



# Lusail Real Estate Development Company

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

### Lusail Construction Safety Management Procedure – Project Site Inspection & Auditing

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### 1. Description

This element of the LCSMP provides Contractors and Consultants with the minimum criteria by which project sites operating within the boundaries of the Lusail Real Estate Development Project shall be assessed for overall risk, and for health, safety, security and environmental compliance.

This element applies to all Lusail personnel, Supervising Consultants, Developers, Contractors, and subcontractors working on the Lusail Project.

This element provides the Contractor and Consultant with inspection and audit process criteria. Contractor and Consultant programs and records must meet or exceed the programs and records used for inspection and auditing, as described in this Procedure.

### 2. Definitions

| Term  | Description                                      |
|-------|--|
| CAP   | Corrective Action Plan                           |
| HSE   | Health Safety & Environment                      |
| LCSMP | Lusail Construction Safety Management Procedures |
| NCR   | Non-Compliance Report                            |
| SOS   | Safety Observation Scorecard                     |
| IDLH  | Immediate Danger to Life or Health               |

### 3. Contractor Inspections

Only through regular and thorough HSE inspection and audit programs can the Contractor adequately evaluate the level of management commitment, compliance with HSE standards and internal procedures, safe work activities, proper tools and equipment, safe site conditions, and safe work behaviors.

The Contractor is ultimately responsible for performance of required regular and random HSE inspections and audits. This scope of responsibility includes inspection and auditing of all human and material resources, means and methods, documentation, and work activities. The Contractor shall be responsible for ensuring that all Subcontractors to the Contractor maintain and implement inspection and audit programs which meet or exceed those of the Contractor, Consultant, and Lusail.

Lusail requires that the Contractor perform HSE inspections per Qatar Construction Specifications 2010, product or equipment manufacturer's guidelines, individual LCSMP elements, and this Project Site Inspection & Audit Procedure.

#### 3.1 Frequency of Inspections & Documentation

##### 3.1.1 Visual

All personnel employed by the Contractor bear some level of responsibility for conducting visual HSE inspections. Workers shall always visually inspect tools, equipment, vehicles, and construction materials prior to use. At a minimum, visual inspection should be performed daily. In most cases, visual inspections are not documented unless an inspection item requires significant action be taken.

Examples of items requiring daily visual or pre-use visual HSE inspections include:

- Fall protection (harnesses, lanyards, anchorages, lifelines)
- Rigging equipment (slings, shackles, chains, ropes)

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- Electrical equipment (spider boxes, extension cords, GFCI's)
  - Power tools (drills, saws, nail guns)
  - Hand tools
  - Personal protective equipment
  - Ladders
  - Generators
  - Compressors
  - Guard railings, stair railings
  - Barrier systems

It is expected that all Contractor personnel will have an inspectors eye at all times during their day. Workers are urged to report abnormal conditions and situations which pose increased risk to the worker(s) or site as a whole.

Defective, damaged, substandard, or non-compliant tools, equipment and materials identified through visual inspection should be taken out of service, properly marked or tagged to reflect the deficiency. Notification shall be made to the HSE Representative or other supervisory staff to initiate documentation and corrective action.

### **3.1.2 Daily Documented**

Various tools, equipment, work areas, and/ or activities require daily documented HSE inspection to ensure safety and to comply with relevant Laws, standards, and policies. For those tools, equipment, work areas and/ or activities which require daily inspection, the responsible Contractor representative (e.g. competent person) shall document the inspection using standardized Contractor forms or tags. Lusail inspection records may be used in lieu of Contractor inspection records.

Examples of items requiring a daily documented safety inspection include:

- Open excavations exceeding 5' (1.5 m) in depth
- Scaffold towers & scaffolding systems
- Plant and heavy equipment
- Cranes
- Man baskets
- Mobile elevating work platforms

Daily inspection records or forms used by the Contractor shall meet or exceed Lusail requirements for such forms or records, Qatar Construction Specifications 2010, or OSHA standards.

In the absence of internal Contractor inspection forms or records, Lusail's or the Supervising Consultant's inspection forms and records may be used by the Contractor, upon request.

