

Part-6 Risk Management

Produced by

HSSE – Facilities & GS Department

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| Policy Description | |
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Policy Description

The purpose of this procedure is to ensure that all the hazards and risks applicable to Qatar University (**QU**) are managed appropriately in order to ensure the effective implementation of the QU Health, Safety and Environment Management System (**HSEMS**).

Who Should Know This Policy

- ✓ President
- ✓ VPs
- ☑ Office of the Legal Counsel
- ✓ Deans
- ☑ Directors/Managers/ Departmental Heads
- ✓ Faculty Members
- ✓ HSE Committees and Sub committees
- ✓ Students
- ✓ All Employees

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1.1 Purpose

- 1.1.1 The purpose of this procedure is to:
 - Ensure that all the hazards and risks applicable to Qatar University (QU) are managed appropriately in order to ensure the effective implementation of the QU Health, Safety and Environment Management System (HSEMS).
 - Outline the methodology by which QU will identify, assess, control, and monitor the Health, Safety and Environment (HSE) risks throughout the organisation and its associated activities.
 - Embed a risk management practice in all phases of QU practices and activities.

1.2 Scope

1.2.1 The requirements in this procedure are applicable to all QU facilities and operations, and activities (routine, non-routine and emergency activities) conducted by QU employees, students, contractors and visitors.

1.3 Responsibilities

1.3.1 Top Management

1.3.1.1 QU Top Management (refer to QU HSEMS Section 3.0 - Roles and Responsibilities Procedure) shall be responsible for allocating appropriate resources to enable identification and control of QU HSE risks in line with this procedure.

1.3.2 Vice President (VPs), Deans, Directors, Managers, Head Sections/Units and Project Managers

1.3.2.1 VPs, Deans, Directors, Managers, Head Sections/Units and Project Managers shall be responsible for the implementation and monitoring of HSE Risk Management requirements and ensuring the implementation of this procedure within their jurisdiction.

1.3.2.2 This includes:

- Ensuring that risk registers are completed, in consultation with the HSSE and relevant personnel, prior to approving of new projects, services, and/or initiatives for QU;
- The implementation of the control measures identified in the risk assessments in their area of control; and
- Ensuring that the risk registers are updated and kept maintained.

1.3.3 Health, Safety, Security and Environment Office (HSSE)

- 1.3.3.1 The HSSE is responsible for the development, implementation, monitoring and review of the QU HSEMS Risk Management Procedure in coordination and consultation with all relevant employees and stakeholders at QU.
- 1.3.3.2 This shall include the following activities:
 - Ensuring that a risk based approach is adopted for the management of HSE in all QU activities, projects and initiatives;
 - Identifying hazards present within QU facilities and operational activities, and assessing the risk of each identified hazard in line with the requirements of this Risk Management Procedure;
 - Developing action plans in accordance with the hierarchy of control (refer to Table
 6) for HSE risks and impacts;
 - Ensuring that a record of the risk assessments and control process is maintained;
 - Ensuring that the control measures implemented are reviewed and monitored;
 - Ensuring the development and implementation of risk control measures is conducted in consultation with QU employees and/or relevant stakeholders; and
 - Ensuring the day-to-day implementation and monitoring of the Risk Management Program for QU including documentation and recording of data.

1.3.4 HSE Committee

- 1.3.4.1 The QU HSE Committee is responsible for providing support to the HSSE to ensure the implementation of the QU HSEMS requirements. This includes:
 - · Providing advice with respect to legislative requirements; and
 - Providing assistance in conducting HSE risk assessments and development of control measures when requested.

1.3.5 Procurement Department

1.3.5.1 The Procurement Department shall ensure that risk assessments for all contracts undertaken by QU are completed prior to commencement of these contracts.

