managing the risks that could arise from our working hour's arrangements. The following sets out the minimum requirements for shift and roster design.

- The minimum time away from work each day shall be sufficient to allow employees the opportunity to sleep for eight (8) consecutive hours. In practice this will require 10 hours at their residence or place of sleep to allow for meals and other personal needs.
- Employees must have the opportunity for two consecutive night-time sleeps following a block of night shifts before resuming on day shift.
- The recommended maximum number of consecutive shifts is:
  - Residential: 10 shifts followed by minimum of 5 off
  - FIFO / DIDO: 14 followed by a minimum of 7 days off
- Maximum scheduled shift duration shall be limited to 12.5 hours (excluding travel time) as a guideline the working day plus daily travel should not exceed 14 hours. Where required to address urgent situations, an individual may work more than14 hours and must have at least 10 hours back in his or her accommodation before re-commencing work. Individuals should not work more than one consecutive day of greater than 14 hours per swing. If greater than 12.5 hours is required, a risk assessment will be completed such that appropriate controls can be implemented to manage the risk of fatigue. Greater than 12.5 hours will be by exception only.

2.9 Monitoring of Hours Work

Each team shall have in place a process to allow the monitoring of scheduled work hours and additional hours. Leaders and individuals are responsible for monitoring the overall hours worked and ensuring that they work within the requirements outlined in this Guideline and have adequate opportunity for rest.

2.9.1 Out of Hours Responses

Roy Hill will ensure that there is a documented process in place to minimize the requirement for individuals to respond out of their normal work hours and to assess the fitness for work of individuals who are required to undertake such responses.

2.9.1.1 Callouts

Callouts will be managed by the following;

- Leaders should establish an out-of-hours response roster to respond to unplanned, after hours requirements,
- Leaders should take appropriate action (e.g., preventative maintenance) to reduce the need for out of hour's responses,
- If it is known that an out of hours response is likely, Leaders should notify individuals as far ahead as possible to allow them to ensure their fitness for work (zeroalcohol consumption, obtain adequate rest etc.),

- Individuals being called out shall complete the Personal Fatigue Checklist to determine their level of fatigue,
- Leaders will assess the fitness for work of individuals' required to work outside their normal hours before allowing them to commence a callout (see Leader Fatigue Assessment),
- Leaders will provide employees required to respond out of hours with information on;
    - their responsibility to ensure that they are fit for work during their time on roster (including their requirements to be rested and not under the influence of alcohol or other substances), and
    - their responsibility to inform the person who calls them in of any possible threat to their fitness for work,
- On completion of an after hour's callout, an individual shall be provided with a 10 hours break at their accommodation before commencing their next work period unless otherwise approved by their Manager Once Removed,
- All individuals who may be subject to callouts are required to complete the Fatigue Management training, and
- A risk assessment must be conducted for all on call arrangements.

2.9.1.2 Call Ups

Individuals who have their sleep interrupted by work related phone calls greater than one hour should complete the Personal Fatigue Checklist before commencement of their next shift.

2.10 Commuting

2.10.1 Daily Commuting

The maximum scheduled working time of 14 hours in a 24-hour period includes time spent traveling to and from work. Any exceptions shall be subject to a risk assessment process as described in Section 2.9 above.

2.11 Fly In – Fly Out Employees

2.11.1 Travel Schedules

- Where flight patterns are such that individuals fly in on the morning that they commence dayshift, those individuals' working time shall start from the time the plane is boarded at the airport This requires that these individuals working time is shortened to ensure that they do not exceed 14 hours of shift time,
- Where a roster starts on a night shift, flight arrangements shall be such that individuals have the opportunity for a 6-hour rest in their site accommodation before commencing the first night shift, and
- Under no circumstances shall an individual operate machinery after they have worked more than 14 hours including travel.

2.11.2 Commute plans

If any individual's normal place of residence is more than 50 kilometres from the airport or the ROC they depart to fly to site, they will have a journey management plan in place. This shall remain in effect for the duration of their employment. The individual shall inform their Leader if the distance from their place of residence changes from what is stated within their individual plans, requiring the plan to be reviewed by the individual with support from their Leader.

