**FATIGUE MANGEMENT PROGRAM**

Piedmont Service Group (PSG) has developed this program to help manage the health and safety risks resulting from fatigue-related impairment. Any possible longer-term effects of specific work patterns or shift-based work in general are not considered in this program. The effective implementation of the program requires the commitment of all personnel. Fatigue-related impairment is considered an identifiable workplace hazard.

Work rosters are the primary means employers can use to establish the working hours of workers. The duration of breaks or work limits indicated in this program consider the need of all individuals to achieve regular restorative sleep and other recovery within patterns of work.

**Scope**

This program applies to all PSG’s employees, contractors (including subcontractors) while at the workplace or carrying out activities on behalf of (or when representing) PSG. The management of fatigue is considered a shared responsibility between an organization and its employees, contractors and sub-contractors. Refer to the illustration below of this relationship. The organization is responsible for providing a safe system of work, which includes the development, implementation and management of working time schedules, and the establishment of a safe work environment and work practices. Individuals are responsible for maintaining fitness for duty by taking into account their lifestyle and other factors, and managing them appropriately.

*Shared Responsibility Model*

***Organizational Responsibilities***

***Individual Responsibilities***

***FATIGUE***

***WORK-RELATED***

*Hours of work, Workload & Environment*

***NON WORK-RELATED***

*Situation & Lifestyle, Medical disorders*

**Purpose**

This program aims to eliminate or otherwise minimize risks associated with fatigue. This program shall serve as a minimum standard. This program prescribes the PSG requirements associated with the identification and management of situations that may be associated with employee fatigue

**Consequences of Fatigue**

Fatigue can significantly affect the ability to communicate clearly, work safely and productively, and react optimally in an emergency situation. Fatigue and related consequences such as unintentionally falling asleep can be significant factors in incidents and accidents. Even without incidents and accidents occurring, fatigue impairment can significantly impact on efficiency and productivity. One of the critical consequences of fatigue is that the ability for individuals and teams to assess their fitness for duty becomes impaired. This can mean individuals and teams may not be fully aware of their fatigue related impairment, which can make communicating about potential issues more difficult.

**Causes of Fatigue**

Fatigue usually results from inadequate sleep, from one night of bad sleep or a build-up through a longer period of time. Fatigue can also be related to being awake at times of the 24-hour day when most people are asleep (2am to 5am as one critical window). Other factors can contribute to fatigue, such as workload, poor medical fitness and challenging work environments (high temperatures, humidity, etc.).

**Responsibilities**

 **PSG:**

 • Educate all workers and facilities about fatigue and fatigue management. This training will be initially and annual refreshers.

 • Offer assistance to any employee taking into account the individual’s right to privacy.

 • Review, monitor and track all aspects of the fatigue management program to ensure compliance across all sites and personnel.

 • Develop and implement agreed working rosters to help ensure adequate opportunities for restorative sleep are provided.

 • Encourage personnel to notify their Supervisor if their capacity to work safely is impaired to an unacceptable level by fatigue without fear of adverse repercussions.

 • Provide suitable accommodation for individuals when they are required to travel for work.

 **Managers:**

 • Implementing this program.

 • Investigating apparent and possible deficiencies of the provisions of this program.

 • Taking appropriate actions where deficiencies of the procedure have occurred.

 • Ensuring that investigations of incidents that possibly contribute to fatigue.

 **Employees:**

 • Not willfully place their own or others health and safety at risk due to fatigue.

 • Make every reasonable effort to be fit for duty while:

 • At work.

 • On call.

 • Driving a vehicle related to fulfilling duties.

 • Operating equipment related to fulfilling duties.

 • Notify their Supervisor if:

 • Their work performance is likely to be affected by fatigue.

 • There is any risk to themselves or others due to the effects of fatigue.

 • Notify their Supervisor or other responsible person immediately where there is a potential risk to health and safety.

 • Communicate the obligations to comply with this program.

 • Participate in fatigue management education.

 • Participate in fatigue assessments, fatigue risk assessments, and fatigue risk reviews, if requested.

 • Report any actual or potential fatigue risks.

 • Fulfill their obligation to arrive at work fit for duty, and report anytime they may not be.

 • Must not misuse over the counter or prescription drugs that may affect their ability to perform their job safely.

**Fatigue Management Education**

PSG will provide all employees with education on fatigue risk management and their responsibilities under this program. This education will give employees the knowledge and clear direction to manage their own fitness for duty related to fatigue. The education will allow personnel to recognize symptoms and behaviors associated with fatigue, and available support for the application of this program. Managers, Supervisors, and Health and Safety Personnel, including on-site industrial representatives, will participate in more detailed education as required. Such additional education may include topics such as procedures for risk assessments, call-outs, and any topics considered necessary.

**Management of a Person Impaired by Fatigue**

Where a person has been identified with a level of fatigue that will or may present a risk to health and safety, the person’s supervisor will discuss with that person the appropriate control measures. Where practicable, suitable alternative duties and control measures are to be selected (less physical work activities, increased supervision of work, rescheduling of tasks, rest periods, longer breaks). However, it may be determined that the person leave the site and return to work on their next work period. Where the level of impairment is considered a health risk, that person should be referred to a medical practitioner. A medical report is to be obtained by that person prior to returning to work if that person has received medical treatment. When it is not possible to provide suitable alternative duties and the person is required to leave site, the Supervisor, Superintendent or Manager shall arrange transport for that person, including relocation of vehicle and/or return to site later.