1.3.6 Employees and Contractors

- 1.3.6.1 All QU employees and contractors shall ensure that their activities support and contribute towards the achievement of the QU HSEMS requirements.
- 1.3.6.2 This includes:
 - · Not placing themselves or others at risk of injury;
 - Reporting any hazards associated with the working environment, work tasks or activities to their superior as soon as becoming aware of them;
 - Participating in the development of appropriate risk control measures for identified hazards to eliminate or minimize risk or prior to undertaking an identified high risk activity; and

- Using designated control measures as required (e.g. PPE, IT tools, SOPs, etc.), and any other measures required to protect health and safety.
- 1.3.6.3 Contractors shall also ensure their activities are in line with the requirements of the QU HSEMS Section 7.0 Contractor Management Procedure.

1.4 Procedure

1.4.1 Overview

- 1.4.1.1 Risk Management is a key element in the QU HSE Policy, as it provides the necessary information for QU to ensure the sufficient management of environmental aspects and ensure the health and safety of students, employees, contractors and the community at large by addressing identified health and safety hazards.
- 1.4.1.2 While QU acknowledges that it is not possible to have a completely risk-free work environment, it is committed to embedding the risk management process in the QU culture and by applying it to all QU operations (including all phases of a project /development, from design to decommissioning) to manage those HSE risks that are identified.
- 1.4.1.3 QU shall ensure integration of the risk management process into the QU culture in the following manner:
 - For potential HSE risks resulting from contractor activities, QU has included the
 requirement for risk assessments to be undertaken from the time of the
 contractor pre-qualification stage through to project close-out. Integration of risk
 management and other HSE requirements for contractor management shall
 commence during implementation phase of the QU HSEMS (refer to QU HSEMS
 Section 7.0 Contractor Management Procedure).
 - QU has included in their SOPs (refer to QU HSEMS Section 9.0 Standard Operating Procedures), the requirement to undertake risk assessments prior to commencing those activities (which have been identified as high risk).
 - QU shall review the existing HSE risk registers (refer to 3.5) on a bi-annual basis
 the first year of implementing their HSEMS with the intention to ensure that risk
 management is being integrated into the QU culture. Thereafter, the risk register
 shall be reviewed as outlined in 3.4.5 of this procedure.
 - Identification of HSE risks and determination of controls shall be taken into account when developing, implementing and maintaining the QU HSEMS and other procedures related to the QU processes and activities. This shall be undertaken through QU HSEMS Section 10.0 –Management of Change Procedure.

1.4.2 Competency and Consultation

1.4.2.1 Those carrying out risk assessments should be competent to do so. Competence is defined as sufficient training and experience; or knowledge and other qualities, to

- enable a person to properly undertake the measures needed to comply with QU risk management requirements.
- 1.4.2.2 Prior to undertaking any risk assessment, depending on the complexity of the process or task, the staff who are involved in the execution of the process or task should be consulted to gain an understanding of the hazards involved and more importantly, how the task is undertaken.
- 1.4.2.3 A consultative group could include, but is not limited to:
 - A representative from the HSSE:
 - A representative from the HSE Committee; and
 - Relevant employees, contractors, and stakeholders.
- 1.4.2.4 Relevant reference material, e.g. Material Safety Data Sheets (MSDSs) for chemicals, Method Statements submitted by the contractor, etc.

1.4.3 Risk Assessment Methodology

1.4.3.1 A Risk Assessment is the process of determining the 'risk' or 'impact' level associated with a 'hazard' or 'environmental aspect' (refer to Table 1 for definitions and examples of hazards, risks, environmental aspects and impacts).

| Table 1 Definitions and Examples Hazard | Risk |
|--|---|
| Is a source, situation, or act with a | Is a combination of the likelihood of an |
| potential for harm in terms of human | occurrence of a hazardous event or |
| injury or ill health, or a combination of | exposure(s) and the severity of injury or |
| these (e.g. chemicals, electricity, working | ill health that can be caused by the event |
| from ladders, noise etc.). | or exposure (e.g. contact with live |
| | electrical equipment causing electric |
| | shock or electrocution or waste oil |
| | causing land contamination). |
| Environmental Aspect | Environmental Impact |
| Is an element of an organisation's | Is any change to the environment, |
| activities or products or services that can | whether adverse or beneficial, wholly or |
| interact with the environment (e.g. | partially resulting from an organisation's |
| | |
| emission to air, waste water discharge to | environmental aspects (e.g. air pollution, |
| emission to air, waste water discharge to water stream or land, waste discharge to | environmental aspects (e.g. air pollution, water pollution, land pollution, noise |

- 1.4.3.2 The purpose of the risk assessment is to identify environmental aspects and impacts, and health and safety hazards within QU operational activities, events, and facilities.
- 1.4.3.3 Risk assessments will be conducted before the start of all operational and specific work activities undertaken within/by each department. This includes systems of work and equipment.