2.12Management of Employees who are Fatigued at Work

Where a Leader believes that an individual may be fatigued at the start of shift, they will assess the situation and decide:

- If the individual is to be allowed to remain at work on normal duties, or perform other non-safety sensitive work, or sent home for the rest of the shift; and
- If the fatigue is a result of the individual's deliberate decisions, behaviour, or factors outside the individual's control (e.g., difficulty sleeping during the day due to noise in the village).

The Leader will also:

- Record the incident through the appropriate process,
- Take appropriate action that may include referral for assistance or appropriate disciplinary counselling.

Where the Leader is aware of repeated occurrences of such behaviour, he or she should refer the individual for assessment and action.

2.13 Guideline to Manage Napping During Night Shift

Roy Hill will implement Work Instructions to systematically control napping on night shifts. This will include:

- Leaders determining if an appropriate opportunity exists for napping in each specific work environment,
- Where appropriate, providing the opportunity for employees who are too fatigued to work safely to have a nap under the conditions set out below,
- Educating employees about the benefits and potential hazards of napping,
- Establishing appropriate safeguards to implement a napping strategy successfully including agreeing where fatigued employees can nap and implementing "controlled napping" Work Instructions including:
    - The nap is no longer than 20 - 30 minutes,
    - The nap be taken at a designated nap area,
    - Only one nap per shift be taken,
    - The employee must inform their Leader of their need for a nap,
    - The Leader must ensure that appropriate cover is provided,
    - The Leader review employee’s alertness prior to returning to work, and
    - Employees who are regularly fatigued on shift be referred for assessment and management of any issues causing their fatigue.

2.14 Management of Alcohol and Drugs

The inappropriate use of alcohol and drugs can cause serious fatigue and other fitness for work problems. To address these risks, Roy Hill has an active drug and alcohol management program in place that includes:

- Educating employees about the adverse effects of inappropriate alcohol and drug use,
- Alcohol and drug testing both pre-employment and in the work place. The latter includes random, mandatory prior to commencement of shift (alcohol), and for cause and post incident testing, and

- Professional help to address these issues through the Roy Hill Health and Safety team and Employee Assistance Program.
- An expectation that employee will be fit for work at all times

For further information on the management of Alcohol and drugs refer to Roy Hill's drug and alcohol procedure.

2.15 Incident Investigation

The investigation of all significant incidents shall include a specific assessment of the potential role of fatigue.

This shall include the use the Roy Hill's Fatigue Incident Investigation Tool.

2.16 Contractors

Roy Hill will ensure that all directly employed contractors comply with their obligation to actively manage their employees' fitness for work (including fatigue levels) whilst on Roy Hill sites. In order to do this Roy Hill shall:

- Prior to commencement on site, provide a new contracting company with information on the relevant Fatigue and Fitness for Work documents,
- Require contractors to demonstrate how they will ensure compliance with the requirements of this Guideline including providing their employees with appropriate education, training and assistance to the standard set out in this Guideline,
- Require contractors to collect data and report on their management of fatigue, and
- Conduct reviews and audits of contractors' procedures and practices in this area.

2.17 Data Collection

This may include data on the following:

- The number of individuals deemed to have been unfit due to fatigue at the start of shift and during shift,
- The number of fatigue education and information programs conducted,
- The number of individuals who attended a fatigue education session,
- The number of individuals who have not attended a fatigue education session,
- The number of Leader training sessions conducted,
- The number of Leaders who have attended a Leader fatigue training session,
- The number of Leaders who have not attended a Leader fatigue training session,
- The number of employees called out after their normal hours of work,
- The number of incidents or accidents where fatigue was a likely contributing factor,

3 Accountabilities

Individuals have the following specific requirements of under the Fatigue Guideline.

3.1 General Manager

The GM is responsible for ensuring the adoption and implementation of the guideline. This includes:

3.1.1 Site Wide Implementation and Management

The GM shall ensure that the guideline is appropriately implemented on site to ensure that:

- Employees are informed of the risks associated with fatigue and are able to participate in controlling these risks,
- The design and implementation of rosters, shifts and procedures minimises the causes of fatigue,
- Hours worked by all individuals on site are monitored to prevent excessive time being worked,
- Appropriate education and training on fatigue is provided to all employees and other individuals on site,
- Leaders receive appropriate training in understanding and managing fatigue,
- Appropriate medical and counselling resources are provided to assist individuals suffering from fatigue, and
- Where site accommodation is provided employees are provided with conditions that are conducive to sleep and a balanced diet.
- The application and effectiveness of this Guideline and its associated measures are regularly monitored,
- Appropriate procedures and facilities are established to ensure that sensitive medical and other personal information with respect to this policy is kept confidential.

