Fatigue Management Standard

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1.0 Purpose

Cenovus is committed to protecting the health and safety of all individuals affected by our activities, as well as the communities in which we live and operate. We recognize that fatigue can adversely affect job performance, the work environment and the safety of our employees and contractors.

2.0 Scope/Application

This standard and related program apply to all employees, in safety and non safety sensitive positions, when they are engaged in company business, working on or off Company premises, and when driving Company vehicles, owned or rented.

Cenovus contractors are expected to develop and enforce Fatigue Management in a manner that is consistent with this standard and its related programs and practices and in accordance with the nature of the contractors' services to Cenovus.

3.0 Fatigue Management Program

A program to manage fatigue in the workplace consists of a number of core elements: risk assessment, implementation of measures to mitigate fatigue and identification and investigation of incidents potentially related to fatigue.

3.1 Fatigue Risk Assessment

Fatigue is a hazard that will be considered when conducting health and safety risk assessments for specific job tasks and non-routine work. If there is a high risk of fatigue-related incidents, mitigating measures will be implemented. Aspects that increase fatigue include hours of work, work schedules, task demands and work environment. Refer to Table 1 for a list of common factors that add to fatigue.

3.2 Fatigue Mitigation

Cenovus will comply with Provincial labour standards specifying maximum hours of work and minimum rest intervals. These are used as the foundation for fatigue mitigation. Building on this, shift scheduling and task fatigue control strategies will be considered to further reduce fatigue. Table 1 summarizes common mitigation strategies for addressing fatigue at work.

Where there is an extreme fatigue risk (*e.g.,* long hours associated with emergency response) additional measures may be warranted. There are some circumstances that will require completion of repetitive or demanding tasks, where few fatigue mitigation options are feasible.

Emergency response is an example of a situation where taking a break may be impossible, as down time could have significant negative consequence. In these instances, the potential consequence of mistakes made by fatigued workers could also be significant.

To encourage alertness in these situations, where possible workers should:

- be rotated through different tasks,
- have interaction with others
- be allowed short naps.

Table 1: Common Fatigue Mitigation Strategies

Fatigue Trigger	Potential Mitigation Strategy
Hours of work – Working more than 12 hours per day can make workers less productive and more error prone and may contribute to incidents.	Except in the case of emergency or unforeseen essential work to prevent an incident, work hours should be restricted to within a 12-hour interval. Work in excess of 12 hours is subject to a risk assessment that includes consideration of fatigue hazards. Where a call out, multiple call outs, or an emergency response situation occurs, responders will be given appropriate rest after providing response. Where the rest is less than 8 hours or where there are multiple call outs in a shift or week, operators are responsible for documenting a risk assessment that includes the emergency, unforeseeable or urgent circumstances of the reduced rest period and strategies for fatigue mitigation.
Work schedules – Out of sync with the waking cycle of normal circadian rhythm – Changes to shift schedule – Age of personnel, where older workers are less able than younger ones to adjust to changes to shift work	Whenever possible, shift schedules will be set well in advance and extend for as long as possible. Optimum scheduling is efficient, effective, and appealing: – Efficient in terms of the total costs, including direct labour expenses and indirect costs (e.g., rates of absenteeism, turnover, incidents) – Effective in terms of facilitating workers' adjustment to the schedule and continuity of work – Appealing in terms of how the schedule matches workers' needs and preferences. Studies have indicated that a schedule that maximizes weekend time and allows for recovery time from a night shift is preferred. Thursday is the optimum day of the week for the last shift of a night shift assignment.
Task demands – Work with high physical labour – Mismatch between work demands and apparent fitness of workers; e.g. workers required to perform tasks that are more challenging for them will tire quickly	Repetitive tasks can increase fatigue, particularly if there is minimal thought required. Constant monitoring for exceptional circumstances that occur infrequently is also tiring, as are tasks that produce emotional stress. When such work is required, alertness should be encouraged by: – varying tasks, – scheduling breaks, – ensuring interaction with others, or – requiring periodic physical movement, as appropriate.
Driving – Long travel times to and from work sites (commute) or long work driving hours	Fatigue hinders the ability to drive safely. Having little or no sleep for 17-19 hours is comparable to driving impaired. When 12-hour shift schedules are implemented, workers will be encouraged to spend the night as close to the worksite as possible. Where lengthy, routine commutes are unavoidable, bussing or an alternate means of fatigue management risk mitigation will be considered and implemented where practical. When driving for long distances, breaks should be taken at a minimum of every 3 hours. When stopped for a break, vehicles should be moved completely off the road and stopped in a well-lit area.
Environmental factors – Extreme cold, hot, or noisy conditions	Adjust ambient conditions as applicable.

3.3 Fatigue-Related Incidents

Managing fatigue also means identifying, investigating and recording it as a contributing factor of incidents. Routine incident investigations should identify if workers were fatigued at the time of incident occurrence. If fatigue is identified, the investigator should note this on the Incident Management System (IMS) report under 'personal factors' and investigate further to determine the potential causes for fatigue. This might include gathering information on:

- When, where and how long the worker last slept
- If the worker had a restful sleep
- When the shift started and how long the commute to the site was
- The number of consecutive hours and days the worker worked before the incident
- Task type and length immediately before the incident
- Workplace conditions or stresses contributing to fatigue

Learnings from incidents involving fatigue will be communicated to help to prevent future fatigue-related incidents.

3.4 Program Improvement

Incidents involving fatigue will be reviewed annually by the Health and Safety team. Program success will be evaluated using the relative rates of proactive and lagging reporting of incidents associated with fatigue. Training records will be used to provide an assessment of communication of the fatigue program.

4.0 Training

All safety-sensitive staff will be required to complete a computer-based training program to increase their awareness of fatigue.

5.0 Roles and Responsibilities

Roles and responsibilities for safety documents are described in the link below:

Cenovus CEN_EHS234, Roles and Responsibility

6.0 Governing and Reference Documents

6.1 Internal Governance

Document Type	Governance Documents
Policy	Corporate Responsibility Policy
Framework	Cenovus Operations Management System
Policy	Enterprise Risk Management Policy
Regulatory	Alberta OHS Code (2009) – Part 2, Section 7, 8, 9 and 37
Regulatory	Saskatchewan OHS Regulation – Sections 12, 22 and 412

6.2 Internal References

Document Ref. #	Internal Reference Documents
CEN-EHS022	Risk, Risk Assessment and Risk Management Description

7.0 Change Management

Proposed changes to this standard can be directed to EH&S Document Management