

Environment & Safety Handbook

QAIA-CEO-QSM-MAN-013-04



Contents

1. Purpose	4
1. Scope	4
2. Related Documents:	4
3. Introduction of Integrated Management System (IMS):	6
4. Important Definition:	6
5. Important Abbreviation:	12
6. Roles and Responsibilities:	12
7. Instructions for Impact & Risk Assessment	14
8. Safety Control Procedures	16
8.1.1 Procedure #1 Hot Work:	17
8.1.2 Procedure #2 Lockout Tag out:	19
8.1.3 Procedure #3 Working at Height:	19
8.1.4 Procedure #4 Confined Space:	22
8.1.5 Procedure #5 Manual Handling:	24
8.1.6 Procedure #6 Electrical Safety Procedure:	25
8.1.7 Procedure #7 Chemical Handling Safety:	27
8.1.8 Procedure #8 Usage of Mechanical Tools:	30
8.1.9 Procedure #9 Noise Management:	33
8.1.10 Procedure #10 Soil Contamination Precaution Procedure:	34
8.1.11 Procedure #11 Air Pollution Control:	35
8.1.12 Procedure #12 General Safety Rules:	36
8.1.13 Procedure #13 Excavation Safety Rules:	39
8.1.14 Procedure #14 IT&T Safe Control Procedure:	41
8.1.15 Procedure #15 Airside Safety Rules:	41
8.1.16 Procedure #16 Safety Rules In Case Working Near/Around Passengers:	42
8.1.17 Procedure #17 Waste disposal Rules:	43
8.1.18 Procedure #18 Pesticides Use and Management	45
8.1.19 Procedure #19 Incident investigation procedure	46
8.1.20 Procedure #20 Social Impact Assessment:	46

Appendix 1: Airside Safety Rules AIG Safety Policy:	48
Appendix 2: Safety & Awareness Signage	54
Appendix 3: Specification of Personnel Protective Equipment's	57
Appendix 4: First aid instructions:	63

1. Purpose

Airport International Group (AIG) as QAIA Airport Operator has prepared this handbook in order to assist and provide the **suppliers/contractors/Visitors/investors** who's selected to work or visit Queen Alia International Airport with rules and guidance for environment & safety work practices. This handbook is based on regulatory requirements, AIG requirements, but no mean all, and any additional information applicable to contract activities for specific project OR Location may be added to work permit document.

Moreover, it is the responsibility of the supplier/contractor/investors to review, understand and use this handbook as a resource to control hazards associated with their assigned tasks. Any failure to comply with the requirements of this document OR work permit requirements will constitute a breach of work permit requirements and AIG management have the right to stop the work until the appropriate corrective actions are taken, however, any delay or cost resulting from such breach will be recovered by AIG.
Permit document.

1. Scope

This procedure applies to supplier/contractor/investors activities when working in QAIA at **Airport International Group** Premises, in addition to stakeholders OR contractors engaged by the subcontractor and suppliers.

2. Related Documents:

The below documents are the reference documents that are used to establish this handbook, however these documents are not available for public and might be provided only as per work need and after the approval of AIG concern department.

- Environment Health and Safety plan (ref.QAIA-CEO-QSM-PLN-015)
- Airside Safety Management(ref. QAIA-COO-AVS-MAN-001)
- Work Permit Procedure(and all related appendixes) QAIA-COO-TEC-PRO-PR-001
- Guideline Environment, Health and Safety Plan During Construction Work Ref.: QAIA-CEO-QSM-GDL-016

Furthermore, the main applicable legal requirements that used as reference to develop this handbook are:

- Environment Protection Law (6) of 2017;
- Aviation & Environment Law, JCARC part 301
- Airport Noise Compatibility Planning JCARC part 150;
- Environment Impact Assessment (37) 2005;

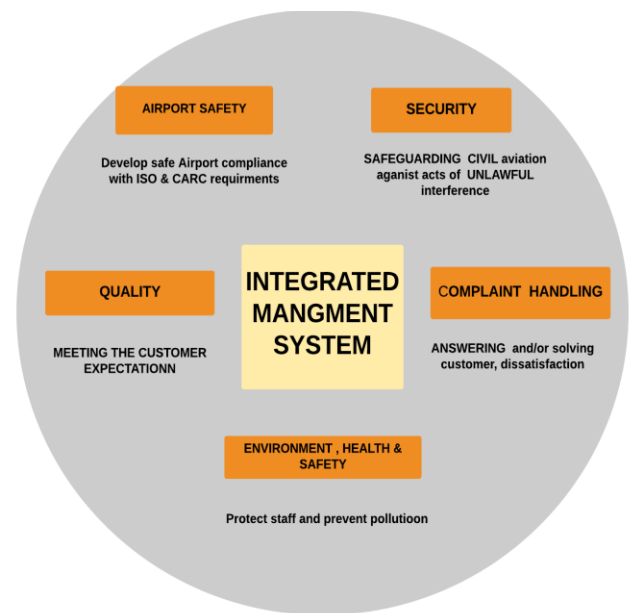
- Management of Hazardous Substance (24)2005;
- Management of Solid Waste (27)2005;
- Waste management framework-2020
- Instruction of solid waste management of 2019
- Protection Environment in Emergency Situation (26)2005;
- Environment inspection number 65 of 2009
- Hazardous waste handling and management instructions 2019
- Protection of the Air Regulations (28)2005;
- Soil Protection Regulations (25)2005
- Instruction Waste Oil Management issued of 2014;
- Instruction of Environment Impact Assessment-2014
- JS Drinking Water Quality (286) 2014;
- JS Dangerous Goods Storage Handling (431) 1985;
- JS 1766-2014_Water – Irrigation water quality guideline
- JS 1214-2018_Water – Bottled drinking water
- JS 1145-2016 of use & disposal biosolid
- JS 893-2006_Reclaimed domestic wastewater
- JS 202-2007_industrial wastewater
- JS 1140-2006_Air_quality
- Climate Change 79 of 2019
- 286-2015-Drinking water Quality
- JS_ 1189_2006_Stack emission
- JS524/1987-Illumination standard
- 2017-Instruction to connect non-domestic waste water to sewer system
- Jordan Labor Law, 14 of 2019
- Jordanian Ministry of Labor Regulation-Safety instruction for equipment has and machines No. (43) Of the Year 1998.
- Jordanian Ministry of Labor regulation-OHS committee No. (7) Of the Year 1998
- Radiation Protection, And Nuclear Safety And Security Law number of 43 of 2007
- Performance Standards of IFC/MIGA/EBRD
- Environment Classification & License no. 69 of 2020
- Hazardous Materials/waste Management no. 68 of 2020
- Environmental Information and Control System for waste management no 85 for 2020
- Performance Standards of European Bank for Reconstruction and Development (EBRD) , International Financial Corporation(IFC) & Multilateral Investment Guarantee Agency (MIGA)

3. Introduction of Integrated Management System (IMS):

The IMS depends on five main pillars (see picture 1), these pillars are the foundation of any operation activity which staff are trained to follow and implement.

Our main goal is to obtain the customer satisfaction by providing high quality of services, protect our customer/Community safety and security, and keep surrounding environment s clean and green.

Picture 1: IMS Diagram



3.1 Overview of IMS Policy

AIG has developed an Integrated Management System (IMS) in accordance with ISO 9001:2015, ISO 14001:2015, ISO45001:2018 , ISO 10002:2014 standards, and shareholders requirements based on the performance standards European Bank for Reconstruction and Development (EBRD) , International Financial Corporation(IFC) & Multilateral Investment Guarantee Agency (MIGA), which is in line with our continual improvement approach, we are committed to:

- Complying with the statutory and regulatory requirements of the Hashemite Kingdom of Jordan;
- Establishing and reviewing objectives and effectively implementing the requirements of the integrated management system and Risk Management;
- Ensuring high level of customer satisfaction at Queen Alia International Airport through an interactive complaints handling system in compliance with financial, operational and organizational requirements.
- Developing and operating a safe airport complying with the applicable aviation standards and following best practices;
- Promoting a safe and healthy work environment through management commitment, staff engagement and participation to establish and develop a proactive health and safety culture for interested parties.
- Implementing and upgrading a sustainable Environmental Management System and continually improving its performance by focusing on carbon and water management, pollution prevention, waste segregation and minimization.
- Involving all concerned stakeholders in our improvement actions

4. Important Definition:

- **Accident:** Accident is a work-related event during which injury, illness, or fatality actually occurs

- **Airport Operator:** A person that operates an airport serving an aircraft operator or a foreign air carrier required to be certified under JCAR Part 139;
- **Breathing equipment:** A device that supplies breathable air for use in areas with high levels of airborne contaminants or irrespirable atmospheres (Self-contained breathing device or self-rescuer);
- **Chemical Safety Signs:** Visual warning of the hazards associated with the dangerous goods stored or used on site;
- **Chemical:** Any element, chemical compound or mixture of elements and/or compounds where chemical(s) are distributed;
- **Clinical Test:** general health test for the body's functions as well as inspecting the previous injuries;
- **Control Procedure/Mitigation Measures:** A procedure, or method to manage the risk to an acceptable level;
- **Confined Space:** An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:
 - An oxygen concentration outside the safe oxygen range;
 - A concentration of airborne contaminant that may cause impairment, loss of consciousness or suffocation; and
 - A concentration of flammable airborne contaminant that may cause injury from fire or explosion.
 - Biological hazards may be presented (snakes)
- **Contaminant:** Any dust, fume, mist, vapor, biological matter, gas or other substance in liquid or solid form, the presence of which may be harmful to persons;
- **Corrective action:** Action taken to correct the existing non-conformity, defect or undesirable event and to prevent its renewal;
- **Danger Confined Space Sign:** A sign that indicates that the area inside the entry point is a Confined Space, prior to entry a person shall be trained and deemed competent to enter a Confined Space;
- **dB or Decibel:** The unit used as measure of noise level based on logarithmic scale;
- **De-energized:** The process of disconnecting lines or apparatus from all sources of electrical energy usually by the process of switching. De-energized does not mean isolated or discharged, or both;
- **Designated Area:** Permanent location designed or approved for hot work operations to be performed regularly;
- **Edge protection:** Providing a barrier, to prevent a person falling along the edge of:
 - A building or other structure;
 - An opening in a surface or a building; and
 - A raised platform.

- **Electric shock:** The effect resulting from the direct or indirect passage of an external electrical current through the body. It includes direct and indirect contacts and both unipolar and bipolar currents;
- **Electrical Risk:** Electrical risk in relation to a person means the risk to the person of death, shock or injury caused directly by electricity or originating from electricity. And in relation to property, the risk of loss or damage caused directly by electricity or originating from electricity;
- **Electrical Work:** Is the manufacturing, constructing, installing, testing, maintaining, repairing, altering, removing, or replacing of electrical equipment;
- **Energized:** Means energized by electricity;
- **Energy isolating device:** A mechanical device (a disconnect switch, line valve, block, blank off plate) that physically prevents the transmission or release of an energy source to machinery or equipment;
- **Energy source:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational, stored or other energy;
- **Environment Impact Assessment:** Evaluation the impact generated from environment aspects during the Normal and Abnormal operation to decide the significant impact;
- **Environmental Aspect:** Activities or products or services that can interact with the environment;
- **Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from company environmental aspects;
- **Excessive Noise:** Noise above the noise exposure criteria as set by the relevant statutory authorities or by the organizations noise policy, whichever is the lower;
- **Environment, Health and Safety representative:** He/she person which is responsible to ensure that the requirements in this procedures are followed, this person can be either senior officer or Section head working in EHS section and under umbrella of Director, Quality/Safety Management Division,
- **Fire Watch:** Person designated from hot work operation to commence Fire watch responsibilities;
- **Hazard Identification:** This is the process of examining each work area and work task for identifying all the hazards integrated with work tasks activities. Materials, & work equipment's
- **Hazard:** Anything (e.g. condition, situation, practice, behavior) that has the potential to cause harm, including injury, disease, death, environmental or property and equipment damage;
- **Hazardous Energy:** Energy sources including electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational or other potential energy that, when released, can cause harm;
- **Hazardous materials:** Any simple, composite or combined substance, or the waste thereof, whether natural or artificial, that is hazardous to the Environment or to any of its elements or to the safety of life;