3.1.2 Provision of Resources

The GM shall ensure that adequate resources are allocated for the education, training, counselling and other requirements of this guideline throughout all operations.

The GM shall ensure that appropriate information is collected to demonstrate that this specification has been effectively implemented, managed, reviewed and adapted in the particular reporting period.

3.2 Managers and Leaders

Managers and Leaders have responsibility for the health, safety and welfare of all individuals under their control. Specific responsibilities under the guideline include;

3.2.1 Fostering Active Cooperation with the Guideline

Leaders should encourage individuals to bring up concerns about their own or other individuals' level of fatigue and other issues that may impair their fitness for work.

3.2.2 Assessing fitness for work

Leaders are responsible for assessing the fatigue levels and fitness for work of individuals under their control, at the start of and throughout the work period.

3.2.3 Action required when an individual is fatigued and not fit for work.

Leaders are responsible for taking prompt and appropriate action whenever they believe an individual is fatigued and not capable of working in a safe and effective manner. This includes;

- Conducting an assessment to determine the potential level of risk, and
- Determining appropriate ways to address the risk.

Where Leader determines the person cannot work safely, the following action shall be taken:

- Isolate the individual from the workplace and any potential hazards,
- Ensure his or her safe return to their accommodation,

- Document and reporting that the individual is not fit for work as a result of fatigue,
- Provide effective feedback to the individual about their fatigue levels and their performance or safety,
- Assist the individual to access appropriate medical and counselling to address any issues causing fatigue, and
- Ensure that the individual has appropriately addressed and resolved any issues causing fatigue prior to returning to work.

3.2.4 Minimising the Impact of Fatigue

Leaders should ensure that all practical steps are taken to minimise fatigue and its effects. This will include;

- Accessing education on the effects of fatigue, especially its effects on alertness and performance,
- Obtaining the skills to assess fatigue and using their authority to direct fatigued individuals to leave the work place,
- Reassessing work requirements to allow extra time for tasks when individuals could be exposed to fatigue related issues,
- Providing written instructions and other checking guidelines to counteract the impairment caused by fatigue on short term memory and verbal communication,
- We will identify work that is short, easy and interesting for allocation to individuals should they advise they are fatigued or we consider that they are fatigued,
- Job rotation; and
- Modifying the physical environment to reduce the impact of fatigue (e.g., using bright lighting to stimulate alertness).

3.3 Individuals

Each individual is responsible to ensure their own safety and health at work and to avoid adversely affecting the health and safety of any other person. In order to fulfil this responsibility, each individual has the following obligations.

3.3.1 Participating in Fatigue Management Training

Individuals are expected to actively participate in education and training necessary to understand and manage fatigue.

3.3.2 Reporting for Work in a Fit Condition

Individuals are expected to arrive at work sufficiently rested to be able to safely perform their duties for the duration of the work period. This includes;

- Ensuring that they obtain adequate (quantity and quality) sleep to prevent fatigue (this is especially important for shift workers who should actively plan to obtain adequate rest),
- Ensuring that their activities outside working hours do not compromise their capacity to work safely and effectively, and
- Exercising particular care to prevent fatigue at critical times such as returning to site, shift change and commuting.

If the employee reports for work and believes they are not sufficiently rested to commence duties they must report the fact to their Leader.

3.3.3 Notification of any Actual or Potential Impairment of Fitness for Work

Individuals shall notify their Leader of any concerns about or potential impairment of their fitness for work due to fatigue or any other issue. This includes;

- Notifying their Leader of any commitments (other jobs, hobbies, study, excessive commuting time etc.) which may cause them to be fatigued, and
- Informing their Leader if at any time at work they become too fatigued to work safely.

3.3.4 Appropriate use of Medication

Individuals shall ensure that any prescription or non-prescription medication that could cause fatigue is taken safely. This requires individuals to;

- Discuss with the prescribing medical practitioner the nature of their duties and any possible impact of the medication on their safety or performance at work,
- Notify their immediate manager or the site medical staff of any medication that could affect their safety or performance at work and complete the Roy Hill medical declaration,
- Take medication strictly in accordance with their doctor's instructions or the manufacturer's recommendations, and
- Report any side effects to their doctor and to advise their immediate manager or the site medical staff of their concerns.