- 1.4.3.4 Risk assessment shall be undertaken prior to the beginning of a project on all the activities being carried out; and reviewed if any elements within the activity changes, or if an incident/accident occurs or due to a change in legislation.
- 1.4.3.5 The Risk Assessment process described in Section 3.4 shall be utilized for undertaking Risk Assessments (refer to Appendix A for the Risk Assessment Template).
- 1.4.3.6 QU may need to undertake additional assessments, including: fire assessments, workstation assessments, manual handling activities assessments, hazardous materials assessments, and noise assessments.
- 1.4.3.7 Each stage of the risk management process shall be appropriately recorded and documented in writing. Assumptions, methods, data sources, analysis, results and reasons for decisions shall be recorded.
- 1.4.3.8 Risk assessments shall take into account:
 - · Routine and non-routine activities:
 - Activities of all persons having access to the QU workplace (including contractors and visitors);
 - Human behaviour, capabilities and other human factors;
 - Identified hazards originating outside the QU workplace capable of adversely affecting the health and safety of persons under the control of QU and within the workplace;
 - Hazards created in the vicinity of the QU workplace by work-related activities under the control of QU;
 - Infrastructure, equipment and materials at the QU workplace, whether provided by the QU or others (such as contractors);
 - Changes or proposed changes at QU organization, its activities, or materials;
 - Modifications to the QU HSEMS, including temporary changes, and their impacts on operations, processes, and activities;
 - Any applicable legal obligations relating to risk assessment and implementation of necessary controls; and
 - The design of work areas, processes, installations, machinery / equipment, operating procedures and work organization, including QU's adaptation to human capabilities.
- 1.4.3.9 Any newly identified risks from the risk assessments shall be recorded into the facilities risk registers (refer to 3.5 of this procedure).

1.4.4 Risk Assessment Process

- 1.4.4.1 Step One: Identifying the Hazards and Risks
 - 1.4.4.1..1 Identifying the hazards applicable to the activity or facility within QU is a critical element in the risk assessment process.
 - 1.4.4.1..2 The hazards applicable to QU activities and facilities can be identified by considering the following sources:
 - Conducting workplace inspections to identify what could be reasonably expected to cause health and safety hazards or harm (including human behaviour);
 - Identifying hazards outside the workplace that may adversely affect the environment or pose a risk to the health and safety of employees;
 - Identifying hazards that may pose a potential risk to persons not in QU's employment;
 - Consultation with relevant employees, HSE representatives, and relevant stakeholders to identify hazards;
 - Reviewing manufacturer instructions or MSDSs for chemicals and equipment used as they can be very helpful in classifying the hazards;
 - Reviewing the design / work areas, processes, equipment, work organisation and operating procedures at QU;
 - Reviewing previous Near Miss & Incident Reports and Investigation findings;
 - · Reviewing Health Surveillance data; and
 - Observation of routine and non-routine activities undertaken by all persons on behalf of QU (in and out of office) and conducting task analysis.

Refer to Table 2 to assist during hazard identification process. It is worth noting that Table 2 is not an exhaustive list, but provides some prompts for considering potential hazards.

- 1.4.4.1..1 Identify the potential consequences if the hazard is not controlled.
- 1.4.4.1..2 Identifying who or what might be harmed will help in identifying the potential consequences, such as:
 - Employees;
 - Students;
 - Visitors;
 - Contractors;
 - Members of the public;
 - Environment; and
 - Equipment/property.