- **Hazardous Waste:** Wastes other than radioactive wastes which by reason of their chemical reactivity or toxic, explosive, corrosive or other characteristics causing danger or likely to cause danger to public health or the environment, whether alone or when coming with other wastes;
- **Hearing Loss:** hearing impairment arising from exposure to excessive noise at work;
- **Hearing protector:** A device that is designed to protect a person's hearing and that:
 - Is inserted in the ear canal;
 - Covers the ear canal entrance; and
 - Covers the entire ear.
- **Hearing Test:** a hearing test provides an evaluation of the sensitivity of a person's sense of hearing; An audiometer is used to determine a person's hearing sensitivity at different frequencies;
- **Hot Work Operator (HWO):** party that will carry on hot work operation;
- **Hot Work Permit (HWP):** A document issued by the authority having jurisdiction for the purpose of authorizing performance of any work involving burning, welding, or similar operations that is capable of initiating fires or explosions;
- **Incident:** Any occurrence that might lead to:
 - Death accident Serious injuries;
 - Minor injuries;
 - Illness; and
 - Near miss, which could have resulted in death or serious injury.
- **Industrial Wastewater:** Solid/liquid in different quantity and size that may cause damage to sewage system or operation problem in the wastewater treatment plant;
- **Isolation Point:** Means the point, or one of many points, used to isolate electrical parts;
- **Isolation:** Ensuring all sources of hazardous energy for a piece of equipment or machinery are moved or controlled to prevent it from unexpected activation or energization;
- **Live Work:** Electrical work performed in circumstances in which the part of the electrical equipment which is the subject of the electrical work is energized. Also includes testing and fault finding;
- **Lockout:** To physically neutralize all energy sources in machinery or equipment, usually by applying locks, before beginning any maintenance or repair work. The purpose of lockout is to prevent all energy isolation devices (switch, circuit breaker or valve) from accidentally or inadvertently being operated while workers are working on equipment;
- **Major spill:** Spill cannot be safely contained with the normal spill kits due to hazard to people or environment risk to enter the sewer system or environment surround;
- **Manual Handling:** Any activity requiring the use of force exerted by a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any object;

- **Material Safety Data Sheet (MSDS):** A document prepared by the manufacturer or importer of a chemical which describes uses, chemical and physical properties, health hazard information, precautions for use, safe handling and emergency information. It is a legislative requirement for the manufacturer or importer to supply a copy of the MSDS for each chemical to the end user;
- **Minor illness:** An illness that does require hospitalization as an inpatient, and that is self-limiting and does not stop the affected person from carrying out their normal functions for more than a short/limited period of time. (*Cold, flu, etc....*)
- **Minor Injury:** An injury that requires first aid treatment only; or an Injury that requires treatment by a professional medical but that does not result in lost-time or hospitalization for more than 48 hours. (*I.e. sprains, bruises, etc....*)
- **Minor spill:** Detected and treatment safely with little or no hazard to person or property and environment impact;
- **Monitoring and Measurement:** Describe the how environment aspects performance measures to comply with operating control procedures;
- **Monitoring and Review:** Ongoing monitoring of the hazards identified, risk assessment and risk control processes and reviewing them to make sure they are working effectively;
- **Musculoskeletal Disorder (MSD):** An injury, illness or disease of the musculoskeletal system affecting the muscles, bones, tendons, ligaments, discs or nerves that arises in whole or in part from manual handling in the workplace, whether occurring suddenly or over a period of time but does not include an injury, illness or disease that is caused by crushing or cut resulting from the mechanical operation of plant;
- **Major Work:** Is the work with high impact on airport operation OR/and environment protection, OR/and staff safety OR/ and customer satisfaction OR/and airport security which require to have risk assessment to identify the expected risk and details of the control measures;
- **Minor Work :**Is the work with acceptable risk which does not require full assessment but general safety rules need to be followed to keep work area free from hazard
- **Nuisance Noise:** Is that which is perceived as annoying, irrespective of daily exposure;
- **Operational Control:** Measures applied on environment aspects to control on environment impact;
- **Permit Authorizing Individual (PAI):** The individual designated by AIG management to authorize hot work. The PAI cannot be the hot work operator;
- **Personal fall protection equipment:** Equipment such as fall arrest harnesses and devices, ropes, restraint equipment, etc. that is worn and/or attached to the user's body to prevent or minimize the effect of a fall;
- **Pollution Prevention:** Avoid, reduce, or control the creation, emission, or discharge of contaminants or waste materials in order to reduce adverse environmental impacts;
- **Preventive action:** Action taken to eliminate the cause of potential non-conformity, defect or undesirable event and to prevent its occurrence;

- **Prohibited zone:** Any accessed zone which is at least 3 m from any unprotected edge on a horizontal surface and rooftops;
- **Respiratory Test:** Inhaled and exhaled materials are measured in samples to test the flow volume with time to identify the efficiency of breathing;
- **Risk Assessment:** The process of assessing the risks associated with each of the hazards identified so that appropriate control measures can be implemented based on the probability
- **Risk Control:** The process of identifying and implementing the most effective risk control measures;
- **Risk:** The likelihood or probability that a hazardous event (with a given outcome or consequence) will occur;
- **Risks and opportunities:** Potential adverse effects (threats) and potential beneficial effects (opportunities)
- **Serious illness:** An illness that involves hospitalization as an inpatient, or an illness that requires continuing treatment by a healthcare provider, or involves permanent/long-term conditions
- **Serious Injury:** An injury that results in hospitalization for more than 48 hours; or an injury that results in/involves: fractures (excluding simple fractures of fingers, toes or nose), concussion, internal injuries, second or third degree burns (or any burns affecting more than 5 per cent of the body surface), lacerations which cause severe hemorrhage, nerve, muscle or tendon damage, verified exposure to infectious substances or injurious radiation
- **Servicing and/or Maintenance:** Activities such as constructing, installing, setting up, adjusting, inspecting, modifying and/or servicing machines. This includes activities such as lubrication, cleaning or un-jamming of machines or equipment and making adjustments;
- **Stand-by person:** A competent person assigned to remain outside of, and in close proximity to, the confined space and capable of:
 - Being in continuous communication with and, if practical, to observe those inside;
 - Where necessary, initiate emergency response procedures; and
 - Operate and monitor equipment used to ensure safety during entry and work in the confined space.
- **Standard/Normal Work:** Is the **PLANNED** work that needs to be done to cover the operation needs
- **Tag out:** Means to attach tags or signs to the locks with written information about the nature of the lockout;
- **Unprotected edge:** Include roofs, landings, floor levels, walkways or platforms, excavations, etc. which do not have a form of edge protection to prevent people and/or objects from falling;
- **Urgent Work :**Work from concerned department that needs **IMMEDIATE** action due to the impact on operations;
- **Welding and Allied Processes:** Those processes such as arc welding, oxy-fuel gas welding, open-flame soldering, brazing, thermal spraying, oxygen cutting, and arc cutting;

- **Work at height:** Tasks that involve working from a height of 1.8 meters or more or working on height opened zone with no edge protection
- **Work Owner:** Entity responsible to finance the work and have full benefit from work results In some cases depending on work nature, the **WORK REQUESTER** can be **WORK OWNER**;
- **Work Supervisor:** Entity or person who is represent the Work owner on site and responsible to follow the work condition to ensure conformity with mitigation measures that were agreed on with **Work Permit Group** in work permit document;
- **Work Permit Group(WPG)** :Entity responsible to review work condition, identify the safety and operation risk related to work and determine the mitigation measures that need to be followed from work permit holder
- **Work Permit Organizer (WPO):** Is the contact person between the **PROJECT REQUESTER** and **Work Permit Group** who is mainly responsible to gather and exchange the required information related to work permit, normally the document control senior officer at Engineering and Maintenance Division playing this rule;

5. Important Abbreviation:

Word	Abbreviation
Work Permit Organizer	WPO
Work Permit	WP
Work Permit Group	WPG
Work Owner	OWN
Standard Work Permit	SWP
Urgent Work Permit	UWP
Airport Duty Manager	ADM
Airport Firefighting Rescue Department	ARFF

6. Roles and Responsibilities: The below described the main responsibilities of Work Owner/Work supervisor/Work Permit Group/Contractor, as per Work Procedure Ref. QAIA-CEO-TEC-PRO-PR-001. However depending of work type, additional responsibilities will be added to the below listed.

Entity/Person Title	Roles and Responsibilities
WORK OWNER OR representative	<ul style="list-style-type: none"> ▪ Provide comprehensive information on work nature and type to project department as below: <ul style="list-style-type: none"> ▪ Project/Work name ▪ Project/Work description ▪ Project/Wok location ▪ Project./Work owner name and contact details(name/phone number/email) ▪ Project/work supervisor contact details(name/phone number/email) ▪ List and type of tools or equipment used(if any) ▪ Drawing (if applicable)

	<ul style="list-style-type: none"> Project/Work duration(start & End date) <p>The above information shall be sent prior three working days from starting work to WPO either by completing Work Permit Form QAIA-COO-TEC-PRO-FO-001 and send the form to email address (WP@aig.aero) or by complete the above information and send it to wp@aig.aero</p> <ul style="list-style-type: none"> <u>Define the Work supervisor OR the Work owner representative that will follow the work with contractor</u> <u>Communicate and Ensure</u> that the contractor understands the control measures listed in WP and implements them on work site Stop the work and inform the Work Permit Organizer in case any change in work scope or duration; <u>Inform ADM (adm@aig.aero)</u> in case of any incident/accident with serious injury or damage to airport property or operation. Submit the security daily permit form prior 48hr from work start date to prepare the necessary security permit; In case of urgent work, <u>work justification email</u> should be sent to ADM(adm@aig.aero) OR concern Division Director as per work nature <u>Prior to start work- Inspect site</u> to demonstrate conformity with control measures as listed in Work permit document; <u>Regular Monitoring</u> to the work performance to ensure from conformity with control measures in The project supervisor in coordination with EHS team shall identify the expected health & safety hazards that might generate from subcontracted works to be able to determine the precaution measures needed to be taken to eliminate or reduce the hazard impact; The subcontractor or site manager shall report OR send email to project supervisor at AIG of any hazards and incidents took place in the workplace, to be able to take the appropriate actions. Implementing OHS risk controls and reporting to quality.department@aig.aero OR ehs@aig.aero and to the relevant workplace manager. Following safe work procedures and instructions as provided in the specific work permit.
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Entity/Person Title	Roles and Responsibilities
WORK OWNER OR representative (cont')	<ul style="list-style-type: none"> Follow the corrective actions needed to solve the nonconformity raised from WPG inspection. The evidence of corrective actions shall be sent to concern entity <u>Inform the WORK OWNER</u> in case any change of work scope/duration
WORK PERMIT GROUP	<ul style="list-style-type: none"> Worker permits shall comply with the requirements of the Ministry of Labor (Instructions to protect workers from risks) <u>Review</u> the safety and operation hazard related to work and <u>define the control measures</u> required; <u>Validate and permit after demonstrate that all the control measures listed in WP are implemented efficiency on site</u> <u>Conduct random Inspection</u> during work duration to demonstrate the conformity with work permit requirements

	<ul style="list-style-type: none"> ▪ Stop the work in case of violation to work permit requirements which impact airport operation or operation safety; ▪ In case of any work violation, Create Job request in CMMS(Computerized Maintenance Management Software) to PROJECT OWNER/REQUESTER to establish the corrective action needed
CONTRACTOR	<p>Contractor responsible to aware his/her team of the work hazard and control measures necessary to be followed onsite as per work permit document.</p> <ul style="list-style-type: none"> ▪ Aware workers or staff of work risk / control measures needed to be followed; ▪ Provide the workers or staff with appropriate Personal I Protective Equipment(PPE); ▪ Supply safety equipment or tools necessary during the work and as per WPG recommendation; ▪ Inform the Work supervisor in case of any major incident or accident with serious injury or impact on operation ▪ Coordinate with PROJECT/WORK SUPERVISOR in case of any change occurred in work scope; ▪ Respect work permit requirements and follow as per WPG recommendation

7. Instructions for Impact & Risk Assessment

7.1 **Purpose** To describe the procedure to identify impact & risk related to work/project bases on work natural.

