



## Procedure

# Fatigue Risk Management

Endorsed: 26 June 2018

### Brief description

This procedure provides guidance on how to manage the risk of fatigue and how to design and apply a fatigue risk management plan.

### Document information

Current version	1.0
First released	18 July 2018
Last updated	26 June 2018
Effective by	1 October 2018
Review frequency	Triennially
Review before	26 June 2021
Audience	All GPC employees and contractors

### Document accountability

Role	Position
Owner	People Communities and Sustainability General Manager
Custodian	Safety Manager

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## Terms and definitions

The following key terms and definitions apply to this Procedure:

Term	Definition
Owner	Under the GPC governance structure, the Owner is accountable for approval and has the authorised discretion to implement or significantly change the system.
Custodian	Under the GPC governance structure, the Custodian is accountable for monitoring the application of the system and advising the owner of the monitoring outcomes, and is also accountable for proposing system design or redesign and facilitation of conformance.
Emergency work	A serious, unexpected or potentially dangerous situation that requires immediate action.
Fatigue <i>Ref: QGN 16-Guidance note for fatigue risk management (2013)</i>	Fatigue can be defined as a state of impairment that can include physical and/or mental elements, associated with lower alertness, reduced performance and impaired decision making.
Fatigue critical work	Tasks identified through a risk assessment that have the potential risk of a fatigue related error of medium or greater, or potential consequence of a fatigue related error of significant or greater. For example: high risk licence work, work at height requiring personal fall protection, driving journey for significantly greater than two (2) hours or operating heavy machinery or equipment or safety critical work.
Fatigue self-assessment	Informal, voluntary self-assessment conducted by an individual to determine their level of fatigue. Can be recorded on the Individual Fatigue Risk Assessment Form if required.
GPC Representative <i>Ref: Contractors and Port Users Safety, Environment and Security Standard v1</i>	A GPC Employee ( <i>including Contractors fulfilling the role of a GPC employee</i> ) that has engaged an external stakeholder to perform work for, or on behalf of, GPC.  A GPC Employee who has been nominated as the point of contact for a Port User.
Individual Fatigue Risk Assessment	Formal fatigue risk assessment to determine an individual's level of fatigue. Usually conducted by the individual with their Supervisor.
Individual Fatigue Risk Management Plan	Identifies the specific actions or controls required for an individual to manage their fatigue for that shift.
Long break duration	The days off between shift rotations.
Short break duration	The time off between the end of one shift and the start of another.
Roster	A timetable that shows the days and times employees are required to work.
Roster Fatigue Risk Likelihood Score	An assessment conducted on a proposed or modified roster to determine the potential level of fatigue risk to individuals who are expected to work that roster. Usually conducted by the workgroup Supervisor with the GPC Representative (where relevant) and the Safety Team. Approval is given by the relevant Manager.
Safety critical role	A role where the impairment (physical, psychological, cognitive) of an individual may compromise their ability to undertake the work (tasks / job) thereby posing a significant risk to the health and safety of themselves or others.



# 1 Introduction

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## 1.1 Procedure purpose

Fatigue can lead to incidents because workers are not alert and are less able to respond to changing circumstances, thereby putting themselves and others at risk. Fatigue can also impair decision making, and therefore cause errors of judgement. As well as these immediate problems, fatigue can lead to long-term health problems.

The Fatigue Risk Management Procedure aims to reduce the risk of an individual making a fatigue related error by providing guidance for Supervisors and GPC Representatives to ensure that individual factors that can impact on a person's fatigue are managed in a consistent manner to provide a safe working environment.

This procedure describes the application of the fatigue element of the Fit for Work Standard.

## 1.2 Procedure scope

This Procedure applies to all GPC employees. It also applies to contractors, if the contractor company does not have their own fatigue risk management procedures.

Given the unique demands on marine pilotage, the GMPS Marine Pilots are not expected to apply this procedure. However, they must comply with the fatigue risk management requirements as defined in the GMPS Pilotage Operations Safety Management System.

## 1.3 Procedure objectives

This Procedure aims to:

- Provide guidance on how to manage the risk of fatigue;
- Describe when and how to conduct an Individual Fatigue Risk Assessment;
- Provide guidance on how to design and apply Fatigue Risk Management Plans;
- Provide guidance for Supervisors and GPC Representatives on how to manage a fatigued individual.