### **3.1.3 Weekly Documented**

At a minimum, Contractors shall conduct a project site-wide health, safety and environmental inspection on a weekly basis. This inspection does not have to be the responsibility of the HSE management team. Each and every line supervisor has the responsibility to inspect their worksite each week. This inspection must include all work areas, equipment, work activities, and personnel presently engaged at the Lusail Project site.

In addition, various work areas, vehicles, and activities require a minimum once per week documented HSE inspection. Examples of items requiring a weekly inspection would include the following:

- Light vehicles
- Offices
- Accommodation camps
- Maintenance shops
- Welfare facilities

- 
- Kitchens
  - Traffic Controls
  - Fuel and hazardous materials/ waste storage areas

HSE or other Contractor representatives (e.g. Competent Persons, Line Supervisors) responsible for conducting weekly HSE inspections shall record their inspections and archive them for at least 10 years from document creation.

Lusail requires Contractors and Supervising Consultants assigned to Construction Packages and a particular Contract or Plot Development site to submit HSE metrics on a weekly basis. This is accomplished by use of Weekly HSE Data and Statistics Log (Attachment [LUS-HSE-FM4-446-087](#)).

This report allows the Contractor/Consultant to enter various data into formulated fields. Data is automatically filed and computed into performance metrics and is a representative of the site's level of safety, risk and compliance. Completed weekly reports shall be submitted to the Lusail Representative each Sunday morning by 8am.

### 3.1.4 Monthly

Examples of equipment which may require a monthly documented HSE inspection by the Contractor's Representative (e.g. Competent Person) include the following:

- Fire extinguishers
- Fire suppression systems
- Ladders
- Smoke detectors
- Fire alarm systems
- Temporary power systems (spider boxes, transformers, power distribution cables)
- Plant & heavy equipment
- Cranes
- Mobile elevating work platforms
- Fall protection equipment (full body harnesses, lanyards, anchorages)
- Accommodation camps
- Kitchens

HSE or other Contractor representatives (e.g. Competent Persons, Line Supervisors) responsible for conducting Monthly HSE inspections shall record their inspections and archive them for at least 10 years from document creation.

### 3.1.5 Quarterly

Quarterly inspections are generally reserved for and conducted by Contractor Senior Management level representatives. This type of Contractor HSE audit must be designed to look at policies, programs, and procedures with the intent to make programmatic/ management level changes in the interest of health, safety and the environment.

Examples of items which may require quarterly inspection would include the following:

- Policies, Programs and Procedures
- Management Commitment to Health and Safety
- Regulatory Compliance

### 3.1.6 Annual

Lusail requires Cranes and select heavy equipment to be load tested and certified on an annual basis by 3<sup>rd</sup> party testing and inspection agencies. Examples of equipment which require annual test and certification include:

- Mobile cranes
- Tower cranes
- Gantry cranes

- 
- Forklifts
  - Mobile elevating work platforms

Agencies currently approved by Lusail as 3<sup>rd</sup> party testing and inspection agencies include:

#### General

- Claymore
- Dutest Industrial
- Bureau Veritas

#### Cranes

- Dutest Industrial
- TUV
- MTI

#### Falsework/Scaffold

- SGB-Harsco
- RMD Kwikform
- NSS

#### Environmental

- Booz Allen Hamilton
- Det Norske Veritas Middle East
- Jacques Whitford/Stantec
- Vincotte International Middle East

Contractors wishing to use agencies not listed above should contact the Supervising Consultant and Lusail HSE Representative for approval.

The Contractor shall ensure that the 3<sup>rd</sup> party agency provides marking on the equipment being tested/ certified and that documentation summarizing the results of testing and certification be provided to the Contractor.

### **3.2 Reporting & Recordkeeping Requirements**

All documented HSE inspection and audit records, forms, checklists, etc. shall be retained by the Contractor on site for the duration of the project and at least 10 years from creation date. Records shall be prepared and written in the English language. Any records written in a non-English language shall be accompanied by a duplicate record written in English.

The Contractor is expected to provide copies of all HSE inspections, audits, and testing and certification records to the Supervising Consultant as directed by this Procedure or upon request by the Consultant. Inspection and audit records shall be submitted to the Supervising Consultant within three (3) business days of the event, unless granted additional time by the Consultant.