7.2 Roles & Responsibilities.

- **Work Owner/Representative**
 - Depending on work nature and applicability, Work owner shall identify the work impact on Environment, Health and Safety
 - Identify the interested parties that affected from work
 - Evaluate the impact and identify the risk assessment with the appropriate control measures to reduce the work risk
 - Submit the impact assessment to work supervisor to review it prior send it to EHS team on ehs@aig.aero
- **EHS Team**
 - Review & approve on the work impact assessment
 - (if necessary) Support work owner to complete the work impact assessment
 - Review and approve on control measures

7.3 Risk Assessment instructions:

Severity scale	Environment impact rating	Work hazard rating
Negligible (E)	No environmental impact Zero impact Harm that is below the threshold of environmental nuisance and does not breach the applicable law is categorize as negligible. In addition to Zero complaint received from community	No personal injury, No ill health
Minor (D)	Environmental nuisance is: Any adverse effect on an amenity value of an area that: <ul style="list-style-type: none"> • Type of materials /waste or pollution sources consider it as low hazard with minor impact on environment; OR • Pollution source or area are controlled and treated safety; OR • Resources(water, Electricity, fuel) consumption are limited; OR • Impact to community around airport are limited and Zero 	Minor personal injury or illness

Severity scale	Environment impact rating	Work hazard rating
Moderate (C)	Material environmental harm but under control Environmental harm must be treated as material environmental harm if: <ul style="list-style-type: none"> • Toxicity of materials/waste on environment is limited; OR • Minor contamination on soil or ground water and under control; OR • Pollution sources or area control, third party support may need it; OR • Minor deviation from legal/ other requirements but under control • Resource consumption are high further action required to reduce it(if applicable);OR • Impact on community are under control and within acceptable limit 	Serious personal injury or illness
Major (B)	Environmental harm and corrective actions identified Environmental harm must be treated as serious environmental harm if: <ul style="list-style-type: none"> • The Toxicity level of materials/waste on environment is high which contain components, that change the characteristic of water/soil such as radioactive materials/ oil/grease; OR • Contamination on soil or ground water and remedial actions identified; OR 	Multiple serious injuries, Multiple serious illness, Permanent disability

	<ul style="list-style-type: none"> Partial deviation from legal and other requirements but corrective actions identified and in process; OR Complaint received from community on pollution/nuisance generated from Airport Operation 	
Catastrophic (A)	A high level of serious environmental harm and no actions <ul style="list-style-type: none"> Extremely harm environment with negative impact to the health or safety' of human which is required to change or modify the existing environment to be more safe; OR Major deviation from legal and other requirements and no actions; OR Major impact on community which require compensation/investment 	Fatality

Probability scale	Environment- Probability rating	Work hazard-Probability rating
Extremely improbable (1)	> 1 per every 20 to 100 years	Likely to occur many times (has occurred frequently)
Improbable (2)	>1 per every 5 to 20 years	Likely to occur sometimes (has occurred infrequently)
Remote (3)	>1 per every 1 to 5 years	Unlikely to occur, but possible (has occurred rarely)
Occasional (4)	>1 per month to 1 per year	Likely to occur sometimes (has occurred infrequently)
Often (5)	>1 per day to 1 per month	Likely to occur many times (has occurred frequently)

Risk Assessment Matrix						
Risk Probability		Risk Severity				
		Catastrophic A	Major B	Moderate C	Minor D	Negligible E
	Often (5)	5A	5B	5C	5D	5E
	Occasional (4)	4A	4B	4C	4D	4E
	Remote (3)	3A	3B	3C	3D	3E
	Improbable (2)	2A	2B	2C	2D	2E
	Extremely improbable (1)	1A	1B	1C	1D	1E

8. Safety Control Procedures

8.1.1 Procedure #1 Hot Work:

8.1.1.1 Purpose

The purpose of this procedure is to eliminate the risk of fire and / or explosion occurring as a result of hot work (Grinding, Welding, Thermal or Oxygen Cutting or Heating, and other related heat producing or spark producing operations), performed outside any site designated workshops

This procedure shall apply to all personnel who carry out hot work and introduce ignition sources outside of the designated hot work area (workshop).

8.1.1.2 Responsibilities under Permit:

Entity or concerned person	Roles and responsibilities
Work owner OR representative	<ul style="list-style-type: none"> • Ensure obtaining hot work permit signed from Facility Management Senior Officer-Organization & Procedure Section-Project Department; • Ensure availability of firefighting equipment on site • Inspect work site prior to starting work to demonstrate the implementation of control measures required as per hot work permit requirements; • Regular inspection on work site during work duration to demonstrate conformity to hot work permit requirements • Stop work in case of work violation, which might have negative impact on operation safety. • Follow any corrective actions raised from Project Technical Supervisor and ensure implementation on site • Isolate the area and isolate the tankers of any flammable materials. • Those who work have a responsibility to comply with the instructions and report any expected risks. • Provision of equipment required to facilitate workflow (Quick access to Emergency contact , camera controller)
Work Permit Group	<ul style="list-style-type: none"> • Review work specification and define accordingly the relevant control measures needed • Validate the work permit and give the permission to start work • Instruct work owner/supervisor of any hazard or flammable materials that are required to be isolated • Send external notification email to any affected entity
OPS-TER-Technical supervisor	<ul style="list-style-type: none"> • Advise the work owner/supervisor with the right time to start work • In case of urgent work and during shift B/C/weekend/holiday, send notification email to relevant department or entity as per WP instructions
Apron Officer-Airside Operation Department	<ul style="list-style-type: none"> • If work location at Airside, monitor the work to ensure safety condition during hot work

	<ul style="list-style-type: none"> • If work during shift B/C/weekend/holiday, coordinate with ARFF to be on site during hot work period
Contractor (permit holder)	<ul style="list-style-type: none"> • Provide his/her staff with appropriate PPE as per work need • Communicate the safety risk and control measures required to his/her staff • Inform the work supervisor of any change in work duration which require sending another work notification • Call ADM (0798302555) immediately in case of any incident

8.1.1.3 Procedure #1:

- Hot work permit shall be sent to **Project department- Facility management senior officer** before 24hr(this duration might change as per work nature and condition);
- In case the work is in Airside location, the Airside Operation shall be informed before 24hr (this duration might change as per work nature l and condition)to do the required arrangement with handlers and airlines;
- If the hot work area near the flammable or hazardous materials or equipment. The contractor is responsible to isolate the work area with fire proof partition;
- Necessary gas tests shall be performed for explosiveness, toxicity or other hazardous conditions ;
- The welding/cutting equipment shall be inspected for the following:
 - ✓ Cracks, splits or loose connections in welding leads before use or Red Tag;
 - ✓ Leaks in connection to oxygen or acetylene bottles, hoses and valves.
- Fuel transfer operations shall not be conducted simultaneously with an open during the Hot Work process;
- Hot Work permits will issue for a maximum of 12 hours of continuous work, if the work needs more time, work permit shall issue.
- When defining the hot work, work supervisor must follow the hierarchy of control to reduce the risk of harm or injury occurring as a result of hot work could include:
 - Eliminating hot work in outside areas;
 - Substituting welding techniques (e.g. oxygen-acetylene and ARC welding);
 - Improving workplace design and layout (i.e. removing or relocating flammable items in workshops);
 - Providing PPE e.g. spark/fire retardant clothing and fire extinguishers; Developing and training employees in HWP

8.1.2 Procedure #2 Lockout Tag out:

8.1.2.1 Purpose

Lockout/tag out standard is designed to prevent injury due to unexpected energizing or start-up of machines or equipment, release of stored energy during servicing and maintenance.



or the

8.1.2.2 Work owner responsibilities

- To be responsible for their own health and safety and the safety of anyone who may be affected by their acts /work
- Never remove the locks belonging to another employee or contractor
- Assist in the development of lockout / tag out procedures for machines, equipment or processes in their area
- Contact and sign-in with the appropriate department prior to commencing their work.

8.1.2.3 Procedure #2

- Verify the location of energy isolating devices and the magnitude of the energy
- Notify the affected employees;
- De-activate the energy isolating device;
- Lock out the energy isolating device;
- Dissipate or restrain residual or stored energy
- Verify the isolation by attempting to start or by testing
- Perform the service
- Ensure that nonessential items have been removed and that the equipment is undamaged
- Check the work area to ensure that all employees have been safely positioned or removed from the area
- Verify that the controls are in neutral
- Remove the lockout devices and reenergize the machine or equipment
- Notify affected employees
- The person who applies the lock and/or tag must also be the one who removes it.

8.1.3 Procedure #3 Working at Height:

8.1.3.1 Purpose

To define the principles and minimum requirements for managing work at height hazards and the processes by which elevated working grounds and working at heights are safely controlled

8.1.3.2 Definition:

World	Definition
Full Body Harness	A harness designed with straps that will secure around the employee in a manner that will distribute the force of a fall over at least the thighs, pelvis, waist, chest and shoulders with the means of attaching it to other components of a personal fall arrest system
Lanyard	A flexible line, rope or strap, which generally has a connector at each end for attaching to the body harness and a shock absorbing/deceleration device and anchor point
Access equipment	such as scaffolds, ladders, MEWPs,..., used when working at height and must be inspected regularly for damages

8.1.3.3 Responsibilities under Permit:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> Ensure that work at heights risks have been identified and controlled for the contract prior to work commencing; Ensure that contractors are responsible for and comply in full with this procedure; Ensure that the contractors team are fully trained and are aware of their roles and responsibilities when working at heights; Ensure that all fall protection equipment to be used by contractors have been maintained under the approved inspection regime; Ensure that the work at height permit approved and signed from authorized person prior to starting work; Ensure adequate resources (time, equipment, and personnel) are allocated for the effective implementation of working at height procedure. Call ADM(0798302555) in case of any incident;
Facilitation officer-work inside terminal	<ul style="list-style-type: none"> Random Inspection on work site to ensure appropriate work isolation and safety awareness signage on place Inform the ADM in case of any work violation which have risk on work safety
ADM	<ul style="list-style-type: none"> In case urgent and during shift B/C/weekend, send notification email to relevant entity as per UWP instructions Inform the WO of any violation which might require corrective action
Apron officer-Airside Operation	<ul style="list-style-type: none"> Monitor work and ensure safety control measures on site Inform the ADM of any work violation

8.1.3.4 Procedure #3:

Case	Procedure
General	<ul style="list-style-type: none"> ▪ The Work supervisor and the person(s) performing the task must fill out the permit; ▪ Eliminate the Height Access: Eliminate the need to access the location at height (relocation of an item or device from a position at height to ground level). ▪ The use of personal protective equipment that reduces the severity of a fall (Safety Boots, Helmet and gloves are mandatory) . ▪ Avoid work at condition that increase probability of being fall such Strong wind . ▪ All requirements of the permit must be met prior to start of work; ▪ Work at height after sunset is forbidden except if ADM accept due to operation activities need, in this case ADM shall nominate one person either apron officer or facilitation officer to be with workers during the work period; ▪ Personnel working in 1.8 meter or more level shall be protected from falling by using fall protection equipment such as a guardrail system, fall arrest system or full body harness safety; ▪ Stairways, ramps or other walkways which around Two meter or more above shall be protected by a guardrail system on all sides; ▪ Never tie-off the lanyard or lifeline safety where the line passes over or around sharp or rough edges. Sharp or rough edges can damage or reduce the strength of the lanyard or lifeline ▪ A training shall provide for each employee who may need to work at height. The Training shall enable each employee to recognize the hazards of falling; ▪ Safety warning signs shall post it below the working area to avoid the risk of falling objects on passengers/employees
If the portable ladder is required to be used	<ul style="list-style-type: none"> ▪ Portable ladders shall have non-slip devices fixed to the base of each ladder; ▪ The floor around the foot of each ladder shall be free from all obstacles; ▪ Ladders shall be securely tied off or supported below at all times when in use; ▪ Ladders shall not be left unattended in a location that is readily accessible and frequented by the public; ▪ Use the ladder only to perform short work period. ▪ It is better to use a ladder made of insulated material to avoid electricity accidents ▪ Only one person shall be on the ladder at any time.
When Mobile Work Platforms may be used to access work areas	<ul style="list-style-type: none"> ▪ Mobile platforms should be constructed to the relevant standards and deemed suitable for the task at hand based on a risk assessment; ▪ Things to follow when installing the platforms :

	<ul style="list-style-type: none"> ✓ Working time ✓ Number of employed person ▪ Ensure that the work platforms are safe to bear the weight of the workers and any other equipment . ▪ Mobile platforms that are mounted on wheels shall have all wheels or travel device secured whilst the platform is in use; ▪ Mobile platforms should have handrails that extend the full length of the access and work area; ▪ If work is to be carried out on the platform, then a safety chain shall be erected to restrict access to the ladder section of the platform whilst work is being performed
Using crane /Man lift (MEWP) Minimum OHS requirements	<ul style="list-style-type: none"> ▪ Crane /Man lift should be maintained regularly, have a current Certificate Inspection within the last six months and be safe to use. ▪ The MEWP must only be operated by trained and competent persons. ▪ Crane /Man lift must never be moved in the elevated position. ▪ It must be operated on level and stable ground with consideration being given for the stability and loading of floors. ▪ The tires must be properly inflated and the wheels immobilized. <ul style="list-style-type: none"> ▪ Outriggers should be fully extended and locked in position. ▪ It is not allowed to exceed the load limits of the Man lift ▪ The Man lift used shall be in good condition, maintained and operated according to the manufacturer's instructions. ▪ The brakes of the Man lift shall be engaged while works are being performed and it shall not be left unattended at all (Never leave the keys inside when not operated) ▪ lifting area must be barricaded with barriers ▪ person/s (worker/s) using Man lift must Wear full body harness clamped to the winch container/basket and safety helmet, reflective vest) ▪ Due care must be exercised with overhead power supplies, obstructions and adverse weather conditions. ▪ Warning signs should be displayed and barriers erected to avoid collisions. ▪ Drivers of MEWPs/man lift must be instructed in emergency procedures, particularly to cover instances of power failure. ▪ All workers on MEWPs should wear full body harness, clamped rigidly on the container / basket.