4 Abbreviations

Abbreviation	Definition
ACOEM	American College of Occupational and Environmental Medicine
FRMS	Fatigue Risk Management System
SMS	Safety Management System

Table 1: Abbreviations

5 Definitions

Term	Definition
Average Weekly Working Hours	The number of shifts worked in a cycle multiplied by the shift length (in hours) multiplied by 7 and divided by the number of days in the roster cycle.
Call Outs	When individuals are called to work outside of their normal working hours to attend to emergencies or breakdowns. For example: Emergency Services Officers, Medical Personnel, Maintenance Personnel, and IT Personnel.
Call Ups	When individuals are called about work matters during their normal hours of sleep but are not required to leave their accommodation. Note call ups shouldn't exceed 60 minutes if it does then the rules relating to callouts are to be enforced
Fatigue	The loss of alertness and capacity to perform safely that results from insufficient or poor quality sleep, working at times you would normally be asleep or engaging in mentally or physically demanding activities
Fatigue Expert	An external service provider with the skills and expertise in fatigue management who will advise and recommend corrective or mitigating actions in relation to non-compliant rosters.

Shift Work	Shift work is work that is outside of normal hours (06:00 to 18:00); and / or shift lengths greater than 9 hours.
Shift Workers	A shift worker is anyone who works Shift Work.
Shift Time	Total time scheduled to be spent in the workplace including Short Breaks, Scheduled Breaks, handover / shift change meetings and Active Work (does not include time spent traveling to and from work).
Night Shift	Any shift which includes work between the hours of 23:00 and 06:00.
Working Time	Total time spent at work, including travel to and from work, Shift Time and any overtime or additional time worked.
Non-Working Time	Time where workers are off-site, away from their usual work related tasks. It does not including travel to and from work
Short Break (or Fatigue Break)	A break from active work, which can include toilet stops, checking equipment, rest and refreshment, not necessarily taken at a crib room.
Scheduled Break	A break scheduled from active work where personnel shall go to areas set aside for the consumption of meals, rest and refreshment etc.
Travel Time	Includes time taken to commute to and from the place of work, traveling between sites, or any business travel undertaken including national and international flights.
Shall and Should	The word shall is to be understood as mandatory. The word should is recommended but not mandatory.
Leader	Person at any level of the organization to whom others report on a day-to-day basis regarding work related issues, and who may have responsibilities for allocation of tasks and / or supervision of others. This includes (but is not limited to) area coordinators, forepersons, superintendents and departmental managers.
Roster Period	The rostered work shift plus the break until the next shift. For example: • 8 on 6 off = 8 shifts of working time plus 6 days of non working time is equal to a roster period of 14 days. • 9 on 5 off = 9 shifts of working time plus 5 days of non working time is equal to a roster period of 14 days.
Rotating Roster	A roster that alternates from day shift to night shift or vice versa.

Table 2: Definitions

6 References

6.1 Interfaces with Other Systems and Procedures

This guideline should be read in conjunction with the following Roy Hill documentation and relevant legislation and standards.

6.1.1 ACOEM Guidance Statement

ACOEM Guidance Statement: "Fatigue Risk Management in the Workplace" ACOEM Presidential Task Force on Fatigue Risk Management: Steven E. Lerman, Evamaria Eskin, David J. Flower, Eugenia C. George, Benjamin Gerson, Natalie Hartenbaum, Steven R. Hursh, and Martin Moore-Ede. JOEM, Volume 54, Number 2, February 2012

6.1.2 Interfaces with Legislation and Standards

i) WA Rail Safety Act 2010 and Regulations 2011

ii) Australian Rail Safety Standard AS 4292.1

iii) Occupational Safety and Health Act (1984)

iv) Western Australia Working Hours: Code of Practice (2006)

7 Review

Reviews are to examine the appropriateness of the guideline, taking into consideration corporate, system and compliance requirements and legislative changes since the last review was undertaken.

This Fatigue Management guideline will be reviewed:

- 12 months after implementation; and
- Thereafter, at least every 2 years.