# 2 Fatigue Risk Management

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## 2.1 Roles and responsibilities

Role	Responsibilities
All individuals	<ul style="list-style-type: none"><li>• Present to work in a fit for work state.</li><li>• Manage their lifestyle and medical conditions to ensure they maintain their fitness for work.</li><li>• Maintain their fatigue levels so when on-call are able to present fit for work.</li><li>• Self-assess personal fatigue levels and notify their Supervisor or GPC Representative if their work performance is likely to be affected by fatigue or there is any risk to themselves or other due to the effects of fatigue.</li><li>• Participate in a fatigue assessment as part of an incident investigation or as required by this Procedure.</li></ul>
Supervisor	<ul style="list-style-type: none"><li>• Consider fatigue management when planning daily work allocation as well as scheduling for shutdown, emergency breakdown work and call out conditions.</li><li>• Consider fatigue as a potential contributing factor when conducting investigations.</li></ul>



Role	Responsibilities
<b>GPC Representative</b>	<ul style="list-style-type: none"> <li>Assist in the preparation, and application, of an Individual Fatigue Risk Management Plan with individuals who have identified themselves as being affected by fatigue or showing signs of fatigue.</li> <li>Forward records of approved Individual Fatigue Risk Management Plans to HR for filing.</li> <li>Ensure approved rosters are complied with to ensure adequate opportunity for restorative sleep is provided.</li> </ul>
<b>Contractor Companies</b>	<ul style="list-style-type: none"> <li>Contractor companies must follow the guidance provided in the procedure when they do not have their own process or documentation for conducting an Individual Fatigue Risk Assessment and Risk Management Plan.</li> </ul> <p>Contractor companies may work to their own procedures / standards, provided that they meet the minimum standards documented by GPC.</p>
<b>Manager, Superintendent &amp; Specialist</b>	<ul style="list-style-type: none"> <li>Provide leadership and commitment through the allocation of resources for the establishment, implementation, evaluation and review of the fatigue risk management plan.</li> <li>Ensure approved rosters are complied with to ensure adequate opportunity for restorative sleep is provided.</li> </ul>
<b>Manager</b>	<ul style="list-style-type: none"> <li>Approve alternative rosters and changes to existing rosters to ensure adequate opportunity for restorative sleep is provided.</li> </ul>
<b>Human Resources</b>	<ul style="list-style-type: none"> <li>Assist Supervisors to investigate the circumstances associated with individuals who repeatedly report they are fatigued.</li> </ul>

## 2.2 Identifying fatigue indicators

Individuals are encouraged to recognise the physical and psychological indicators of fatigue. These indicators can include:

- desire to sleep;
- involuntary napping;
- micro-sleeps;
- reduced vigilance;
- delayed reaction times;
- decreased alertness;
- poor judgement;
- decreased motor skill;
- irritability;
- poor hand-eye coordination;
- reduced visual perception;
- degradation in physical and mental performance.

## 2.3 Individual fatigue risk assessment

An Individual Fatigue Risk Assessment (IFRA) is required to be completed by the individual with their Supervisor, in the following scenarios:

- Self-assessment of fatigue identifies a fatigue risk of higher than low;



- The need to offer overtime is identified;
- The need to work beyond 14hrs is identified or planned;
- The need for an individual to return to work with less than a 10 hour break is identified.
- Where identified as a control for the Individual Fatigue Risk Management Plan;
- Where any roster dimension of an alternative roster is scored eight(8) and that threshold value is reached;
- Where identified as a control for an approved alternative roster (e.g. for shutdowns).

### 2.3.1 Self-assessment of fatigue

Individuals are required to self-assess in the following scenarios (also see Appendix 2):

- Individuals believe they are suffering from, and can identify symptoms of, fatigue (self-observation);
- Individuals are displaying signs of fatigue through their actions and behaviour (observed by others – see 2.2.3 Behavioural indicators of fatigue);
- Individual Fatigue Risk Management Plan identifies periodic self-assessment as a control measure.

The self-assessment may be recorded on the Individual Fatigue Risk Assessment and Risk Management Plan. This template is located on the GPC Intranet>SAFETY>Fatigue Risk Management>Individual Fatigue Risk Assessment and Risk Management Plan.

Individuals are required to report fatigue issues to their Supervisor in the following scenarios (also see Appendix 2):

- They have not obtained sufficient sleep prior to commencing their shift;
- If they believe they become fatigued during the shift or prior to the commute home;
- There are personal factors influencing their ability to obtain sufficient sleep or impact on their fatigue levels during the shift. For example – prescription or non-prescription medication, personal circumstances etc;
- Results of an Individual Fatigue Risk Assessment indicate fatigue levels higher than low if using the Individual Fatigue Risk Assessment and Risk Management Plan.