8.1.4 Procedure #4 Confined Space:

8.1.4.1 Purpose

The purpose of this procedure is to define and manage all activities related to working with a confined space to protect Airport International Group employees and contractors from any entry into and work within confined spaces hazard.

8.1.4.2 Responsibilities under Permit:

Entity	Responsibilities
Work Owner & Contractor	<ul style="list-style-type: none"> Details in work permit document the work required in confined space to identify the impact on airport operation and specify the related hazard; If the work location inside the Airside area. A coordination with Airside operation and Airside Safety section required to complete the Safety Impact Analysis Form(if required) ref. QAIA-COO-QSM-FO-003; Ensure to have the confined space entry work permit approve (ref.QAIA-COO-TEC-PRO-FO-024) prior start work; Provide the workers/staff with appropriate PPE Prior to starting work, (if necessary) Do the required gas test to ensure that confined space environment safe for the workers Inspect the site to ensure conformity with work permit requirements; To be responsible for their own health and safety and the safety of anyone who may be affected by their acts /work Check the safety equipment's prior enter to confined space and inform the project supervisor of any damage or failure Ensure that the site supervisor is aware of the hazard and control measure required as per permit document. Deliver training to employees to provide them with the skills and knowledge to work and enter at confined space safely with the minimum risk Call ADM(0798302555) in case of any incident

8.1.4.3 Procedure #4:

- Eliminate as much as possible the work at confined space during night unless it is urgent work;
- Confined space entry permit work ref.QAIA-COO-TEC-PRO-FO-024 shall be signed prior the start of work within 24hr(this duration might change as per work nature and condition);
- Respiratory equipment shall be tested to ensure effective operation **Prior to entry** to confined space;
- Gas test in confined space shall be tested **Prior to entry** and after each break or interruption of work;
- After conduct the gas test, if natural ventilation is inadequate, mechanical ventilation might be used to ensure movement of fresh air in the permit space. The Ventilation shall be continued until the gas test results are within acceptable limit;
- The atmospheric checks shall include the following:
 - Oxygen: Minimum 19.5% and Maximum 22 %;
 - Flammable or Explosive Vapors : 0% of LEL without respiratory equipment and Maximum 10% with respiratory equipment, if Above 10% rescue purpose only with respiratory equipment
- If conditions require a **Hot Work Permit** it shall be issued in accordance with Hot Work procedure #1;
- A safe means of access and exist shall be provided at all times when the permit space is entered/exited from above or below grade. This could include a portable ladder or scaffolding that is properly installed and secured for climbing;

- When entrance covers are removed, the opening shall be promptly guarded by temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space;
- All lighting equipment that is required for working within the permit space shall be explosion-proof
- All electrical equipment shall be properly grounded or bonded to prevent static discharge (sparks);
- Fire extinguisher(s) and other firefighting equipment shall be available at the work site if flammable or combustible materials are present. The extinguisher shall be inspected to confirm that it is in good working order;
- Supervision: To assign a stand by person to monitor the work area and to assure a quick response in case of any emergency.
- Stand-by personnel must remain on duty at the entrance to each space entered. This person shall have
 - No other duties that would distract him from monitoring the entrants or the space
 - Have knowledge and know-how using respirators.
 - Keep the place adjacent to the confined place free of all obstacles.
 - Seek help from emergency and rescue teams in case there is need to rescue and remove anyone from inside the enclosed space.
 - The absence of any work may cause a fire around the closed place
 - Checking the direction of air, temperature, humidity and weather conditions periodically.
 - Provides a convenient way of communicating with people outside the enclosed space.
- AIG have the right to terminate the permit and instruct all entrants to evacuate the permit space if the conditions are not allowed under the permit OR if the permit requirements are not followed;

8.1.5 Procedure #5 Manual Handling:

8.1.5.1 Purpose

The purpose of this procedure is to identify hazards initiated from manual handling to assess the associated potential risk on employees' health from manual handling tasks and to reduce and eliminate these risks.

8.1.5.2 Responsibilities:

- **Work Owner** shall be responsible to aware the contractor of the safety precaution measures that should be taken when staff need to have manual handling;
- Inform the ADM of the incident occurred during the project duration
- **Contractor:** Shall :
 - Eliminate the manual handling as much as possible by using the mechanical handling tools;
 - Aware his/her staff of the safety precaution measures that should be followed;
 - Report to project supervisor any incident occurred which have serious staff safety injury

- Provide the staff with right personal protective equipment and report to project supervisor for any damage of safety equipment's tool.

8.1.5.3 Procedure#5:

- Before manual lifting is performed, a risk assessment must be completed. The assessment must consider size, bulk, and weight of the object(s), if mechanical lifting equipment is required, if two-man lift is required, whether vision is obscured while carrying and the walking surface and path where the object is to be carried
- Employees must use manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, where they can be used without causing additional risk. Use of provided equipment by employees must be enforced by all supervisors;
- Maximum weight should not exceed 25Kg;
- If lifting above shoulder height (stocking high shelves for example) then should not lift items heavier than 10kg;
- Ensure that there are no sharp, hot or cold edges which could cause injury.
- Ensure that walkways are free from obstructions.
- The Load should be kept as near as possible to the body trunk to reduce strain and should not be of such size as to obscure vision.
- load should ideally be lifted from no higher than knee-height to no higher than shoulder height and make sure you are standing directly in front of the item you wish to lift;
- Position your feet evenly (shoulder width apart);
- Take hold of the item firmly with both hands;
- Keep your back straight and stand up tall;
- Distribute the weight evenly - make sure you are not unbalanced;
- Keeping the items close to your body, begin to stand up by straightening your legs
- When placing the item down, bend your legs and stand up slowly. Do not move quickly;
- Items which are pushed or pulled should be as near to waist level as possible;
- Carrying distances should be minimized, especially if the task is regularly repeated;
- Repetitive tasks should be avoided whenever possible;
- If the load is raised to a high level, it is recommended that it carry out in two stages.
- Take enough rest to refresh your body and soothe your muscles .
- Avoid handle loads which are beyond their individual capability. Assistance must be sought where this is necessary.
- Staff/workers undertaking lifting of carrying will be given suitable instruction, and information to undertake the task with minimum risk.
- PPE shall be used while carrying out manual handling activities. If the use of PPE restricts safe and easy movement, this should be reported;

8.1.6 Procedure #6 Electrical Safety Procedure:

8.1.6.1 Purpose:

The purpose of this procedure is to define and manage all activities related to electrical work to prevent injury, death or property damage resulting from live electrical work at site

This procedure applies to all electrical work performed by Airport International Group employees and contractors at Queen Alia International Airport premises that falls under AIG control.

8.1.6.2 Roles & Responsibilities:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> Identify the type of electrical work and equipment used in work permit document; Coordinate with approved person prior start and in case of change in work scope; Communicate the electrical hazard associated with electrical work to contractor and staff; Conduct regular inspection onsite to ensure conformity with electrical safety procedure; Call ADM(0798302555) in case of any incident Stop work in case of any hazard issued from electrical work that have negative impact on operation or staff safety; Follow the corrective action to solve any nonconformity raised during the work

Entity	Responsibilities
Contractor	<ul style="list-style-type: none"> Communicate the hazard raised from electrical work to staff to be aware of hazard and control measures; Ensure that the electrical equipment or tools used in work are safe and test appropriately; Provide appropriate PPE to staff and ensure using these PPE during the work; Provide the necessary safety sign at worksite to aware public around the work location from any hazard; Being familiar with relevant safety instruction such as Logout-Tag out instruction, emergency and evacuation procedures, the location of first aid and emergency personnel and equipment to respond and act in an appropriate time in case of any electrical accident. Call ADM(0798302555) in case of any incident

8.1.6.3 Procedure#6:

- All workers should check the physical condition of electrical equipment they use, including the lead and plug connections, prior to starting work. If a hazard is identified prior to or during use the equipment should be turned off and isolated
- Only qualified and trained personnel should repair or install electrical equipment or work around live electrical circuits;
- Ensure that the electrical equipment are dry and clean prior using it;
- De-energize all circuits before beginning work to prevent the electrical circuits from being inadvertently energized;
- Don't withdraw a plug from a socket by pulling the cable;

- Before touching a person suspected of suffering from electrical shocks, switch off electricity supply;
- In case of electrical fire, switch off electricity and don't use water or foam
- Practice the use of fire extinguishers that is suitable for use in electricity fires, such as powder extinguishers, carbon dioxide extinguishers, with no use of water at all, because water is a good conductor of electricity.
- Worker/staff shall not wear rings, watches or other similar metallic objects while working on energized electrical equipment;
- Use suitable protective equipment including rubber gloves, mats and blankets to provide insulation from other elements, which are energized or grounded;
- Do not render electrical safety switches inoperative by removal, modification or destruction;
- Use non-conductive ladders when working on or near electrical equipment or conductors. The use of metal ladders is prohibited;
- Never use defective electrical equipment or extension cords. A periodic inspection should be made of all extension cords in stock. Never use a cord that has been taped up or repaired;
- Report all defective electrical equipment to supervisor;
- In case install electrical underground cable, excavation permit to work shall be taken
- Avoid using metal ladders or non-insulated hand tools when working in electrical appliances
- Ensure that all stationary and mobile electrical devices are connect it to the ground by wires, so that the wires do not carry an electrical current.
- Be way from exposed wires and corroded electrical parts, replace them immediately, or cover them with insulating tape until they are replace.

8.1.7 Procedure #7 Chemical Handling Safety:

8.1.7.1 Purpose:

The purpose of this procedure is to ensure that all risks associated with using chemicals are controlled and managed to minimize their risks.

8.1.7.2 Roles and Responsibilities:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> ▪ Identify the chemical type that needs to be used during the work and ensure providing MSDS; ▪ Monitor the contractor performance to ensure conformity with safety control procedure ▪ Call ADM(0798302555) in case of any incident; ▪ Inform concerned department as per requester type details in section 8.1.1.2 in case of change in type of chemical materials used in work.
Contractor	<ul style="list-style-type: none"> ▪ Ensure that the person who is working with chemical has appropriate awareness OR training; ▪ Provide workers with appropriate PPE; ▪ Take appropriate action to comply with chemical safety control procedure; ▪ Perform regular inspection to check chemical storage condition ▪ Call ADM(0798302555) in case of any incident

8.1.7.3 Procedure #7:

- Use appropriate protective clothing and equipment (glasses, aprons, boots, gloves, etc.) as required or as necessary
- Ensure that the container closed and sealed prior start the handling process
- If the clothing becomes contaminated by the chemical, shower or wash the skin areas exposed
- Do not take contaminated clothing home to be laundered because by doing so, it could expose family members to the contaminant
- Never take food into the work area where chemicals are being used or stored
- When you have spillage use sand or spill kits to control it.
- Keep the workplace clean to reduce the risk of contamination
- In case incident during chemical transporting process from/to Airport, the transporter need to implement the spill response procedure to eliminate the impact to the community around the airport, otherwise need to call civil defense for further assistance.
- Know what to do in an emergency: If there, is a leak or spill, keep away from the area, unless you know what the chemical is and how to safely clean it up. Know where emergency protective equipment and supplies kept and how to use them.
- When chemicals contact the eye, promptly flush eyes with clean fresh water for prolonged period (minimum of 15 minutes) and seek medical attention;
- Labels and chemical safety information labels (MSDS) indicate the degree of chemical hazardous and precautions should be followed to avoid harm, and should be made available to all worker it contain several information such as :
 - ✓ Name of chemical material
 - ✓ Physical property for this material (color, boiling point)
 - ✓ First aid in case of leakage or spillage
 - ✓ Physical and chemical hazards of matter
 - ✓ Chemical transfer method
 - ✓ Method of disposing chemical material
- In case of skin contact, promptly flush the affected area with water (minimum of 15 minutes), remove contaminated clothing and seek medical attention;
- Try to use less dangerous materials.
- Do not smell or taste chemicals; do not eat, drink, smoke, when in direct contact with chemicals. Wash hands before and after conducting these activities.
- Minimize adverse impact from chemical transport on community around airport.
- Chemical storage should be minimized in site, but in case it is necessary to store chemical in site the following requirements need to be followed:
 - ✓ Protect the chemical container from weather condition(e.g. sun, rain)
 - ✓ Ensure that the store area is secure;
 - ✓ Segregate chemical containers as per MSDS requirements (Isolate flammable from other materials)
 - ✓ Don't store container on ground directly, but keep minimum 5-10 cm space and use the secondary contamination tank (size of secondary contamination tank shall be 110% of container size);
 - ✓ Keep the storage/handling and surrounding area free of combustible materials, waste, refuse and vegetation for distance at least three meters;
 - ✓ Chemical container shall be properly labelled;