1.4.4.1..1 Also consider how hazards can be imposed on people with special circumstances such as expectant mothers, persons with disabilities, young or inexperienced workers, and lone workers.

Table 2 Example Prompt for Hazard Identification

| Factors in the work environment that influence risk | Work organization factors that may influence risk by interacting with other risk factors | Useful sources of information | |
|---|---|---|--|
| Temperature Lighting Noise Dust Vibration Radiation (incl. UV) Electricity Water Fire Ventilation Floors Manual handling Waste Equipment Chemicals Location of work Topography Cultural and natural heritage | Workplace condition and layout Contaminated atmosphere Moving or falling objects Working at heights Work station design Overhead or underground utilities Vehicle / traffic movement Presence of asbestos in the place of work Staffing levels Availability of appropriate equipment Work schedules Shift work Work space Task variety Rest breaks and recovery time Work practices and systems of work Interaction with clients Appropriate instruction, training and information Availability of appropriate protective equipment (personal or environmental) | QU Facilities' OHS Risk Registers QU Facilities' Environmental Impacts Registers Project HSE Plans Training Matrix Inspection Reports MSDSs Results of atmospheric or health monitoring contaminants First aid records Incident/ hazard reports HSE committee meetings | |

- 1.4.4.2 Step Two: Evaluating the Initial Risk Rating
 - 1.4.4.2..1 Risk analysis involves consideration of the source of risk, its consequences and the likelihood that those consequences may occur. The level of risk is calculated by:

Risk = Consequence x Likelihood of Occurrence (refer to Table 3 for the risk matrix)

- 1.4.4.2..2 All risks shall be evaluated and ranked based on a combination of the potential likelihood of occurrence (refer to Table 4 for likelihood descriptors) and the potential consequence (refer to Table 5 for consequence descriptors) as specified in the risk matrix in Table 1.
- 1.4.4.2..3 Take into account existing preventative or precautionary control measures and check that the control measures meet legal requirements, industry standards, and represent good practice. Typical measures include:
 - Legal Compliance (e.g. Laws, Regulations);
 - Planning (e.g. Pre-contract, maintenance, Standard Operating Procedures, Method Statements, interaction between contractors);
 - Physical (e.g. Access, Personal Protective Equipment requirements, equipment requirements, signs);
 - Managerial/Supervisory (e.g. Checks and actions required by supervision, inspections); and
 - Training (e.g. Specific employee/operator training or certification required).

Table 3 Risk Matrix

| Risk Matri | X | Consequence | | | | |
|-------------------|---|---------------|------------|-------------|-------------|--------------|
| li | | Insignificant | Minor | Moderate | Major | Catastrophic |
| Likelihood | | A | B C D E | | | Е |
| Almost Certain | 5 | Low | Moderate | Significant | Extreme | Extreme |
| Likely | 4 | Low | Low | Moderate | Significant | Extreme |
| Possible | 3 | Negligible | Low | Moderate | Significant | Extreme |
| Unlikely | 2 | Negligible | Negligible | Low | Moderate | Significant |
| Very Unlikely | 1 | Negligible | Negligible | Low | Moderate | Moderate |

Table 4 Likelihood Descriptors

| Likelihood | Source | _ | | |
|------------------------|---|---|---|--|
| Descriptor | University (Specific) | Qatar (local) | Industry (worldwide) | Exposure |
| 5 Almost Certain | Typically occurs more than once per task | Typically occurs more than once per year | Typically occurs more than 10 times per year | Frequent (daily) exposure at > 10 x Occupational Exposure Limit (OEL) |
| 4 Likely | Typically occurs once per task | Typically occurs once per year | Typically occurs 1-10 times per year | Frequent (daily) exposure at > OEL |
| 3 Possible | Typically occurs once per 1-10 tasks | typically occurs once every 1-10 years | Typically occurs once every year | Frequent (daily) exposure at > 50% of OEL Infrequent exposure at > OEL |
| 2 Unlikely | Typically occurs once every 10-100 tasks | Typically occurs once every 10-100 years | Typically occurs once every 1-10 years | Frequent (daily) exposure at > 10% of OEL Infrequent exposure at > 50% of OEL |
| 1 Very Unlikely | Might occur every 100 or more tasks | Might occur every 100 or more years | Might occur every 10 or more years | Frequent (daily) exposure at < 10% of OEL Infrequent exposure at > 10% of OEL |