### 2.3.2 Behavioural indicators of fatigue

The Karolinska Sleepiness Scale (Figure 1) and/or the Signs/Symptoms Checklists (Figure 2) can be used to identify the level of fatigue risk observed in the behaviours of individuals. These scales are subjective and should not be used in isolation to assess individual fatigue risk. Both tools are available as part of the Individual Fatigue Risk Assessment and Risk Management Plan.

Karolinska Sleepiness Scale (KSS) Score	How do you feel?
1	Extremely alert
2	Very alert
3	Alert
4	Rather alert
5	Neither alert nor sleepy
6	Some signs/symptoms of sleepiness
7	Sleepy, but no difficulty to keep awake
8	Sleepy, but some effort to keep awake
9	Very sleepy, great effort to keep awake, fighting sleep

Figure 1 – Karolinska Sleepiness Scale (KSS) – a subjective behavioural indicator of potential fatigue through self-assessment of alertness.



	Physical	Mental	Emotional / Affective
<b>Generic</b>	<input type="checkbox"/> Eye rubbing <input type="checkbox"/> Yawning <input type="checkbox"/> Slumped posture <input type="checkbox"/> Slow blinks	<input type="checkbox"/> Slowed reaction time <input type="checkbox"/> Reduced situational awareness <input type="checkbox"/> Poor memory <input type="checkbox"/> Distracted	<input type="checkbox"/> Irritable, easily frustrated <input type="checkbox"/> Terse communication <input type="checkbox"/> Withdrawn, un-talkative <input type="checkbox"/> Hyper-reactivity
<b>Task Specific</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> Delayed response on 2-way radio <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Figure 2 – Fatigue Signs/Symptoms Checklist – a subjective behavioural indicator of potential fatigue through observed symptoms by self or others.

Task specific physical, mental and emotional behaviours typical of fatigue onset are also included in the task specific job bank for fatigue critical work.

## 2.4 Individuals managing their own fatigue risk

Individuals are expected to manage their own fatigue risk at work by:

- Taking scheduled breaks;
- Avoiding foods and beverages that are high sugar, high fat and high salt;
- Keeping active by stretching or walking and alternating activities throughout the shift; and
- Manage exposure to work environments that contribute to fatigue.

Outside of work, individuals should ensure:

- Their sleeping environment is cool and dark,
- Limit physical activity, alcohol and caffeine intake prior to trying to sleep,
- Maintain good health and fitness levels, and
- Ensure personal commitments do not interfere with the sleep opportunity provided between shifts (ie – second job: refer to GPC General Employment Conditions as per the individuals letter of offer).

## 2.5 Planners and Supervisors managing worker fatigue risk

Planners and Supervisors must ensure that fatigue related risks are considered when planning tasks and allocating work. Where possible, vary work activities throughout the shift to reduce physical and mental fatigue to reduce the risk of fatigue related error.

Work environments that contribute to fatigue should be identified and controlled before and during work to minimise worker exposure. Such work environments include:

- High noise and / or vibration;
- Extremes in temperature;
- High humidity;
- Poor ventilation;
- Poor lighting;
- Repetitive tasks and high forces/exertion.

Supervisors must monitor their team and check for signs of fatigue throughout the shift, particularly when the tasks involve fatigue critical work and ensure that breaks are taken when scheduled.



## 2.6 Roster design considerations

### GPC Rosters

Rosters detailed in the GPC Enterprise Agreement (2016) have been compared with industry guidelines and are generally an overall low risk when complied with. However, an Individual Fatigue Risk Assessment is required when there is a need to **operate outside of these rosters** (eg: extending shifts beyond 14hrs, emergency work etc. See 2.7 “Managing fatigue risk with rostering”) and when the roster requires a quick turnaround (i.e. less than 10hrs break).

### Alternative Rosters

**When designing alternative rosters** for GPC employees or contractors for shutdowns, turnarounds, projects and the like, the Roster Fatigue Risk Likelihood Score (rFRLS) Calculator (Figure 3) must be applied to identify where the roster potentially deprives the individual of the opportunity to sleep.