Records shall be made available to the Lusail Representative upon request, or as directed by this Procedure (section 3.1.4). The Contractor shall also make various inspection and audit records available to their employees, upon employee request.

## **4. Supervising Consultant Inspections & Audits**

The Supervising Consultant serves as the frontline Project Management team on each Construction Package. As such, they are responsible for ensuring that the Contractor meets or exceeds all HSE requirements as specified in this Lusail Procedure, the LCSMP, Qatar Labor Law, and current version of the Qatar Construction Specifications (e.g. 2010).

In addition, the Supervising Consultant shall conduct their own internal HSE inspection and auditing program to (1) monitor level of safety, risk, and compliance on their respective Contract, as well as (2) track the performance of their Contractor(s).

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With the exception of inspections/audits summarized in Section 4.1.3, the Supervising Consultant will conduct inspections and audits on a schedule determined internally by the Consultant, with the approval of the Lusail Representative. Lusail will monitor the Consultants inspection and audit program for comprehensiveness and effectiveness, and should deficiencies be identified, will recommend changes to the program to ensure Lusail requirements and expectations are met.

As a proactive effort to identify safety management leading indicators, the Supervising Consultant shall conduct a monthly HSE Self-Assessment Scorecard and submit to the Lusail Representative. Lusail will review each scorecard against performance targets as a way to identify safety gaps in supervising consultant leadership. The Consultant shall utilize a monthly HSE Self-Assessment Scorecard which has been developed and approved by the Lusail Representative

#### **4.1 Frequency of Inspections & Documentation**

##### **4.1.1 Daily Visual Inspection**

Similarly to the Contractor, Supervising Consultant Representatives are responsible for conducting some measure of HSE inspection at all times while on site. All Consultant personnel have some level of responsibility for safety and health of the Contractor worker.

All observations of unsafe acts, behaviors, and/ or conditions; or safety policy or procedure non-compliance shall be reported to the HSE Manager for the Supervising Consultant or other HSE Representative. Consultant HSE Representatives shall stop Contractor work when imminent danger situations are observed.

Visual HSE inspections are typically not documented; however, should the situation, act, deficiency, or condition warrant the Consultant shall generate the appropriate documentation and follow through with any required action.

##### **4.1.2 Scheduled Documented Inspection**

As stated above, the Consultant shall have an internal schedule for conducting project site HSE inspections and audits. Such inspections and audits shall address all work activities, equipment, and personnel in the particular inspection area.

The Consultant shall utilize standardized inspection reporting forms which have been reviewed and approved by the Lusail Representative. Inspection reports shall be forwarded to the responsible Contractor(s) for corrective action, and made available to the Lusail Representative upon request. Reports shall specify a required schedule for corrective action and close-out.

##### **4.1.3 Weekly Safety Observation Scorecard**

In addition to the internal documented inspection schedule, the Consultant shall form and facilitate a Weekly Management Site Safety Walk with the Contractor on a weekly basis utilizing (Attachment [LUS-HSE-FM4-446-088](#)) Safety Observation Scorecard (SOS). The weekly safety site walk shall consist, at a minimum, of the following team members: PMCM Management Representative; PMCM HSE Supervisor; Contractor Site Manager; General Contractor HSE Manager, Supervising Consultant HSE and Management Representative. The SOS shall be submitted to the PMCM HSE Representative upon completion of the site walk for entry into a Safety Observation and Corrective Action Log.

The Supervising Consultant shall be responsible to ensure the Contractor records all At-Risk hazards observed during the site walk into their deficiency tracking log for corrective action. The results of the weekly management site safety walk will be revealed as a leading indicator safety percentage score for the week.

##### **4.1.4 Focused Inspections**

The Consultant shall also conduct focused inspections when reports or information are obtained of unsafe acts, behavior, equipment, or conditions occurring in the field. Consultant Representatives conducting focused HSE inspections shall invite and include representatives from the Contractor to the extent possible for expediting corrective action(s).