- ✓ Don't store more than two container above each other;
- ✓ Ensure availability of appropriate fire extinguisher on site;
- ✓ Install safety Sign (e.g. CHEMICAL STORE AREA/NO SMOKE/NO MOBILE);
- ✓ Maintain the storage temperature of the stored materials according to their category
- ✓ Containers for chemicals shall be made of suitable materials that are not likely to affect it by the substance they contain.
- **Precaution measures should be taken while storing compress gas cylinder, as below:**
 - ✓ Store area must be clear from any ignition sources;
 - ✓ Flammable gas cylinder must be stored vertically;
 - ✓ Non-flammable cylinders can be stored horizontally in an approved rack;
 - ✓ If an oxidizing gas is stored (e.g. oxygen), keep at least three meter away from other flammable gas cylinder;
 - ✓ Cylinder shall be secured by chain, cable, or other suitable means to prevent falling;
 - ✓ Ensure availability of earthing ground to protect the storage area from any statistic electronic results due to outside weather condition or any other reason;
 - ✓ keep cylinder stocks to the necessary minimum for your volume of storage area;
 - ✓ Never pick up a cylinder by its protective cap;
 - ✓ Cylinders should be stored away from corrosive chemicals;
 - ✓ Empty cylinders should be marked and segregated from full ones; and
 - ✓ Keep main valves closed when the cylinder is not in use or connected for use, and ensure that the protection cap on the cylinder at all times when the cylinder is not in use.
 - ✓ Never use oil or grease as a lubricant on valves or when attached to oxygen cylinders.
- **Precaution measures should be taken while handling chemical container, as below:**
 - ✓ Person who handle hazardous materials should be trained in hazardous material handling and management;
 - ✓ Use the PPE during the handling process;
 - ✓ Ensure that there is no critical physical damage on container from outside to avoid any leakage during handling process;
 - ✓ Ensure that the container is well sealed and closed properly;
 - ✓ Tie containers with each other to avoid any sudden movement which may cause container to fall;
 - ✓ Don't transport hazardous materials inside vehicles, if necessary to do so ensure using secondary container to keep the chemical container inside it.
 - ✓ Ensure availability of absorbent materials or spill kits inside the vehicles to control any spill that may occur;
 - ✓ Ensure availability of appropriate fire extinguisher, to control fire that may occur;
- **Precaution measures should be taken while handling compress gas cylinder, as below:**
 - ✓ Person who handle compress gas cylinder should have specific training dealing with compress gas handling and management;
 - ✓ When necessary to transport cylinder from location to another due to work need, it should be tied and secured with vehicles frame to prevent any movement;
 - ✓ Use the PPE during the handling process;
 - ✓ Don't drop or bang against each other during handling process;

8.1.8 Procedure #8 Usage of Mechanical Tools:

8.1.8.1 Purpose:

To clarify the general precaution measures when using any mechanical tool to guarantee protections and safety for contractors and staff.

8.1.8.2 Roles and Responsibilities:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> Identify the type and purpose of mechanical tools that need to be used in work permit document;
Contractor	<ul style="list-style-type: none"> Test equipment prior starting work to ensure working condition; Provide the worker with appropriate PPE and ensure using them; Provide appropriate isolation equipment to isolate the working area and equipment ; Inform the project supervisor in case of serious staff injury incident;; To be responsible for their own health and safety and the safety of anyone who may be affected by their acts /work Reading and familiarizing themselves with the machine specification and requirements they are required to use Use the right Personal Protective Equipment Call ADM(0798302555) in case of any incident

8.1.8.3 Procedure#8:

Work type	Procedures
General	<ul style="list-style-type: none"> Safety glasses, or appropriate goggles / face shields and safety shoes are required during work; All the tools and accessories must be kept back at their relevant places. Placing them anywhere will lead to chaos and inefficient working The gangway through the workshop must be kept clear. Any grease or oil spillage must be cleaned on a regular basis Machines should be sensibly placed to avoid overcrowding and suitably anchored to vibration. All the tools and accessories must be kept back at their relevant places. Placing them anywhere will lead to chaos and inefficient working Do not operate any item of equipment unless workers are familiar with its operation Avoid excessive use of compressed air to blow dirt and never use compressed air guns to clean clothing, hair; Do not attempt to remove foreign objects from the eye or body before ensuring that the hand is clean; Machines must be shut off when cleaning, repairing, or oiling; Do not wear ties, loose clothing, long sleeves, jewelry, gloves, etc. around moving or rotating machinery; Long hair must be tied back or covered to keep it away from moving machinery; Hand protection in the form of suitable gloves should be used for handling hot objects, glass or sharp-edged items; Do not work in the shop if tired, or in a hurry;

	<ul style="list-style-type: none"> ▪ All machines must be operated with all required guards and shields in place; ▪ A brush or gentle air blasts should use it for removing chips, shavings, etc. from the work area. Never use your hands; ▪ A hard hammer should not use to strike a hardened tool or any machine part. Use a soft faced hammer. ▪ Workshop area should be clean and free from dirty piece of equipment; ▪ Keep the floor around machines clean, dry and free from trip hazards; ▪ Food and Smoking is not allowed while working with mechanical tools; ▪ Heavy sanding and painting should only be done in well ventilated areas, preferably outside ▪ The power cords and plugs should check it on portable tools before using them. ▪ When working in a confined space, always have someone present to render assistance in case of emergency, and follow all other confined entry procedures before entering the confined space. ▪ The need to provide a first aid box in the workplace in order to deal with minor injuries quickly
Incase necessary to work with DRILL	<ul style="list-style-type: none"> ▪ Always hold work in a vise or clamp to the drill table. NEVER hold it by hand; ▪ Remove the waste generated from drill work with brush, NOT with the hand; ▪ Don't use a dull or cracked drill. Inspect the drill before using it; ▪ Don't drill with too much pressure; ▪ Clamp the work piece down or secure it in a vice before applying the power drill to it. ▪ Avoid Baggy Clothing, Loose sleeves, jewelry and hair can be a hazard when you are operating a power drill. ▪ AVOIDING ELECTRIC SHOCK, Look for breaks, exposed wires, and looseness at the plug or housing connection ▪ Do not allow anyone to use an electric drill that is not properly trained ▪ Always wear eye protection. ▪ Always clean drill sleeve and the spindle hole before mounting; ▪ Never clean the machine while it is in motion; ▪ Let the spindle stop of its own accord after turning the power off. Never try to stop the spindle with your hand.
Incase necessary to work with GRINDER	<ul style="list-style-type: none"> ▪ Abrasive wheel machinery shall not be operated without the appropriate guards in place; ▪ Avoid accidental starting. Be sure switch is off before plugging in. ▪ Carry out a test run after every tool change, ensuring that you are holding the angle grinder firmly with both hands ▪ Do not attempt to touch the moving tool due to risk of injury ▪ Check the Speed, The speed of the grinder must always monitor. ▪ Carry out maintenance of grinders at regular intervals of time and as stated by the manufacture ▪ Never use a wheel that drop or receive a heavy blow, even though there may be no apparent damage. Such wheels may be weakened or unbalanced enough to fly apart on startup; ▪ Do not grind on side of wheel unless wheel is specifically designed for such use; ▪ If a magnetic chuck is being used, on the surface grinder, make sure it is holding the work securely before starting to grind;

Work type	Procedures
Incase necessary to work with SAW	<ul style="list-style-type: none"> Stand to one side of the work being fed through the saw. Never stand directly in line of the work; Use the proper blade for the material and the type of cut; Inspect the blade before using it. Make sure it is the proper blade and make sure the blade is sharp and free from cracks or defects; Never allow your fingers to get near the blade when sawing. Use a pusher stick to rip narrow pieces of stock; If the piece of material that you are cutting is too large for one person to handle safely, get someone to assist in large work; Never reach over the saw to obtain something from the other side; When shutting off the power, never attempt to stop the saw by shoving an object, piece of work, or anything else against the blade. Make sure the saw has stopped completely before leaving work area; Never make any adjustments or measurements while the saw is in motion, Always turn off the power and make sure that the saw has made a complete stop before making any necessary adjustments or measurements; Do not allow material to collect on or around the table saw. Sweep up all sawdust and material scraps regularly while working to minimize chances of slipping or stumbling.
Incase necessary to work with LATHE machine	<ul style="list-style-type: none"> Make sure that the chuck is securely tightened onto the lathe spindle; When removing or installing the chuck do not use machine power; Don't run the machine faster than the proper cutting speed; Do not grasp or touch chips or turnings with fingers; Stop the machine before taking measurements;
Incase necessary to do WELDING work	<ul style="list-style-type: none"> Inspect all welding equipment to be used, prior to each use, for possible damage; ALWAYS wear a proper face shield ,wear close-toed shoes ,wear a long sleeved, non-flammable shirt. And wear proper welding gloves To avoid electrical shock, avoid work in damp condition , wearing wet cloths. Respirators protect you from fumes and from lungs diseases due to oxides and gases that the welding process creates. Your respirator must be suitable for the work you are carrying out Avoid handling oxygen bottles with greasy hands, gloves or rags; Do not weld in or near a wet area or with wet gloves/hands; Remove all flammable materials from the work area; Do not wear clothing or gloves that have been exposed to flammable liquids Don't See the Light. It takes only a moment of exposure to a welding arc's rays for unprotected eyes to experience "arc flash," a painful condition that may not appear until hours after the exposure Never weld in the same area where degreasing or other cleaning operations are performed; Keep suitable fire extinguishing equipment nearby and know how to operate it.

	<ul style="list-style-type: none"> ▪ Shut off the cylinder valves when the job is completed; ▪ Utilize all protective equipment and clothing. Do not weld with any part of the body uncovered ▪ Never weld inside drums or enclosed spaces without adequate ventilation, or, the use of respirators ▪ Check the ventilation system before starting to weld, welding fumes should not be allowed to get into the rest of the shop working areas. ▪ Never cut or weld any container that has held explosive or flammable materials; ▪ Do not weld on painted, galvanized or greasy, oily metals.
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8.1.9 Procedure #9 Noise Management:

8.1.9.1 Purpose:

The purpose of this procedure is to assist in the control of workplace noise and the reduction of noise related to health problems;

8.1.9.2 Roles and Responsibilities:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> ▪ Identify the type and work location of equipment with high noise exposure limit in work permit document; ▪ Monitor the contractor performance to ensure conformity with safety control procedure ▪ Call ADM(0798302555) in case of any incident; ▪ (if necessary) Coordinate with AIG-EHS senior officer (ehs@aig.aero) to measure the noise level.
Contractor	<ul style="list-style-type: none"> ▪ Test equipment prior starting work to ensure working condition; ▪ Ensure noise protection controls are maintained at all times ▪ Report items of plant or work areas that could be a noise risk ▪ Provide the worker with appropriate PPE and ensure using them; ▪ Provide appropriate isolation equipment to isolate the working area and equipment; ▪ Inform the project supervisor in case of serious staff injury incident; ▪ Call ADM(0798302555) in case of any incident

8.1.9.3 Procedure # 9:

Measures should be taken to prevent or imitate noise to protect workers, So that the intensity of noise and exposure duration does not exceed the allowable limit

- Replace noisy equipment or machinery with quieter equipment or machinery, OR replace noisy processes with quieter ones;
- Modify the way in which the equipment operates so that it generates less noise: e.g. operate the equipment at a slower speed, improve lubrication, balance rotating parts and relocate equipment;
- Segregate noisy areas through place sound absorbent material or barriers and covers around noisy equipment
- Provide the workers with appropriate personal hearing protection

- Continuously measure the noise level at worksite to determine the exposure limit and identify the exposure time;
- Periodic hearing check for workers who deal directly with noise
- Isolation: Removing the hazard from the employee or the employee from the hazard
- plan and coordinate jobs to reduce employee exposures

8.1.10 Procedure #10 Soil Contamination Precaution Procedure:

8.1.10.1 Purpose:

The purpose of this procedure is to describe the measures that need to be taken to reduce the possibility of soil contamination and the actions that need to be taken in case soil contamination.