**General Schedule Guidelines**

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| **Rule** | **Basis** |

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|  **For Interns** |
| 72 hours in any 7-day period |
| Minimum of 1 day off in 14 |
| 12 hours. |
| 144 hours in any 14- day period |

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| Planned Work **-** Limit number of actual work hours in any 7 day period. | 72 hours in any 7-day period |

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| 60 hours in any 7-day period |
| Minimum of 1 day off in 14 |
| 12 hours. |
| 144 hours in any 14- day period |
| 4 or more night shifts on consecutive days. |
| 16 hours. |

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| Attendances **–** All circumstances | Minimum of 1 day off in 14 | Minimum of 2 days off in 14 |
| Planned maximum hours of work per shift day. | 12 hours. | 10 hours. |
| For activities outside the normal 7 day period (outages, forced outages, emergencies and special projects) the number of actual work hours will be limited.  | 144 hours in any 14- day period | 120 hours in any 14- day period |
| If Personnel are required to work 4 or more nights on consecutive days the person will have a minimum of 48-hours of rest after changing from night work/shift before returning to normal roster. \*See Note 2. | 4 or more night shifts on consecutive days. | No overnight work |
| Maximum hours worked in a 24-hour period | 16 hours. | 12 hours. |

**Telephone Call Disturbances**

When sleep is disturbed by work related telephone calls, the loss of sleep should be considered in the worker’s assessment of fatigue risk level. This may result in the worker being unavailable for duties until sufficient restorative sleep or waking up time has been achieved.

**Breaks within Shifts**

Duration of breaks within shifts is important in reducing and controlling fatigue. Changing work tasks is not considered a break.

**Signs and Symptoms of Fatigue**

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| ***Common Physical Signs of Fatigue*** | ***Common Mental/Behavioral Signs of Fatigue*** |
| *•Tired, sore eyes and/or heavy eyelids •Yawning**•Poor hand-eye coordination •Slower reflexes and reactions •Fidgeting**•Lack of energy, feeling lethargic**•Increased frequency of dropping objects like tools or parts**•Speech difficulties (it may be slurred, slowed or garbled)**•Blurred vision •Head nodding •Drooping of eyelids* *•Micro-sleeps* | *•Irritability, impatience, mood changes •More withdrawn than usual, emotional •Lacking motivation or energy**•Slowed response time (radio contact)**•Poor memory (forget instruction and events)**•Difficulty concentrating and limited attention span**•Increased risk taking**•Impaired judgment and problem solving ability**•Difficulty making decisions, and communicating**•Working slower, checking work more, relying more on co-workers, avoiding complex tasks**•Lapses in attention or ‘zoning out’.* |

**Fatigue Self Assessment Tool**

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| **Questions** | **Responses** |
| How do you feel right now? | Very alert - wide awake | A bit tired, effort required to stay alert | Very fatigued, having difficultly staying alert |
| Did you sleep in the last 24 hours? | Yes - got my ideal amount of sleep | Yes - but I did not get my ideal amount of sleep | No |
| How would you rate the quality of that sleep? | Good | Average | Poor |
| Have you suffered any signs of fatigue immediately prior to or during this shift (eg. Micro sleeps, difficult concentrating)? | No | Some only Minor | Yes |
| Do you believe you are fit for work? | Yes | Yes, with additional risk controls | No |

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| **Risk** | **Response / Actions** |
| Low | Normal work activities. Self Monitoring. Undertake individual fatigue control measures. |
| Moderate | Report to supervisor. Discuss and document work to be performed and any necessary additional fatigue control measures. |
| High | Do not perform any work until you have had a discussion with your Supervisor about the assessment results. Identify and document work that can be performed and any necessary additional fatigue control measures. |

**Risk Factors and Control Measures**

 ***Work Demands Possible Treatment Options***

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| **Repetitive or monotonous work****High physical demands****High mental demands** | **•Redesign jobs to eliminate boring, repetitive tasks.** **•Introduce challenging, meaningful tasks.****•Use machinery and equipment to eliminate or reduce excessive physical demands.****•Introduce job rotation to limit a build-up of mental and physical fatigue.****•Ensure adequate breaks during the shift to allow recovery. Use alarms and monitors, particularly for solo work.****•Ensure there are adequate employees and resources to avoid placing excessive demands on staff.** |
| **Night Shifts** | **•Schedule physically or mentally demanding tasks to be undertaken during the day, where possible.****•Limit the need for safety-sensitive and/or quality-critical tasks to be undertaken during night shift.****•Ensure that schedules allow for at least two full nights’ sleep after the last night shift before changing to an alternate schedule.** |
| **Hours of Work** | **•Reduce working hours. Control the length of shifts.****•Avoid working arrangements that provide incentives to work excessive hours.****•Ensure that any overtime does not result in excessive total work hours Limit the use of on-call work, call backs or overtime (particularly unscheduled overtime).****•Monitor actual hours of work.****•Provide alternative transport at end of overtime/long shift.****•Ensure that responding to emergencies does not result in excessive hours.** **•Ensure time for adequate communication at shift handovers.****•Reduce irregular and unpredictable work schedules.** |
| **Breaks**  | **•Ensure a minimum of 10 hours break between shifts.** **•Defer non-urgent work to allow appropriate rest and recovery.** **•Provide adequate resources to cover breaks.****•Use strategic breaks.** |
| **Adverse Working Conditions** | **•Avoid working during periods of extreme temperature.** **•Use heating and cooling to control ambient temperature. Control exposure to hazardous substances.****•Provide effective protective clothing and equipment, allowing for different shifts.****•Provide adequate facilities for rest, sleep, meal breaks, and other essential requirements, such as bathroom facilities.****•Install adjustable, vibration-free seats in appropriate machinery and vehicles.****•Ensure the workplace and surroundings are well lit, safe and secure.** |