The rFRLS Calculator is included in both the Shutdown/Project/Alternative Roster Fatigue Risk Management Plan and the Individual Fatigue Risk Assessment & Risk Management Plan.

Roster Fatigue Risk Likelihood Score (rFRLS) Calculator						
<i>Instructions</i>						
1. Each roster dimension is given a score between 0 and 8.						
2. Calculate a <b>Total Score</b> by adding all of the individual risk dimension scores together.						
3. Compare the <b>Total Score</b> to the appropriate Roster Fatigue Risk Likelihood Score (rFRLS).						
Roster Dimension	Score					Score (1-8)
	0	1	2	4	8	
Max hours per 7 days	≤36h	37-44h	45-48h	49-55h	>55	
Shift duration	≤8h	9-10h	11-12h	13-14h	>14h	+
Short break duration	≥16h	15-12h	11-10h	9-8h	<8h	+
Max hours of night work per 7 days	0	1-8h	9-16h	17-24h	>24h	+
Long break frequency/duration	>1/7d	≤1/7d	≤1/14d	≤1/21d	≤1/28d	+
Roster Fatigue Risk Likelihood Score (rFRLS)	<b>Total Score =</b>					
	≤5	6-9	10-19	20-30	>30	
	1 - Rare	2 - Unlikely	3 - Possible	4 - Likely	5 - Almost Certain	

Figure 3 – Roster Fatigue Risk Likelihood Score (rFRLS) Calculator

The proposed or modified roster must be submitted with a Shutdown/Project/Alternative Roster Fatigue Risk Management Plan to the Safety Specialist for recommendation for approval before being submitted to the relevant Manager for final approval prior to implementation of the roster.

**Rosters assessed with a rFRLS less than 10** would generally not need any specific fatigue risk management controls, unless an individual roster dimension score is four (4) or eight (8), then that roster dimension should be re-evaluated or considered for reduction or additional control if possible.

**Where a roster dimension score cannot be reduced below eight (8)**, then an Individual Fatigue Risk Assessment and Management Plan is required once that threshold value is reached. For example: if working 6 x 10hr days, then the maximum hours per a seven (7) days is greater than 55 hours. Exceeding 55 hours is triggered on the 6<sup>th</sup> day, therefore, on the 6<sup>th</sup> day, the individual must complete the Individual Fatigue Risk Assessment with their Supervisor at the beginning of that shift. If the overall fatigue risk is higher than low, then the Individual Fatigue Risk Management Plan is also required, otherwise, work can proceed without the need for additional controls.





**Rosters assessed with a rFRLS of 10 or greater** must have a Shutdown/Project/Alternative Roster Fatigue Risk Management Plan identifying how the fatigue risk will be managed for the duration of the shutdown/project. The Plan must be approved by the relevant Manager accountable for the work.

**Approved rosters** must be kept with the relevant shutdown/project documentation for the duration of the work and filed in eDocs (8/10/10 - Fatigue Risk Assessments & Plans) for future reference.

Approved rosters may be applied to future work without re-approval provided all conditions remain the same.

## 2.7 Predicting personal fatigue risk likelihood (Prior sleep / wake data)

Collecting information on an individual's sleep and wake periods for the preceding 48 hours provides an assessment of fatigue risk potential at the time of assessment. Using the Personal Fatigue Risk Likelihood Predictor, the onset of fatigue risk in subsequent hours can be determined.

Figure 4 illustrates the manual version of the prior sleep / wake data tool used at GPC. It can be modified to indicate current fatigue and predicted fatigue by adjusting the values in Steps 3b and 3c to reflect either now time or the anticipated finish time.

**Prior sleep / wake data** must be supplied by an individual in the following situations:

- Individual informs their Supervisor that they have had insufficient sleep;
- Observed behaviour or signs that could indicate an individual is fatigued is reported;
- Prior to extending a shift or offering overtime (work opportunity is not necessarily denied, but identified fatigue risk must be managed);
- Working an alternative roster where the analysis results in ANY roster dimension score of eight (8);
- After any incident where the error that caused the incident is typical of a fatigue related error for that task.

Personal fatigue likelihood risk can be calculated using the tools available:

- In the PORT pocket book self-assessment insert (Figure 4); or
- As part of the Individual Fatigue Risk Assessment & Risk Management Plan; or
- On using the excel based version the GPC Intranet>SAFETY>Fatigue Risk Management>[Personal Fatigue Likelihood Predictor](#).