8.1.10.2 Roles and Responsibilities:

Entity	Responsibilities
Contractor	<ul style="list-style-type: none"> ▪ Treat any spillage occurred during work ▪ Collect the contaminated materials from spillage in separate containers(do not mix with other wastes); ▪ Provide the worker with appropriate PPE and ensure using them; ▪ Call ADM(0798302555) in case of any incident

8.1.10.3 Procedure #10:

- Control measures shall be followed to prevent soil contamination as below:
 - ✓ Avoid storing containers containing chemical materials outside without secondary contamination tank;
 - ✓ It is forbidden to clean directly on soil any mechanical tools or equipment that might contain residual of chemical or hydrocarbon materials;
 - ✓ It is forbidden to paint any mechanical tools or equipment directly on soil;
 - ✓ It is not allowed to install underground storage tank without taking permission from AIG-Concern department by sending request to wp@aig.aero
 - ✓ It is not allowed to mix domestic wastewater with industrial wastewater and discharge it directly to soil. However, pretreatment unit should be installed onsite to treat waste water prior discharging to sewer system, in case of difficulties to install such unit, permission is required to be taken from EHS section head prior discharging the waste water to sewer system;
 - ✓ Waste shall not be disposed directly to soil as any waste shall be in closed container;
 - ✓ Use secondary contamination tank in case it is necessary to light maintenance on site, in order to prevent any type of spillage.
 - ✓ The soil contamination due to spillage incident should be removed from site and treated as hazardous waste which should be disposed in license treatment center as per Ministry of Environment recommendation;
 - ✓ In case of contamination area more than 1square meter and 1meter depth. AIG-EHS department shall be informed to monitor the remedial action on site;
 - ✓ Upon EHS Department request, soil samples might be taken to check any residual of contamination, analysis result should be submitted to ehs@aig.aero

- ✓ It is not allow to mix contaminated soil with non-contaminated in order to treat the contamination part;

8.1.11 Procedure #11 Air Pollution Control:

8.1.11.1 Purpose:

The purpose of this procedure is to describe the measures that need to be taken to reduce or eliminate the air pollution from work activities.

8.1.11.2 Definition:

- **Air pollution:** The presence in or introduction into the air of a substance which have harmful or poisonous effects.
- **Chlorofluorocarbon (CFC):** Gaseous compounds that contain carbon, chlorine, fluorine, and sometimes hydrogen, that are used as refrigerants, cleaning solvents, and aerosol propellants and cause damage to ozone layer in the Earth's atmosphere.

8.1.11.3 Procedure #11:

To reduce or eliminate air pollution, the following measures need to be taken into consideration during work activity:


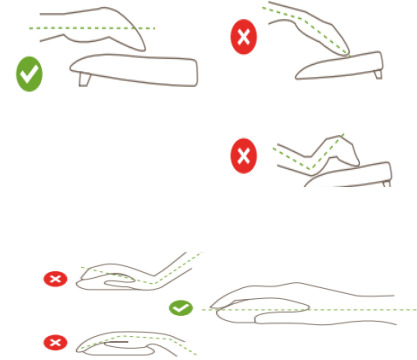
- It is forbidden to burn any type of materials such as waste oil to use it in work activity;
- In case of any work that generate dust, water shall be used prior or during work as per need;
- If applicable, use control device to absorb pollutants and eliminate gaseous and vapor pollutants, such control device(e.g. carbon absorbers, Electrostatic precipitators, Catalytic reactors, etc);
- Ensure good condition of equipment and vehicles prior using them to eliminate smoke level which might generate from using equipment;
- It is forbidden to use any Chlorofluorocarbon (CFC) in any type of activity;
- take steps to minimize your exposure to air pollution and protection your health
- Don't use items that are going to kick up a lot of dust into the air
- Buy Rechargeable Batteries , a charger and few sets of rechargeable batteries is best practices than the batteries which are sold and then disposed off after use
- Good air ventilation if the activities are performed indoors, such activities may contain air polluted and toxic element.

8.1.12 Procedure #12 General Safety Rules:

Case	Procedures
8.1.12.1 General Equipment Safety Rules	<ul style="list-style-type: none"> Do not work or operate with defective equipment; Select the right tool for the job; All tools and machinery must be clean and in good condition; Work only with equipment that you have been trained to use properly; Always follow the manufacturer's suggestion for safety precautions when using tools or machinery; Keep tools in a safe place; Store the cutting tools in a rack or tool box when not in use; Don't use your cloth to clean the sharp or cutting tools; Never leave long-handled tools lying on the floor where they pose a tripping hazard OR leave them leaning against a wall or door where they could fall over and present the same problem; Unplug the machine when not in use and never leave it unsecured where anyone (unauthorized) might have access to it; Before using any electrical machine, check from wires and the plug to ensure that in good condition. Don't attempt to correct defective wires by taping them; Do not use conductive tools on or near electrical wiring or equipment; Always use the appropriate Personal Protective Equipment (PPE)
8.1.12.2 Vehicles Operation	<ul style="list-style-type: none"> The vehicle shall fit for the purpose, inspected before use, and shall maintain in safe working order. Always wear a seat belt; It is forbidden to eat/smoke/drink while driving; Shut off engine if you are not inside the car; Follow speed limit rules as per signage instruction in airport; Do not drive a vehicle with a door open or other compartment unsecured. Personnel must not get out of a vehicle when it is in motion; Vehicles should be properly parked, so it will not cause hazard or obstacle to other activity
8.1.12.3 Elevator Use	<ul style="list-style-type: none"> Enter and exit carefully; Observe the entrance floor, It is very important to pay attention to the level of the floor when entering and exiting an elevator; Before entering, stand aside and allow exiting passengers to get off; Watch for closing doors. Only touch or stop them if they are expected to interfere with passage; If the doors don't open when the elevator stops, ring the alarm button and wait. Never force the doors open or try to exit; In case of fire, never use the elevator, use the stairs; Don't try to stop closing doors with anything, including hands, feet, canes, etc. Wait for the next elevator Stand clear of the doors, keeping clothes and carry-ons away from the opening. Push and hold the DOOR OPEN button if doors need to be held open, or ask someone to push the button for you. Push or pull the ALARM button to call for assistance

Case	Procedures
8.1.12.4 Forklift Operation	<ul style="list-style-type: none"> ▪ The operator shall be responsible for inspecting the forklift before beginning operation. The inspection as a minimum should include: <ul style="list-style-type: none"> • All fluid levels. • Brakes and hydraulics. • Lights and warning devices. • Safety equipment, e.g. seat belts, fire extinguisher, etc. ▪ Only handle loads that are within the rated capacity of the forklift being used; ▪ Never allow passengers to ride on the forklift; ▪ Always use personal restraint belts; ▪ When a load blocks the operator's view, the forklift may be operated in reverse. A signalman shall be used when the load impairs the operator's view; ▪ Do not use the forks to lift personnel from overhead without a previous approval ▪ forklift should be turned off when not in use;
8.2.12.5 Office Safety	<ul style="list-style-type: none"> ▪ Keep all entryways, stairways and existing clean without obstructions; ▪ Be familiar with fire extinguishing location; ▪ Be familiar with Emergency exit door location ▪ Stack boxes and other materials to prevent them from falling; ▪ File drawers and desk drawers should be kept closed when not in use; ▪ Do not open more than one upper file drawer at a time. Heavy files should keep it in the lower file drawers. Do not open a file drawer if someone is working below them; ▪ Keep all chair legs on the floor. Never lean in any position that does not allow for all chair legs to remain on the floor; ▪ Never use a chair for reaching or climbing. Use a ladder or stepstool designed for climbing or reaching; ▪ Keep cutting devices such as paper cutters in secure position when not in use; ▪ When carrying materials, do not overload yourself, use proper lifting techniques and get help when needed; ▪ Use handrails when going up and down stairs. Never run up or down stairs; ▪ Avoid the use of extension cords as much as possible. If the need exists to use an extension cord, tape exposed cords to the floor to reduce tripping hazards; ▪ Do not overload power outlets by using multiple outlet extensions; ▪ When removing plugs from wall, pull on the plugs and not on the cord;
8.2.12.6 Ergonomics safety rules in the office	<p>Monitor tips</p> <ul style="list-style-type: none"> ▪ Adjust the monitor height so that the top of the screen is at or slightly below eye level. ▪ Your eyes should look slightly downward when viewing the middle of the screen. ▪ Position the monitor at least 20 inches (51 cm) from your eyes—about an arm's length distance. If your screen is larger, add more viewing distance. ▪ Keep glare down by adjusting the screen position.

	<ul style="list-style-type: none"> Avoid eye strain by applying 20-20-20 rule, every 20 minutes spent looking at screen, a person should look at something 20 feet away for 20 seconds.
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Case	Procedures
8.2.12.6 Ergonomics safety rules in the office	<p>Chair</p> <ul style="list-style-type: none"> Choose a chair that supports your spinal curves. Adjust the height of your chair so that your feet rest flat on the floor or on a footrest Adjust armrests so your arms gently rest on them with your shoulders relaxed Your forearms, wrists, and hands should be in a straight line and be approximately parallel to the floor Position your keyboard and mouse at a distance where you can keep your elbows bent in a neutral position. <p>Using a Mouse and keyboard</p> <ul style="list-style-type: none"> Try to keep your wrist in a neutral position. Modern mice are often shaped to keep the wrist more neutral and are often a lower profile to help keep the wrist in a better position Keeping the wrists in a neutral position helps reduce strain on the top and bottom of the wrists and in the fingers, as well as reducing the strain on the outside of the elbow limit keyboard use to periods of less than 20 minutes, then rest the hands and arms for a couple of minutes to allow the muscles to reset their resting length.  
8.2.12.7 Biological hazard	<ul style="list-style-type: none"> Regular cleaning of the workplace, pest prevention/extermination, proper disposal of items that may pose a biological risk. Changing work processes and activities in order to make them safer examples (enclosing of fluids movement to avoid contact with body) Providing/implementing immunization programs for workers when necessary and limiting exposure of time for employees around potential Biological Hazards and training them to work safely around them. Examining workers regularly with regard to health risks at their work place Providing Safety Datasheets and guidance materials on biological agents PPEs including Gloves, Protective clothing, Eye protection, Face protection, Respiratory protection where Needed and according to Risk Assessment Providing appropriate restrooms, washing equipment, eating areas Prohibiting smoking, eating, drinking at the biological risky areas workplace. Providing adequate (hand) washing facilities (with soap).

8.1.13 Procedure #13 Excavation Safety Rules:

8.1.13.1 Purpose:

The purpose of this procedure is to ensure work safe condition during excavation work

8.1.13.2 Roles and Responsibilities:

Entity	Responsibilities
Work Owner OR representative	<ul style="list-style-type: none"> Provide the required information on excavation work in work permit, such information: <ul style="list-style-type: none"> ✓ Excavation location and drawing related; ✓ Excavation depth and length; ✓ Equipment' used in excavation process; ✓ Excavation date/time and duration Complete the excavation permit work and have the required approval as per work need; Coordinate with concerned entity as per WP to check the site to ensure that the underground utilities such as sewer/cables/etc are clearly marked and identified prior start the excavation Notify the ADM on phone (0798302555) in case of breaking one of buried utilities. <ul style="list-style-type: none"> Aware the contractor of the safety measures that need to be followed during the excavation work; Ensure implementation of safety required as per procedure in site prior starting work Follow contractor work to ensure effectiveness and efficiency of control measures taken;
Contractor	<ul style="list-style-type: none"> Provide the worker with appropriate PPE during the excavation work such as but not limited to, safety shoes and hardhats; Provide appropriate Isolation equipment to the site to ensure safe condition during the work; Follow the instruction as detailed in this procedure and any additional requirements might be listed in work permit paper shall be followed also; Inform immediately the project supervisor in case any change in excavation layout which require having new permission; Notify the ADM on phone (0798302555) in case of incident;

8.1.13.3 Procedure#13:

- Prior starting excavation, Project Supervisor OR representative shall coordinate with WPG to be onsite to ensure that the excavation work shall not endanger the underground installations;
- In case it is necessary to remove the underground utilities. The utilities left in place shall protect by barricades, shoring, suspension or other means as necessary.
- If necessary, Contractor shall take samples to test the soil resistance and according to the results precaution measures shall be taken to protect the worker during the work, such precaution install soil shoring;
- Barricades, fence, lighting and signs shall be provided prior to the start of excavation operations to protect the staff;

- Put appropriate warning signs around and enter the site.
- Provide safe ways out of the fossil, especially in emergencies such as fire or water flow.
- Ensure proper ventilation so that the atmosphere remains breathable
- Stairs, ladders or ramps shall be provided when workers enter excavations over 1.8 meter deep;
- If the excavation is more than 20 meter, exit shall be provided;
- No one shall work underneath loads handled by lifting or digging equipment. Workers shall stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials;
- A warning system shall be used when mobile equipment is operated next to the edge of an excavation if the operator does not have a clear, direct view of the edge of the excavation;
- Materials and equipment shall be kept at least 2 meter from the edge of the excavation with the proper protective system in place;
- If there is any possibility that the trench or excavation could contain a hazardous atmosphere. Workers shall not permit to work unless atmospheres test conducted to check the concentration of oxygen and combustible gas.
- In case excavations near underground storage tanks or that contain fuel pipelines, test should be continuously monitored;
- Some trenches specify as confined spaces and required permission prior enter, in case one of the following exist:
 - ✓ Contains or has the potential to contain a hazardous atmosphere, OR
 - ✓ Contains a material that has the potential for entrapping worker
 - ✓ Has an internal configuration that could trap the worker due to converging walls or floor which slopes downward and tapers to a smaller cross-section
- Appropriate PPE shall be provided to worker, such PEE as below:
 - ✓ Hardhats;
 - ✓ Steel toed shoes or boots;
 - ✓ Those exposed to flying fragments, dust or other materials produced by drilling, sawing, sanding, grinding and similar operations shall wear safety glasses with side shields;
 - ✓ Those exposed to hazards produced by welding, cutting, or brazing shall wear approved eye protection or a welding face shield or helmet;
 - ✓ Those workers entering deep and confined excavations or excavation with a bell-bottomed pier holes or other confined footing configurations shall wear a harness with a lifeline. The lifeline shall be separate from any line used to handle materials;
 - ✓ Always wear gloves or other suitable hand protection;
 - ✓ Workers at the edge of an excavation 3 meter or more deep shall protect it from falling by guardrails systems, fences, barricades, or other approved means.
- Walkways shall be provided where workers or equipment are allowed to cross over excavations. Guardrails shall be provided on walkways used by the general public regardless of the height above the excavation;
- No one shall work in excavations with standing water before water is removed;
- No one shall work in excavations during a rainstorm unless circumstances warrant it and adequate precautions are taken;
- Project Supervisor shall inspect the trenches after each rain and before anyone is permitted to re-enter the excavation;

- Workers shall protect it from excavated materials, equipment or other objects that could pose a hazard by falling or rolling into excavation. These materials or equipment should be kept at least 2 meter from the edge of the excavation;

8.1.14 Procedure #14 IT&T Safe Control Procedure:

8.1.14.1 Purpose:

The purpose of this procedure is to identify the actions that need to follow to minimize any failure in one of IT&T system or equipment.