Table 5 Consequence Descriptors

| | Consequence | | | | |
|--------------------|---|---|---|--|--|
| | A Insignificant | B Minor | C Moderate | D Major | E Catastrophic |
| Health & Safety | First aid and no medical treatment. Reversible health effects of little concern, requiring first aid treatment at most. Minor irritations of eyes, throat, nose and or skin, or minor unaccustomed muscular discomfort. | A medical treatment or minor lost time injury. E.g. Sprains and strains and minor fracture (including fingers, thumbs and toes). Reversible health effects of concern that would typically result in medical treatment. Can include temperature effects; stress; and sunburn. | A significant lost time injury or partial disability. E.g. Significant fracture (other than digits), amputations, dislocations; loss of sight, electric shock or injuries requiring admittance to hospital. Severe, reversible health effects of concern that would typically result in a lost time incident. | Single fatality or permanent disability. Irreversible health effects or disabling illness. | Multiple fatalities or permanent disabilities. |
| Environment | On-site/Off- site environmental negligible impact and of low significance. | On-site/Off- site environmental localized impact, immediately contained. | On-site/Off- site environmental short term impact, immediately recoverable | On-site/Off- site environmental medium term impact or repeated non- compliance with potential for prosecution. May require notification of Ministry of Environment. | On-site/off- site environmental long term harm that is not recoverable. Significant fines and prosecution at company and individual level. Requires notification to Ministry of Environment. |

- 1.4.4.3 Step Three: Identifying and Implementing Risk Control Measures
 - 1.4.4.3..1 Having established a level of risk for a hazard, it is then necessary to determine and implement an appropriate control measure (or combination of controls if no single measure is sufficient) in order to manage the hazard to an acceptable and As Low As Reasonably Practicable (ALARP) risk level. For hazard(s) with low risk, actions may not be required, as long as the existing control measures are being implemented maintained and remain relevant.
 - 1.4.4.3..2 Risk control must be achieved by using a predetermined hierarchy of controls (refer to Table 6 for hierarchy of controls). The hierarchy of controls provides a guide from most preferred (eliminating a hazard) to least preferred control measures (use of protective equipment). It is a world-wide accepted model for managing of risks.
 - 1.4.4.3..3 When the mitigation measures are identified, a second assessment (refer to 3.4.4) will be done to evaluate the HSE risk level of the hazard (i.e. *residual risk*) after considering one or more of the proposed control measures.
 - 1.4.4.3..4 Furthermore, if mitigation measures are to be implemented, an action plan shall be formulated addressing:
 - Roles and responsibilities;
 - Training required for the relevant parties;
 - Time frame for completing the actions; and
 - Required changes for the HSEMS and its associated documents and procedures.