Prior Sleep / Wake Data					Points	
<b>Step 1: Your sleep in the past 24 hours</b>						
Sleep (hrs)	≤ 2	3	4	≥ 5		
Points	12	8	4	0		
<b>Step 2: Your sleep in the past 48 hours</b>						
Sleep (hrs)	≤ 8	9	10	11		≥ 12
Points	8	6	4	2		0
<b>Step 3a: What time did you wake up?</b>						
<b>Step 3b: What time will you finish your shift today?</b>						
<b>Step 3c: How many hours you will have been awake at the end of your shift since you last woke from sleep?</b>						
For every hour awake (3c) MORE than your sleep in the past 48 hours, add 1 point						
<b>Step 4: Total your points to determine your score</b>						

*Figure 4 – Manual calculator for predicting a personal fatigue likelihood score*



The scale in figure 5, provides an indicator of the expected fatigue related behaviours, signs and symptoms associated with the calculated personal fatigue likelihood score.

Personal Fatigue Likelihood Score	
0	Able to perform tasks safely. Few external signs of fatigue.
2	Slowed cognition. Occasional minor fatigue behaviours. Minor mood changes observable.
4	Difficulty in maintaining extended concentration for complex tasks.
6	Difficulty concentrating. Occasional lapses of attention. Poor judgement on complex tasks.
8	Clear evidence of behavioural impairment. Difficulty sustaining attention on simple tasks.
10	Clear loss of motivation. Significant loss of situational awareness. Task performance impaired.
12	Struggling to stay focused on any task. Difficulty staying awake at times. Micro-sleeps likely.

*Figure 5 – Fatigue related signs, symptoms and behaviours related to the calculated predicted fatigue likelihood score.*

## 2.8 Calculating the overall risk of fatigue related error

The overall risk of a fatigue related error considers the likelihood of personal fatigue risk from the:

- Roster design,
- Individual prior sleep / wake data; and
- Behavioural symptoms.

The highest likelihood score from either Part A, B or C, is cross referenced with the most likely consequence of a fatigue related error relative to the role, task or activity to determine the overall fatigue related error risk. The risk assessment tool is available as a part of the Individual Fatigue Risk Assessment and Risk Management Plan as illustrated in Figure 6.

Individual Fatigue Risk Assessment									
Likelihood from Parts A-C				Overall likelihood of a fatigue-related error	Most likely consequence of a fatigue-related error relative to the role/task/activity				
Part A	Part B	Part C(i)	Part C(ii)		Minor (1)	Moderate (2)	Significant (3)	Major (4)	Critical (5)
Roster Analysis	Prior Sleep Wake	KSS Score	Symptoms						
>30	>12	8-9	3 in 15min	Almost Certain (5)	Medium	Medium	High	High	Extreme
20-30	9-12	6-7	2 in 15min	Likely (4)	Low	Medium	Medium	High	High
10-19	5-8	4-5	1 in 15min	Possible (3)	Low	Low	Medium	Medium	High
5-9	1-4	2-3	1 in 30min	Unlikely (2)	Very Low	Low	Low	Medium	Medium
<5	0	1	1 in 1hr	Rare (1)	Very Low	Very Low	Low	Low	Medium

*Figure 6 – The overall risk of a fatigue related error through an Individual Fatigue Risk Assessment*

## 2.9 Individual Fatigue Risk Management Plan

An Individual Fatigue Risk Management Plan (IFRMP) is required for the following scenarios:

- The need to offer overtime is identified and the overall fatigue risk is calculated to be higher than low;
- The need to work beyond 14hrs is identified or planned;
- The need for an individual to return to work with less than a 10 hour break is identified;
- The results of an Individual Fatigue Risk Assessment indicate the overall fatigue risk to be higher than low.



## 2.10 Managing fatigue risk with rostering

The GPC Enterprise Agreement (2016), describes the rules with regards to extending shifts and working overtime.

An Individual Fatigue Risk Assessment and Risk Management Plan, with an emphasis on prior sleep / wake data, must be documented **prior to continuing or commencing work beyond 14 hours** (see also Appendix 3). The assessment and plan should be done as soon as practicable after it is identified that a person is required to work beyond 14 hours.

Any individual who has **not had a minimum of 10 hours break** before returning to work must complete an Individual Fatigue Risk Assessment and Risk Management Plan prior to commencing work.

The number and type of controls for the Fatigue Risk Management Plan is determined by the individual's current and predicted fatigue throughout the shift or extended period and the fatigue related error risk associated with the tasks to be conducted.

