

Lusail Real Estate Development Company

Health, Safety, Security, Environment, Logistics & Quality Department

Lusail Construction Safety Management Procedure – Ergonomics

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COMPANY PROPRIETARY INFORMATION

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Amendment Record

This document is reviewed to ensure its continuing relevance to the systems and process that it describes. A record of contextual additions or omissions is given below:

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1. Description

This element of the LCSMP establishes guidelines for evaluating and managing ergonomic issues in the workplace. This element applies to all Lusail personnel, Contractors, Developers, Consultants and subcontractors working on the Lusail projects.

2. Definitions

Term	Description		
Job Hazard Analysis (JHA)	A process used to identify hazards or potential hazards associated with each step of a job or work plan to uncover hazards and eliminate, control, or remove them before the work is started.		
Administrative controls	Methods that control risk factors through management techniques such as job and task rotation. Administrative controls rely on employee behaviors and activities rather than physical modifications to the work environment.		
Engineering controls	Measures that eliminate or reduce risk factors by physically modifying a job or work environment.		
Ergonomics	Modifying tasks and environments to support the physical capabilities of employees.		
Risk factors	Requirements of a job or task that increase the risk of an ergonomics-related disorder.		

3. Responsibilities

The Contractor is fully responsible for the pre-planning, development of Method Statements, Job Hazard Analysis, overall safe work planning and implementation. The Contractor's Project Management is responsible for the assurance that all work is planned and conducted according to the pre-planning document, Contractor and Lusail Health Safety & Environment (HSE) procedures and the Qatar Construction Specifications 2010. Should a conflict occur between procedures/standards or requirements the more stringent will apply.

4. Assessment

Each Contractor with their HSE Representative shall make a suitable and sufficient assessment of all manual handling operations that have a risk factor for injury to thoroughly assess the hazards and/or recommend controls.

The assessment considers potential ergonomic hazards that result from:

- Awkward postures of the wrist or shoulders
- ♦ Excessive manual force
- ♦ High rates of manual repetition
- ♦ Lifting
- ♦ Vibration

Ergonomic hazards may be found in the following job types, among others:

- ♦ Buffing/grinding/welding
- **♦** Construction
- ♦ Desk/data entry
- Driving
- ♦ Housekeeping

- Machine or equipment operators
- ♦ Overhead work
- ♦ Packing
- ♦ Small parts work
- Stockroom, shipping, material handling

5. Ergonomic Controls

Lusail implements ergonomic controls as necessary to minimize potential for injury.

Engineering controls are the preferred method of reducing risk of occupational injury. If engineering controls are not possible or practical, or until engineering controls can be implemented, administrative controls will be used.

♦ Engineering Controls

- Move items and workstations closer together to reduce carrying distances and holding times.
- Locate frequently used items and controls so they are directly in front of employees and between the waist and shoulders.
- Support objects mechanically rather than manually.
- Provide materials handling aids such as handles, grips, and dollies.
- Eliminate or reduce twisting motions.
- Position frequently used materials and parts on or slightly above the work surface.
- Orientate pallets being loaded from a conveyor or unloaded onto a conveyor at 90 degrees or less to the worker.
- Use scissor lifts, floor jacks, adjustable tables and conveyors whenever possible to keep the working surface at the optimum height at all times.

♦ Administrative Controls

- Reduce frequency or exertion time to increase recovery time.
- Increase the number of individuals at a job to distribute the work among more people and decrease each individual's task frequency.
- Train on proper lifting techniques. Simple movement of the entire body to and from the workstation can reduce fatigue and muscle strain.
- Establish a weight limit of fifty (50) pounds for one time lifting and thirty five (35) pounds for repetitive tasks.
- Rotate new employees and employees returning to work after long absences to facilitate adjustment to high risk activity.
- Evaluate employees periodically to confirm safe work practices.
- Provide appropriate PPE, in accordance with <u>LUS-HSE-WG3-446-006</u>, Personal Protective Equipment, in a variety of sizes to accommodate the physical requirements of employees. Proper fit is an important factor in the selection of PPE.
- Reduce the number of repetitions in a task to effectively limit exposure to injury.
- Limit the number of overtime hours per employee for tasks that are repetitive.

6. Environmental Controls

Lusail work facilities/ sites will adjust environmental controls to increase productivity and decrease physical and mental stress associated with a poor work environment.

Maintain lighting for optimum illumination and comfort, in accordance with <u>LUS-HSE-WG3-446-005</u>, Field & Office Facilities.

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Maintain temperature, humidity and noise levels to achieve optimum levels, in accordance with <u>LUS-HSE-WG3-446-007</u>, Ventilation and <u>LUS-HSE-WG3-446-007</u>, Hearing Conservation.

7. Injury

When an employee is injured, the Licensed Health Care Provider (LHCP) develops a restricted work activity program that provides the employee with alternate work activity. The employee will be progressively returned to full status, if he or she can be reasonably accommodated.

Employees are encouraged to report symptoms immediately.

Injured employees will be treated by physicians designated by Parsons. For more on the steps to take to receive treatment for a workplace injury, see <u>LUS-HSE-WG3-446-002</u>, First Aid.

8. Training

Lusail trains employees in ergonomic awareness, stretching exercises, and safe lifting procedures. Contractors and Subcontractors must train their own employees.

The HSE Representative arranges employee training at the time of initial assignment and whenever a new hazard is introduced to the jobsite. This training can be organized and presented to groups or on a work area by work area basis, depending on the operation.

Supervisors brief employees on ergonomic hazards and controls during daily huddles before beginning work.

9. Documentation

The records custodian documents instruction. The Contractor maintains project records at the site for the duration of the project and archives them for a minimum retention time of 10 years from creation date.

10. References

Qatar Construction Specifications 2010 Section 11 Part 1.2.7 "Manual Handling"

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