Table 6 Hierarchy of Controls

| HIERARCHY OF CONTROLS | | | | | |
|---------------------------|---|---|--|--|--|
| AIM | & DEFINITION | EXAMPL | E OF CONTROL | | |
| Eliminate | ELIMINATE - Get rid of | Redesign the work process to remove the hazard | | | |
| the Hazard | the hazard out of the workplace | Redesign of the work exposure | process to eliminate | | |
| | SUBSTITUTE - Try to replace or change plant, | Consider using air-po powered tools | owered instead of electric | | |
| | substances or materials to lower the risk from hazard | Consider using less h | nazardous cleaning products | | |
| | Try to <i>ISOLATE</i> the | Insulation (e.g. sound | d proofing, heat insulation) | | |
| | hazard | Place noisy, particle-or locations away from p | | | |
| Change the Way Work is | ENGINEERING CONTROL - Design and | Use lifting aids to mo | ve heavy items | | |
| Done | install equipment to counteract the hazard | Use exhaust systems particles / fume away | | | |
| | ADMINISTRATIVE | HSE related training / certification / signs & warnings | | | |
| | control - Arrange work so people spend less time around the hazard and monitor their understanding of the hazard and the controls | Risk Assessments | | | |
| | | Contractor HSE Plans | | | |
| | | Standard Operating Procedures | | | |
| Protective Equipment | PROTECTIVE EQUIPMENT | Protective Equipment should be appropriate for the person / place | Examples of Protective Equipment: • PPE (i.e. clothes, gloves, helmets, hats, goggles, safety footwear, high visibility vests, ear plugs and ear muffs) • Respirator • Bunding • Silt traps / fencing • Disinfectant (for mobile equipment) • Spill kits | | |
| | | As a short term measure arrange for people to wear Personal Protective Equipment (PPE) and clothing while near the hazard | Limitations of the equipment should be explained to staff members | | |
| | | Use physical barriers to prevent environmental damage | Staff member should be given instruction and training on the proper use of Protective Equipment. | | |

1.4.4.4 Step Four: Determining the Residual Risk Rating

- 1.4.4.4..1 Following identification and implementation of control measures, each risk will need to be reassessed, taking into consideration the potential risk reduction created via the implementation of control measures, and to weigh up whether enough precautions have been taken or whether further controls are necessary to prevent harm.
- 1.4.4.4..2 The residual risk rating can be determined using the same criteria detailed in Step 2 (3.4.2).
- 1.4.4.4..3 In accordance with the ALARP Reporting Framework (refer to Table 7), the ALARP Actions are to be implemented based on the corresponding residual risk rating. For example, where an EXTREME level of risk has been identified, stop task or activity and notify the HSSE immediately (who will in turn notify QU Senior Management).
- 1.4.4.4.4 The ALARP Reporting Framework has been developed to engage QU management in the HSE risk management process. It is the responsibility of the person undertaking the risk management exercise to commence the upward reporting framework by informing their immediate supervisor of the relevant risk information for consideration including the suggested control measures to be implemented to reduce the risk.
- 1.4.4.4..5 Any further actions needed to mitigate the risks shall be documented.

Table 7 ALARP Reporting Framework

| ALARP Actions | | | | | |
|---------------------------|--|---|---|---|--|
| Residual Risk Category | Negligible or Low Residual Risk | Moderate Residual Risk | Significant Residual Risk | Extreme Residual Risk | |
| Actions | Continue task or activity within existing systems, processes and controls. | Continue task or activity considering all practicable controls to reduce risk. Active monitoring of the risk is required | Adopt and implement all practicable risk reduction measures and do not proceed without permission and supervision of HSSE. Active management of the risk is required | Reassess the need for the task or activity, and do not proceed with the task without reducing the risk and only with the permission and supervision of senior management and the HSSE. Do not proceed with the task without reducing risk and senior management permission | |

1.4.4.5 **Step Five:** Monitoring and Review

- 1.4.4.5..1 Risk management shall be an ongoing and constantly improving process within QU. To ensure the effectiveness in eliminating or minimising risk, the process must be continuously reviewed and steps taken to implement revised control measures, where appropriate. It ensures that new hazards are identified and controlled.
- 1.4.4.5..2 The HSSE shall ensure that there are procedures in place to review relevant HSEMS documentation in light of any technical, operational, or organisational changes (Refer to QU HSEMS Section 10.0 Management of Change Procedure). This shall include, but not be limited to, updating procedures, risk registers and reviewing training needs.
- 1.4.4.5..3 The risk management process and risk assessments shall be reviewed and documented as follows:
 - When planning or making change to a work procedure and/or practices;
 - When introducing new equipment, materials, substances, machinery into the workplace;
 - After an HSE incident or near miss;
 - After an organisational change;
 - At regular or scheduled intervals appropriate to the nature of the workplace and the hazards present;
 - After legislative changes (including regulations and QU policies and standards);
 - Before high risk work activities begin, including any work that might require a permit to work, e.g. maintenance activities requiring high risk activities, such as hot work, electrical lock outs, confined space etc. In these cases an assessment needs to be done and a work permit issued for the specific work; and
 - · At least annually.