See also 2.12 "Managing a fatigued individual" and 2.13 "Fatigue risk management control options" in this Procedure.

## 2.11 Managing fatigue risk for travel/commute and work related driving

Long periods of driving increase the risk of fatigue.

### 2.11.1 Travel/commute

Whilst GPC cannot dictate where a person chooses to live, individuals are informed that their commute time is a contributor to their overall level of fatigue risk through induction, training and awareness programs provided by GPC.

**Travel/commute times must be considered** when assessing an individual's fatigue risk likelihood through their prior sleep / wake data.

### 2.11.2 Work related driving

**Work related driving journeys** significantly longer than two (2) hours\* will require the "Journey" section of the Fatigue Risk Management Plan to be completed in addition to the rest of the Plan prior to departure. In this instance, the plan should include the following information:

- Estimated duration of the journey with expected departure and arrival times;
- Route to be travelled;
- Rest breaks;
- Call in procedure;
- Shared driving strategy if travelling with others.

See also 2.13 "Fatigue risk management control options".

**\* Note 1:** It is recommended to take a 20 minute break after two (2) hours of continuous driving, however, you must stop and rest as soon as you feel tired.

**\* Note 2:** The usual travel time between the Port of Bundaberg and the Port of Gladstone is 2h and 34min (206.6km). A journey plan is not usually required for this travel unless requested or there is an elevated risk identified with the circumstances of the journey.

## 2.12 Managing a fatigued individual

In all situations where an employee is identified as fatigued, or reports they are fatigued, the Supervisor must action the following (also see Appendix 3):

1. Supervisor and the fatigued individual must complete the Individual Fatigue Risk Assessment to identify the level of fatigue and the demands of the task/s to be conducted for the remainder of the shift;
2. If the individual is considered to be able to continue work after a break:



- a. Allow them to take a rest break of sufficient duration agreed by the individual and the Supervisor; and
  - b. Develop the Individual Fatigue Risk Management Plan and continue work with the agreed controls in place.
3. If the individual is considered too fatigued to continue work then:
- a. The individual will be deemed 'unfit for duty' and leave will be taken for the duration of the shift; and
  - b. The Supervisor will arrange for safe travel home.

The Individual Fatigue Risk Assessment and Risk Management Plan for fatigued individuals will be held by the person's Supervisor for the current plus previous month in a secure location.

The circumstances of individuals who consistently present or are likely to continue to present 'unfit for duty' due to fatigue may be referred by the Supervisor to the Employee Relations Specialist, Safety Specialist or Health and Wellbeing Specialist to understand the cause and provide assistance to the Supervisor and individual to manage appropriately.

## 2.13 Fatigue risk management control options

**When deciding on control options** for managing an individual's fatigue, consideration must be given to both the individual's predicted/calculated fatigue levels as well as the planned workload and associated fatigue-risk.

Fatigue risk management control options may include, but are not limited to the following:

- Alternate tasks;
- Job rotation;
- Regular breaks;
- Regular movement/posture changes (eg: Safespine) for sedentary work;
- Additional controls for physical environment (see also 2.4 "Planners and Supervisors managing worker fatigue risk");
- Buddy system;
- Regular checks from Supervisor;
- Periodic self-assessment for symptoms of fatigue onset or fatigue related error;
- Provision of safe travel home;
- Journey plan.

The following actions are specifically required where the overall fatigue related error risk is calculated to be or personal fatigue likelihood is predicted to be:

- **LOW: LOOK OUT FOR SELF:** Requires self-management and monitoring of symptoms, possibly includes task rotation.
- **MEDIUM: LOOK OUT FOR OTHERS:** Individual and Supervisor develop an Individual Fatigue Risk Management Plan to identify specific interventions required based on the task and associated risk. For example: self-monitoring for increased symptoms, strategic caffeine, task rotation. Buddy system may be required.
- **HIGH: LOOK OUT:** As above, but fatigue critical work such as, high risk licence work, work at height requiring personal fall arrest or driving or operating heavy equipment, is not permitted.
- **EXTREME: LOOK OUT:** As above and report and document. Do not engage in fatigue critical work. Arrange safe passage home. Do not recommence until fit for work.

Specific controls for the Individual Fatigue Risk Management Plan must be recorded in Part H of the form.