8.1.14.2 Roles and Responsibilities:

- Work owner shall be responsible to define the type or nature of services that might impact the IT&T services to minimize the risk of any failure or disturb of IT&T services;
- IT&T Engineer, shall be responsible to review work details and technical specification of equipment (if any) which might disturb the IT&T services.

8.1.14.3 Procedures #14: Work owner OR representative shall:

- Keep the IT room clean and neat.
- Keep the door closed.
- Keep our NTO in the loop.

8.1.15 Procedure #15 Airside Safety Rules:

8.1.15.1 Purpose:

Airside is an extremely hazardous work environment. The associated dangers of aircraft operations and large quantities of aviation fuel plus the congestion on airport aprons and large specialized vehicles associated with the turnaround of an aircraft, create extreme hazards to the inexperienced or the unwary.

8.1.15.2 Roles & Responsibilities:

AIG, as the airport operator is committed to:

- Focus on prevention of damage to aircrafts;
- Actively support and promote actions designed to enhance airside safety;
- Make sure that staff is instructed about hazards on the airside and the relevant safety regulations;
- Make sure that the airside accidents and incidents are properly reported, followed up and archived.

The safety measures included in the work permit are meant to:

- Protect the employees
- Maintain operational continuity
- Assess all risks to health and safety caused by the work place and airport operational requirements.
- Provide adequate hazard controls for affected parties (including customers, third parties, etc.) whether safety or health related.
- Provide suitable instruction, and information
- Eliminate or reduce accidents and incidents.

Companies being awarded contracts at the airport airside areas shall completely implement all the safety and operational requirements as included in the related work permit. Noncomplying contractors or any of his staff or sub-contractors will subject the contractor to financial penalties as stated in the related contract in addition to reflecting the performance on the contractor evaluation which could lead to having the violating contractor black listed and prohibited from working with-in the airport premises for limited and/or unlimited duration based on the impact caused by his violation and the frequency of violation

For more details on Airside safety rules, please request Appendix 1 –Airside Safety Rules

8.1.16 Procedure #16 Safety Rules In Case Working Near/Around Passengers:

Entity	Responsibilities
Work owner OR representative	<ul style="list-style-type: none"> ▪ Ensure that the contractor clearly understood the control measures details in work permit to be able to implement on site. ▪ Ensure isolating worksite (as per work need) prior starting work ▪ Regular inspection to work site during work duration to ensure from conformity with work permit requirements ▪ Follow up with contractor any corrective action might be required as per project technical supervisor input or work need ▪ Report any incident or accident to ADM by sending email on adm@aig.aero, or call on phone(0798302555)
Work Permit Group	<ul style="list-style-type: none"> ▶ Review work specification and define accordingly the relevant control measures needed ▶ Validate the work permit and give the permission to start work ▶ As per work need, inspect work site to ensure from conformity with permit requirements
Technical Supervisor	Advise the work owner of the right time to start work
Facilitation officer	<ul style="list-style-type: none"> ▪ Random monitoring the site to ensure from work safety condition ▪ Inform the ADM in case any work violation

Contractor (permit holder)	<ul style="list-style-type: none"> ▶ Provide his/her start with appropriate PPE as per work need ▶ Respect work permit requirements ▶ Immediately inform the work owner/ supervisor of any change in work description/duration which might need to review the work permit. ▶ Immediately inform the work owner/supervisor of any incident/accident occurred during work duration
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8.1.16.1 Procedure #16: The Permit Holder:

- Work period need to be off peak to ensure minimum passenger disturbance and operational impact;
- If work will directly impact the operations and passengers, an alternative needs to be defined (contingency procedure) prior to starting the works;
- Full isolation of the work area if digging actions are implemented;
- Provide safety signage to be added as per work need;
- Work notification to be circulated which indicate start/end work date;
- Materials in/out of the work site need to be coordinated with operation division (Large part) to avoid flow disturbance and/or PAX/staff injuries

8.1.17 Procedure #17 Waste disposal Rules:

8.1.17.1 Purpose:

The purpose of this procedure is to identify the actions that need to follow to dispose different types of wastes.

8.1.17.2 Roles and Responsibilities:

Work owner shall be responsible to define the type of materials and the nature of activities in order to identify the type of waste that generate it

8.1.17.3 Procedures #17:

i. Hazardous waste disposal:

- Hazardous waste should not mix with non-hazardous waste.
- Hazardous waste should be packaged and disposed outside the airport, to approve and licensed treatment centers designated by the Ministry of Environment.
- Waste generator owner, should have receipt report from treatment center, to ensure waste delivery is completed.
- Hazardous waste should not sold or recycled(unless hazardous characteristics remove it)

- In case it is necessary to store hazardous waste onsite, shelter with secondary retention tank should provide to minimize any spillage or contamination during storage process.
- Staff that are responsible to handle and store hazardous waste should have appropriate PPE.
- Containers must be closed when not actively collecting waste
- Keep Hazardous Waste at or near the point where it is initially generate.
- Containers used to collect hazardous waste must be:
 - In good condition
 - Compatible with the waste being added
 - No inappropriate containers (e.g., food containers, recycling bins, or glassware disposal boxes)
- Empty containers of HHW can pose hazards because of the residual chemicals that might remain so handle them with care also.
- Staff who transport hazardous waste shall be trained;
- On regular basis, Waste collection company shall send list of hazardous waste to Ministry of Environment before start transportation process;
- All waste package should be closed and labeled with hazardous waste label ;

ii. Construction waste disposal:

- Construction waste must be disposed I outside the airport, and to approved landfill by the municipality.
- Not to allow to store or dump any construction waste inside airport premises.
- Not to allow to use AIG waste containers to dispose construction waste.

iii. Non-hazardous waste disposal:

- Non-hazardous waste should collect it in closed containers.
- Not to allow the disposal of waste on the ground.
- Regular cleaning around waste store area is necessary, and pest control must implement.
- Food waste must collect and dispose in closed containers.
- Regular container cleaning process should be taken
- Separate wood, plastic and cartoon for recycling purpose

8.1.18 Procedure #18 Pesticides Use and Management

8.1.18.1 Purpose:

Pesticides are toxic to both pests and humans. However, they need not be hazardous to humans and non-target animal species if suitable precautions are taken. These safety instructions developed as a guide for people working in pest management to promote safe and healthy practices in regards to the use, storage and transport of pesticides by end users.

They aim to minimize the risk of detrimental effects to human health and the environment when storing, transporting or using pesticides, by suggesting ways to control known risks associated with these substances.

8.1.18.2 Responsibilities

- **Contractors:**

The Contractor must ensure the risk to the health and safety of their employees and other persons at their place of work is minimized. This includes minimizing health risks associated with the use and storage of pesticides. Employers have specific obligations to:

- Ensure that information is readily available detailing how pesticides can be used safely and without risks to health
- Provide employees with appropriate instruction, training and supervision provide safe systems of work, including the use of plant and equipment conduct workplace risk assessments
- Employers must also protect the health and safety of others who are not employees, such as public visiting a workplace. This includes minimizing risks arising from the application of pesticides, spray drift and any residues.

8.1.18.3 Control measures:

The below control measures are minimum that shall follow during pest/vector control works, the contractor shall develop Integrated pest Control Management Plan

- (if possible) Using a less toxic pesticide & less volatile pesticide
- Pesticides must be register at Ministry of agriculture, if the pesticides not registered , the supplier must contact the manufacture
- Pesticide containers must be labeled as per Ministry of Environment requirements
- Dangers goods storage requirements must follow when store pesticides containers
- Separate areas used for storing, mixing and preparing pesticides with limited access to all public, doen allow others to be in the vicinity during mixing and spraying process
- Pesticides in a vehicle should be isolated from the driver and other staff during transport
- Using an extraction ventilation equipment (ventilator) to remove vapors after treatment
- Reducing the number of people exposed and excluding non-essential personnel from the area, for example, treating an office building after normal working hours example, treating an office building after normal working hours
- Never leave unsecured pesticides unattended
- prohibiting eating, drinking and smoking when handling pesticides ,If contamination occurs, wash the affected area immediately with water and inform doctor

- providing and ensuring the use of adequate facilities for effective decontamination, such as washing facilities
- Ensuring that outdoor tasks are done at the most appropriate time of day to minimise heat stress or spray drift
- only mixing the amount of pesticide necessary for the job
- Placing signs around treated areas indicating the hazards; these should be posted and remain in place until the product has dried or dissipated
- Empty containers shall dispose as hazardous waste, never dispose pesticide toilet /soil/storm water ditches
- PPE must appropriate for the task and fit for the employee ,readily available, clean and in fully operational condition and employees are trained in the use of the PPE, including the selection and maintenance (and, where appropriate, when to discard disposable PPE)
- If necessary to do fumigation or spraying pesticide outdoor, weather conditions need to consider, avoid spraying pesticide during strong wind, spraying pesticide outside must not applied during rain
- Calibration and maintenance for spraying/fumigation equipment's must be regularly
- Spraying/fumigation pesticides preferable early in the morning or late in the afternoon, to minimize the risk to public/staff
- Control spray drift risks. Notify the owner or occupier of the site prior to the commencement of spraying.
- Not use your mouth to blow or suck pipes or nozzles to clear them
- Spills should be cleaned up immediately, and contaminated materials shall disposal as hazardous waste
- At the of each day's operations change clothes, and wash it separately from others uniform
- Health surveillance shall organize for the staff working with pesticides as per labor law requirements
- First aid or incident reporting procedures where injury or illness to other persons has occurred

8.1.19 Procedure #19 Incident investigation procedure

- In case any health and safety incident, the contractor is responsible immediately to inform the Inform Airport Duty Manager (0798302555) and if necessary call Civil defense on phone **44522225**
- The contractor is responsible within 72hrs to conduct the initial investigation to identify the incident cause and corrective action.
- Report shall communicate it to AIG-EHS department on ehs@aig.aero
- EHS team will review the incident cause analysis and the corrective action to confirm it

8.1.20 Procedure #20 Social Impact Assessment:

As per project natural and impact, the contractor is responsible to identify the Social impact related to the project; impact assessment should include:

- Assess the social impact related to transportation goods
- Assess health and safety impact on local community and related to project such as (Noise, air pollution, water contamination, communicable disease, etc.)

For more information on social impact assessment, please refer to section 3.5.2.1.5 Environment, health, Safety plan ref.: QAIA-CEO-QSM-PLN-015, which is available at AIG website on this link: http://www.aig.aero/sites/default/files/qaia-ceo-qsm-pln-015-04-ehs_plan.pdf

Appendix 1: Airside Safety Rules during Work

1. AIG Safety Policy:

AIG Commitment towards QAIA Safe Operations

We commit to **implement**, **maintain** and **continuously** improve QAIA **Safety Management System** related manuals, plans and procedures ensuring compliance with aviation standards.

2. Safety Definition

• International Civil Aviation Organization (ICAO):

"Safety is the state in which the risk of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management"

• **Difference between Hazard & Risk:**

▪ **What is Hazard?**

A Hazard is a potential source of harm or adverse health effect on a person or persons.

▪ **What is Risk?**

Risk is the likelihood that a person may be harmed or suffers adverse health effects if exposed to a hazard.



E.g. When the engine starts and begins to pull the air would present the suction hazard. When we apply safety rules to avoid the hazard, the hazard would remain but the risk would be neutralized.