1.4.5 HSE Risk Registers

- 1.4.5.1 All HSE hazards identified in consultation, via observation, or analysis shall be recorded in the HSE risk registers, which constitutes of an Occupational Health & Safety (OHS) Register and an Environmental Impacts Register.
- 1.4.5.2 The OHS Risk Register shall establish a record of health and safety hazards and risks associated with QU operations and activities. The OHS Risk Register (refer to Appendix B) shall include:
 - Activities/Tasks:
 - · Hazards and potential risks;
 - Legal and other requirements;
 - · Existing controls;
 - Initial risk score, assessed before proposed control measures;
 - Proposed controls;

- Residual risk score, risk remaining after implementation of proposed control measures; and
- · Actions.
- 1.4.5.3 The Environmental Impacts Register shall establish a record of environmental aspects associated with QU's operations and activities. The impacts on the environment, both positive and negative, shall be identified and evaluated for significance. The Environmental Impacts Register (refer to Appendix C) shall include:
 - · Activities/Tasks;
 - · Aspects and potential impacts;
 - · Legal and other requirements;
 - · Existing controls;
 - Initial risk score, assessed before proposed control measures;
 - Proposed controls;
 - Residual risk score, risk remaining after implementation of proposed control measures; and
 - · Actions.
- 1.4.5.4 The HSSE shall maintain the HSE risk registers to ensure that all changes to the identified hazards/aspects and level of risk controls established through subsequent risk assessments are included and the registers are current.

1.4.6 Management of Operational Risk

- 1.4.6.1 Once the high risk operations are identified via the Risk Assessment process (initial risk rating), the HSSE will create specific Standard Operating Procedures (SOPs) or Technical Guidelines (TGs) in consultation with the appropriate personnel to consider specific control measures and safe working practices.
- 1.4.6.2 The SOPs/TGs (refer to QU HSEMS Section 9.0 Standard Operating Procedures) shall detail the required HSE considerations, identification of hazards and assessment of risks, the supply of work instructions and method statements as required, use and maintenance of suitable equipment.

1.4.7 Training

1.4.7.1 Training as a Control Measure

1.4.7.1..1 The HSSE shall make sure that training needs of QU employees, students, visitors and contractors identified during the risk assessment process shall be implemented as per QU HSEMS Section 11.0 – Training and Competency Procedure.

1.4.7.2 Risk Assessment Training

- 1.4.7.2..1 Training on how to undertake risk assessments shall be provided by QU where the need arises. The training is to include a combination of verbal description and practical demonstration to instruct members of staff on how to undertake risk assessments and shall include, at minimum:
 - How to identify hazards associated with the task/work place;
 - How to assess the risk of the hazards identified; and
 - How to identify and implement controls to manage the risk associated with the task.

1.4.8 HSE Performance Measures

- 1.4.8.1 In reference to QU HSEMS Section 15.0 HSE Performance Monitoring Procedure, the hazards and risks identified shall be measured against a monitoring plan and Key Performance Indicators (KPIs) identified. Accordingly, HSSE shall ensure that:
 - All hazards identified in the work area are accurately recorded in the HSE risk registers;
 - Risk assessments have been properly completed for all identified hazards;
 - All control measures have been implemented for identified hazards and any failure of control measures recorded and reported to the direct line manager; and
 - All equipment registers (where applicable) have been properly completed and all registrations are current.

1.5 Document Control

- 1.5.1 This Procedure is a controlled document. The controlled version of this Procedure is located on the QU Electronic Documentation Management System.
- 1.5.2 Any printed copies of this controlled document are reference copies only. It is the responsibility of all of those with printed copies to ensure their copy is kept up to date.
- 1.5.3 Refer to QU HSEMS Section 16.0 Document Control and Record Retention Procedure.

1.6 Appendices

Appendix A: Risk Assessment Template

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