### 2.13.1 Fatigue proofing strategies

Tasks identified as having a fatigue related error risk of medium or greater, or consequence of significant or greater, must consider fatigue proofing strategies in their documented safe system of work. It is preferred that these tasks are re-engineered or re-designed so that if a mistake is made, the chance of resulting in an incident is significantly reduced.



These tasks must also be recorded in the Department Risk Register and flagged as fatigue critical work.

## 2.14 Identifying and investigating fatigue related incidents

**To determine if an incident is fatigue related**, the Safety Specialist must be consulted.

To understand if an incident is fatigue related there needs to be evidence that:

1. The individual was likely to be fatigued at the time of the incident; and
2. The error that caused the incident was typical of a fatigue related error for that task.

Unless both conditions hold true, the incident cannot be considered to be fatigue related.

Evidence for individual fatigue likelihood needs to include:

- 2-3 weeks of roster information leading up to the incident; and
- 2-3 days of prior sleep / wake data leading up to the incident; and
- Symptoms or signs of fatigue or behavioural indicators leading up to the incident.

Evidence for typical fatigue related error for the task may include reference to the task specific job bank.

Fatigue related incidents will be managed in accordance with the Incident Management and Investigation Procedure.

## 2.15 Contractor Management

Supply / Contracts are to provide references to GPC's fatigue management requirements in all tender and contract documentation.

GPC Representatives must be involved in the roster design and approval process for the work under their control. GPC Representatives must monitor contractor and port user compliance to this procedure and Fatigue Risk Management Plans by conducting audits on a frequency based on the level of risk associated with their work or defined in the Plan.

Contractors and port users must ensure that workers who move between different non-GPC sites to work are compliant with this Procedure and associated Fit for Work Standard, by considering their work at those sites prior to presenting to a GPC site.

## 2.16 Training

The GPC Corporate Mandatory Training Matrix defines the training format and frequency for training in fatigue management.

- Any person accessing a GPC site via a GPC issued access badge must first complete the 'on-line induction' which states GPC's expectations with regards to managing fatigue risk.
- All GPC employees must complete fatigue management awareness training, including how to conduct an Individual Fatigue Risk Assessment, on commencement of employment and then every 3 years via the E-learning module 'Fatigue Awareness'.
- All GPC Leaders, including GPC Representatives, must also attend 'Fatigue Management' training – a face-to-face training session delivered by the Safety Specialist that details how to structure alternative rosters for shutdowns and projects etc., and how to proactively manage individuals who present with fatigue.

## 2.17 Breaches of the Procedure

Breaches of this Procedure must be raised as an incident in Cintellate by the Supervisor and managed as per the Incident Management and Investigation Procedure and the Managing Discipline Specification, as required.



### 3 More information

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This Procedure will be available to all employees, contractors and port users.

This document is uncontrolled when printed. The current version of this Procedure is available on Gladstone Ports Corporation's Intranet.

If you require any further information, please contact the Custodian, listed under Document Accountability on the cover page.



## 4 Appendices

### 4.1 Appendix 1 – Related documents

#### 4.1.1 Legislation and regulation

Key relevant legislation and regulation, as amended from time to time, includes but is not limited to:

Type	What
Federal	NA
State	Work Health and Safety Act 2011 Work Health and Safety Regulations 2011
Australian Standard	NA
Other Standards	<i>QGN 16 - Guidance Note for Fatigue Risk Management (2013)</i> – Department of Natural Resources & Mines <i>Guide for managing the risk of fatigue at work</i> – Safe Work Australia <i>Managing fatigue: A guide for the workplace</i> – Workplace Health & Safety Queensland