Focused HSE inspections and audits shall be documented using inspection/ reporting forms which have been approved by Lusail. The inspection reports shall be forwarded to the Contractor(s) with requirements for corrective action and close-out. The Consultants inspection report shall specify a schedule for such corrective action and close-out.

#### **4.2 Corrective Action Tracking**

Whether in response to Contractor inspection reports or the Consultants internal HSE inspections, the Supervising Consultant shall require the Contractor to implement corrective actions, measures, or controls necessary to mitigate the deficiency.



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The Supervising Consultant is responsible for establishing a schedule for implementation and close-out of corrective actions by the Contractor, and for managing the Contractor to ensure corrective actions are completed and deficiencies closed out per the established schedule. The Supervising Consultant shall verify that deficiencies reported to be closed out are in fact closed out, and that corrective measures implemented have effectively mitigated the risk.

The Consultant shall keep the PMCM HSE Supervisor informed of the status of corrective actions for high hazard deficiencies. As well, corrective actions close-out status shall be reported to the PMCM HSE Supervisor and retained in the project files.

### **4.3 Reporting & Recordkeeping Requirements**

All documented inspection records, forms, checklists, etc. shall be retained by the Supervising Consultant on site for the duration of the project. Records shall be prepared and written in the English language. Any records written in a non-English language shall be accompanied by a duplicate record written in English.

The Supervising Consultant should forward copies of all inspection and audit reports to the Contractor for their immediate action (section 4.2). Reports should be provided to the Contractor within three (3) business days following the inspection or audit.

All Consultant generated inspection and audit reports shall be made available to the PMCM HSE Supervisor or Lusail Representative upon request.

## **5. The PMCM HSE Department**

The PMCM Construction Health, Safety & Environmental team will conduct project site inspections on a daily basis. The type and complexity of the inspection or audit will range between random visual observations to quarterly program-wide comprehensive audits.

The impetus behind PMCM HSE inspections and audits is three-fold: (1) to identify elevated risk potential to Lusail, the Supervising Consultant, and Contractor; (2) to identify the level of compliance with Qatar Labor Laws and Lusail Policies, and (3) to assist the Contractor with the improvement of their HSE program with the specific goal of eliminating incidents.

Non-response to PMCM HSE inspections and assessments by Contractors with timely, adequate, and effective corrective actions may result in monetary fines levied onto the Contractor through contract payment deduction, as per the Lusail General Requirements for Construction Health and Safety.

### **5.1 Daily Visual HSE Inspection**

All PMCM HSE Staff shall conduct visual inspections for unsafe conditions, acts, behaviors and work activities at all times while on site. Visual inspections which identify deficiency, risk, and/ or non-compliance shall warrant the PMCM HSE Representative to implement some measure of action, such as stopping the work activity, notifying the Supervising Consultant and/ or Contractor of the deficiency, or directly addressing the workers involved in the deficiency.

Visual inspections will typically not be documented; however, when warranted the PMCM HSE Representative shall document the deficiency with notification to the Consultant or Contractor prior to leaving the project for corrective action.

The PMCM HSE Representative shall use daily visual inspections as an indicator of work locations, activities, or Contractors which require closure inspection by either the Contractor HSE Representative, Supervising Consultant, or Lusail.

### **5.2 Documented HSE Inspection & Assessment**

#### **5.2.1 PMCM Project Site HSE Assessment**

PMCM HSE Department personnel shall conduct visual HSE assessments and document observations for Construction Package sites

Documented safety assessments will be composed of a site scoring element, summary of deficiencies, positive observations and a risk rating. The Consultant and/or Contractor representative will provide signed receipt of the observations prior to PMCM HSE leaving the project.

A copy of the completed assessment report and corrective action log with deficiencies is submitted to the Supervising Consultant and Contractor, preferably on the same day as the inspection.

Non-Compliance Reports (NCR's) will be issued to the Supervising Consultant and/or Contractor when the following circumstances apply:

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- Extremely high risk hazard is observed
  - Repeat hazards observed
  - Site-Wide HSE related issues exist
  - Immediate Danger to Life or Health (IDLH) or imminent danger situations exist

**Other situations that determine an NCR may be required to correct a serious HSE related matter.**

### **5.2.2 Contractor Corrective Action Planning**

The Contractor shall identify the implementation/close-out date(s) of the stated corrective actions in their deficiency tracking log. The Supervising Consultant shall assist the Contractor as necessary in the identification and implementation of required corrective actions. .