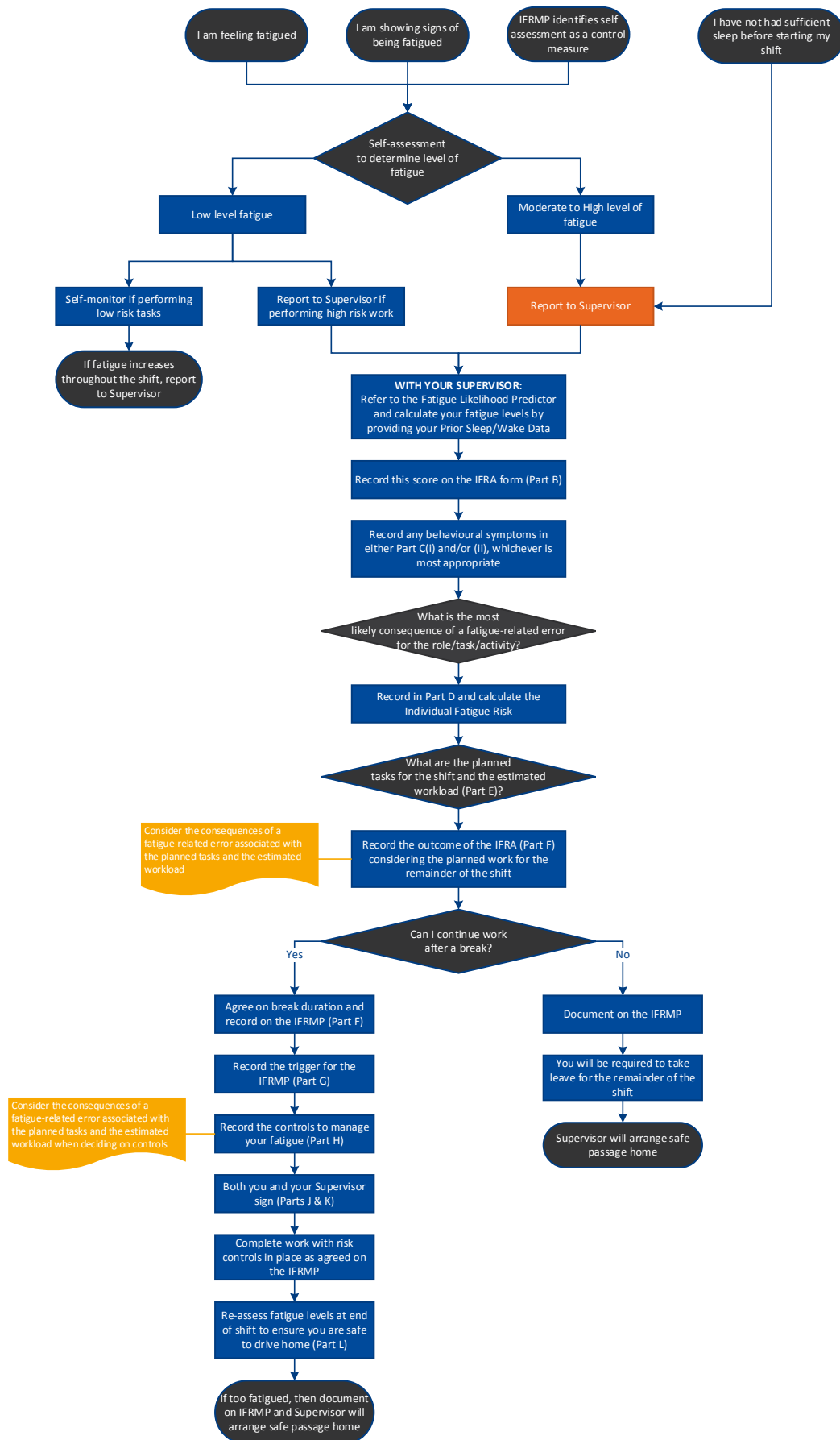
#### 4.1.2 Gladstone Ports Corporation documents

The following documents relate to this Procedure:

Type	Document number and title
Policy	DOCSCQPA#365624 Policy – Health and Safety
Standard	DOCSCQPA#1331115 Standard – Fit for Work DOCSCQPA#995910 Standard – Contractors and Port Users Safety, Environment and Security Standard
Specification / Procedure	DOCSCQPA#1075526 Procedure – Incident Management and Investigation DOCSCQPA# 960456 Specification – Managing Discipline
Reports / Other	Conditions of Employment DOCSCQPA#1393873 Procedure Flow Charts
Form / Template	DOCSCQPA#1331124 Form – Individual Fatigue Risk Assessment and Risk Management Plan DOCSCQPA#1331122 Form – Shutdown/Project Fatigue Risk Management Plan DOCSCQPA#1302038 Form – Personal Fatigue Likelihood Predictor
Training	On-line Induction DOCSCQPA#1032559 Matrix – Corporate Mandatory Training Matrix DOCSCQPA#1414673 Training – Fatigue Risk Management – Workers Guide DOCSCQPA#1415098 Training – Fatigue Risk Management – Leaders Guide



## 4.2 Appendix 2 – Flow chart for an individual identifying and reporting fatigue







### 4.3 Appendix 3 – Flow chart for a Supervisor managing fatigue risk