Be it through follow-up site assessments, visual inspections, or Progress/HSE Meetings the Supervising Consultant shall verify that corrective actions implemented by the Contractor have in fact been effectively implemented and the deficiency has been effectively closed out. The deficiencies noted in the corrected action log will be signed by SC representative as completed and returned to the PMCM HSE Representative.

In the case that an NCR is issued, the Supervising Consultant and/or Contractor shall respond within three (3) business days. A thorough root cause analysis to determine the causes which led to the NCR shall be conducted. The results of the root cause analysis shall be utilized to develop corrective actions that will prevent future occurrence and lead to continuous improvement of project health and safety management

## **5.3 Consultant HSE Program-Wide Auditing**

### **5.3.1 Program-Wide Auditing**

PMCM HSE HSE Representatives shall conduct a program-wide HSE table top audit at one Construction Package a minimum of once per quarter using (Attachment [LUS-HSE-FM4-446-089](#)) Consultant HSE Audit Checklist as a guide.

PMCM HSE will establish a timeline for the Program-Wide Audit utilizing an annual calendar of table top reviews. The calendar will include the date and time of each proposed program audit and the Supervising Consultant to be audited.

One to two weeks prior to each audit, applicable parties will be notified of the Lusail visit and an advanced copy of the HSE audit checklist will be provided.

The PMCM HSE I audit team will be comprised of 4-5 members to review documents with one team lead to serve as audit coordinator and liaison between Lusail and audited Companies.

PMCM HSE shall present program-wide audit findings report to the Supervising Consultant within three (3) business days of the audit.

The PMCM HSE audit findings report will provide recommendations for ensuring measured improvement to each subject matter section addressed during the audit. The reports will also detail specific improvement milestones to be achieved by the contractor and a scheduled time frame within which the contractor must meet those milestones.

The expected timeline for corrective action completion is based upon the severity of the finding and will be evaluated on a case by case basis.

### **5.3.2 Consultant Response**

In response, the Consultant is required to submit a wet signed recovery plan within seven (7) business days which summarizes how they plan to address each improvement milestone set by PMCM HSE.

If requested by Lusail each main Contractor recovery plan shall include a schedule for submittal of required written plans, schedule for initiation/ implementation of new programs on site, and identification of key Contractor personnel responsible for implementation and management of new program. The recovery plan shall be wet signed by Consultant and Contractor Project Management.

The Supervising Consultant shall assist the Contractor in identification of means, methods, and techniques necessary for achievement of HSE program milestones. The Consultant is responsible for ensuring the Contractor meets all Lusail recommendations per the schedule identified by the Contractor in their summary plan response.

## **5.4 Reporting & Communication**

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In addition to reporting and communication requirements discussed previously in this Procedure, the PMCM HSE Representative shall verbally report significant Consultant/Contractor HSE deficiencies identified during assessments and audits to the Lusail Safety Manager and Lusail Sr. HSE Manager.

“Significant” HSE deficiencies would include any deficient condition, act, behavior, work area, or program which contains elevated potential for serious injury, fire, structural failure, vehicle accident, or fatality.

Notification to Lusail Project Management may also be required depending upon the situation, deficiency, and potential impact the deficiency may have on operations.

## 6. Recordkeeping

Records of HSE inspections, assessments, and audits prepared by Lusail HSE Representatives shall be retained in project files for the duration of the project and archived for 10 years from creation date. Records shall be made available to Lusail, or Consultant Management upon request.

## 7. References

Qatar Construction Specifications 2010

## 8. Attachments

|                                     |   |
|-------------------------------------|---|
| <a href="#">LUS-HSE-FM4-446-087</a> | Weekly HSE Data and Statistics Log              |
| <a href="#">LUS-HSE-FM4-446-088</a> | Safety Observation Scorecard (SOS)              |
| <a href="#">LUS-HSE-FM4-446-089</a> | Consultant HSE Table Top/Field Review Checklist |