▪ **Airside Works Safety Requirements:**

Meeting JCARC regulations & to neutralize to the maximum possible any risk resulting of an existing hazard on airside, AIG published and circulated the ASM

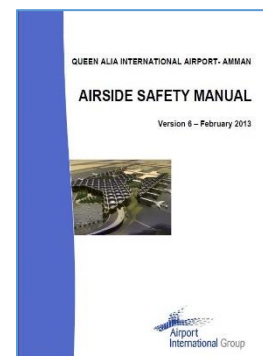
▪ Most important safety consideration for works:

- High Visibility Clothing (ASM 2.4.1.1)
- No Smoking (ASM 2.4.2)
- Airside Driving Permit (ASM 3.8)
- Foreign Object Debris – FOD (ASM



airside

3.11)



3. Risks Resulting from Contractors & Airside Works:

▪ **Work Impact on Operations:**

- Equipment and/or workers incursion on aircraft maneuvering areas (RWYs, TWYs, Safety Clearances/Strips, Obstacle Limitation Surfaces and/or ILS Critical and Sensitive Areas.
 - FOD (Foreign Object Debris) and related risk on aircraft operations and wildlife management
 - Dust Generation
 - Fire on Movement Areas
 - Damage and/or Impact on Aerodrome Operational Systems and Requirements (AFL, Signage, Marking, NAVAIDs and/or ILS, Power Cables, Water Lines....etc.)
 - Interruption and/or pausing constrains due to change of normal service roads layout and/or availability
- **Operations Impact on work:**
 - Aircraft Incursion on Worksite
 - GSE (Ground Services Equipment) Incursion on Worksite
 - Aircraft Jet Blast
 - **Other specific work type risks can be detected upon performing work risk analysis:**
- Accordingly there is need to have early information to enable proper works planning and preparations

4. What are the prerequisites for proper work preparations & planning?

- Worksite drawing showing the distances in relation to the operational pavements centerline or incursion to airside service roads and aircraft stands.
- Full description, duration, impacted systems and purpose of the intended works
- Works equipment & materials
- In addition, Quality Department might require meeting with contractor and/or concerned work owner if further details were required to proceed with the work permit.
- After all preparations are done and the time to start the works and duration are defined, operations department will circulate 48 hours before work starts a **Work Notification** through e-mail to all operators and entities impacted or using the work location and/or systems to have them alerting their personnel and drivers of the intended works and impacted locations or systems

5. Risks Mitigation Measures

Based on the Risk Impact Analysis performed through the past years for all sorts of airside works the below risk mitigation measures are found to be the most frequently followed:

- **General Safety Rules:**
- Airside works during severe weather conditions including low visibility and strong wind, are prohibit. Any ongoing works shall stop.

- i. **Exception:** In certain irregular cases when the works are, consider necessary for maintaining the airport operational safety and continuity, special arrangement must be taken in coordination with airside operations department, airport safety section and ATC as required.
- Work owner is responsible for briefing the contractor company representative on the works safety requirements and related rules, then filling the acknowledgment form to confirm his understanding and commitment to the given instructions. The form shall sign by the contractor representative and filed, then attached to the work permit. Contractor representative (Project Manager) will then brief all works staff of these safety requirements and regulations and have the names of those employees whom have attended the awareness recorded. AIG representatives, during airside works inspection, could request to inspect the contractor safety awareness records to ensure all staff at the

site have been briefed of the works safety requirements. If it was found that any of the employees involved in the works were not listed in the contractor records, penalties as described in the related contract will then apply and unaware staff will be requested to leave site immediately.

- Contractor shall always have a worksite supervisor, available at the site during the whole work duration, that will be responsible for maintaining the safety requirements and report to AIG any failures, deviations and occurrences if any.
- Contractor shall name a project manager and provide his mobile phone number and when available an e-mail address. This person name and contact information shall be included in the work permit to be available for AIG 24/7 to communicate any violation related to the works and safety requirements, and request the immediate corrective action.
- **Worksite Isolation:** For non-fixed or mobile airside works location there will always be need for a competent AIG escort equipped with ATC radio communications. As for fixed location airside works and based on the minimum space required to perform the works the isolation equipment location will be defined in a way that would comply with the safety clearances for operating aircraft and vehicles on the airside.

The isolation can be implemented through:

- a) Plastic barriers filled with water to prevent being dislocated by wind and/or equipment and minimize the severity if was accidentally hit
- b) Fence with concrete base covered with mesh when the work duration is relatively long. The mesh would prevent the transfer of dust to operational areas.
- c) Cones when the work duration is relatively short (few hours) and the worksite is with-in a few square meters so as the contractor workers would be in control of the cones to avoid having it fallen and transferred to operational areas

- d) Jet blast reflectors can be requested based on the worksite location in relation to the adjacent aircraft operational areas

6. Operational Areas Closure Requirements:

▪ Aircraft Stands Closure:

- When the work duration is less than 1 day, no works will be conducted during night and the worksite will be attended during all work duration, the stand closure will require three plastic barriers on the stand lead-in line to be positioned just after the taxi lane safety line toward the stand
- When the work duration include night works or overnight closure then three obstruction lights must be added to the closure marking in front of the barriers towards the taxi lane and the barriers must then be filled with water.
- For long term works fence can be used in combination with obstruction lights
- NOTAM for stand closure to be issued defining the exact duration

▪ Airside Service Road Closure or Partial Closure:

- For routine works like for example the man lift used for terminal glass cleaning, the closure will be through use of cones and caution tape with the existence of a flag man on ground to ensure alerting traffic. That in addition to maintaining at least one lane of the road free for operational use.
- For non-routine works, the closed area must be surrounded by continuous plastic barrier filled with water if the works where with-in one daylight hours.
- For works during night hours or overnight closures, construction lights must be used on all side of the closed area facing the traffic in addition to reflecting material warning signs of the detour and works in progress.
- For full closure of the service road the above requirements in addition to proper panning for alternative road defines by plastic barriers filled with water.

▪ Aircraft Maneuvering Areas Closure:

- Closed area must be marked by the use of plastic barriers if the work was during daylight and with-in the same day.
- For works during night hours or overnight closures the plastics barriers shall be filled with water and obstruction lights must be implemented ahead of the barriers toward the operational areas.
- The barriers and light shall be positioned on 60 meters distance from the centerline of the adjacent operational taxiway and on 75-150 meters from the runway centerline depending the exact location and impact on ILS critical area and NAVAIDs (to be defined based on the exact work location)

- The barriers shall be implemented continuously on the pavement one connected to the other while 5 obstruction lights for taxiways and 7 for runway closures on each side of the closed area.
- Fence can be used instead of plastic barriers for long term works. In such case obstruction lights shall be implemented ahead of the fence concrete base facing operational areas.
- In addition the NOTAM issuing defining the exact duration and distances from operational areas must be done before the work start.
- For closure of taxiways and/or runways or part off, specific meeting must take place with ANS providers to consider their feedback and alert them of the operational impact so that they would assist in informing pilots whenever needed of the existing closures and additional operational procedures.
- **Protection of Airport Infrastructure:**
 - Whenever the works include excavation works and to ensure the works will not impact the airport infrastructure and related systems, as a pre-work start preparations the Excavation Form must be validated by all included AIG activities like for example the High Voltage, Water, Low Voltage....etc.
 - Entities and AIG departments whom have or might have operating systems at the work area must be notified in due time to obtain their approval and ensure the works will not impact and/or interrupt their business continuity
- **Dust Generation Control:**
 - » Whenever the works include excavation works, works on a non-paved area and/or sand blast use is required to accomplish the intended works, contractor must continuously use water spraying to prevent the impact of dust and sand on the adjacent operational areas
- **Contractor Equipment Conditions:**
 - » Contractor equipment must be always inspected for being:
 1. FOD Free (No mud on tires and no loose parts)
 2. Well Maintained with no leakages (No traces of oil, grease or hydraulic oils on the equipment)
 3. Clean overall appearance
 4. Equipped with proper load covering blanket for trucks.
- **Maintaining Operability of Airport Systems :**

AIG Work Owner shall clearly provide all concerned departments of the airport systems that could be impacted by the intended works in order to allow having involved system responsible department providing related risks and mitigation measures to avoid impact on airport operational safety and/or interruption to operational continuity.

Such work description details shall be included in the intended works preparation prerequisite mentioned in paragraph **4**

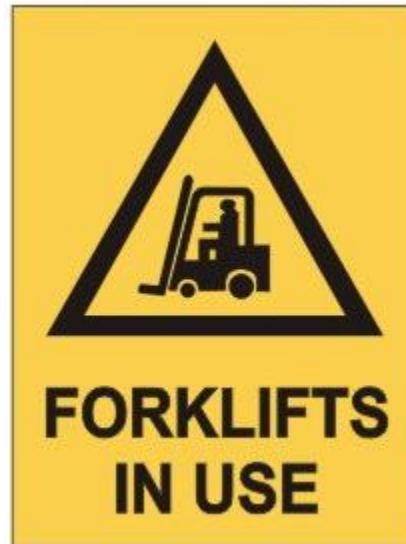
Safety Signs



Danger Signs



Caution Signs



Appendix 3: Specification of Personnel Protective Equipment's

Job Hazard/s	Main Personal protective equipment's	General description	Related/applicable Standard
Electrical hazards	Electrical Safety Shoes	This safety shoes is designed to provide a source of protection when accidentally coming in contact with live electrical circuits	ASTM F 2413 EH ; EN ISO 20345
	Electrical gloves	Insulating gloves provide means of protecting the workers from accidental electrical.	BS EN 60903:1993
	Electrical Safety Shoes up to 14KV (<u>medium voltage activities</u>)	This safety shoes is designed to provide a source of protection when accidentally coming in contact with live electrical circuits	ASTM F 2413 EH ; EN ISO 20345
Chemical hazards	Chemical mask	a mask connected to a chemical air filter and used to protect the face and lungs from toxic gases	BS EN 149:2001 +A1:2009
	Full face Chemical mask	full face chemical mask is a mask used to protect the user from inhaling airborne pollutants and toxic ... Some have one or two filters attached to the face mask while others have a large filter connected to the face mask with a hose, oxygen cylinder	BS EN 136:1998
	Half face chemical mask	A half face particulate (air-purifying) mask is generally worn to protect the wearer from dust and paint fumes	BS EN 140:1999
	self-contained breathing apparatus (SCABA)	A self-contained breathing apparatus, or SCBA, sometimes referred to as a compressed air breathing apparatus (CABA), or simply breathing apparatus (BA), is a device worn by rescue workers, firefighters, and others to provide breathable air in an immediately dangerous to life or health atmosphere (IDLH)	BS EN 1146:2005 • BS EN 137:2006
	Dust mask/muzzle	A dust mask is a flexible pad held over the nose and mouth by elastic or rubber straps to protect against dusts encountered during construction or cleaning activities, such as dusts from drywall, brick, wood, fiberglass, silica (from ceramic or glass production), or sweeping.	• BS EN 374-1:2016 • BS EN 6529:2013
	Chemical gloves	Chemical resistant gloves protect hands from solvents and isocyanates when mixing paints, spraying paint, and cleaning painting equipment. When	EN 374-3:2003

		these chemicals touch skin, they can irritate or burn the skin or cause an allergic reaction. Etc....	
	Overall Clothing	Full body wear that is usually water proof, protects form oils, greases etc....	BS EN ISO 17491-4:2008
	General Safety shoes	A steel-toe boot (also known as a safety boot, steel-capped boot or safety shoe) is a durable boot or shoe that has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid-sole plate to protect against punctures from below	BS EN ISO 20345:2011
Physical hazards (ex., radiation, heat and cold stress, vibration hazards, and noise hazards.	Ear defender (range 35-40) (reducing 40 dB max, if worn all the working time)	Ear defenders protect the wearer from extreme noises. The head-band and outer covering is usually made from a hard thermoplastic or metal. The protection usually comes from acoustic foam – this absorbs sound waves by increasing air resistance, thus reducing the amplitude of the waves.	BS EN 458:2004
	Ear plugs (range 25-30) (reducing 30 dB max if worn all the working time)	Earplug is a device that is meant to be inserted in the ear canal to protect the user's ears from loud noises or the intrusion of water, foreign bodies, dust or excessive wind.	BS EN 458:2004
	Sun caps	a hat to protect head from the sun	• -----
	Sunglasses	Glasses tinted to protect the eyes from sunlight or glare.	BS EN 1386:2005 Sunglasses and Sun Glare filters
	Welding goggles	Welding Goggles are forms of protective eyewear that usually protect the eyes the from welding sparks and glare	BS EN 7028:1988
	Welding face protection	A face shield is a device used to protect wearer's entire face (or part of it) from impact hazard such as flying objects and road debris, chemical splashes (in industry), or potentially infectious fluid (in medical).	BS EN 175:1997
	General Safety goggles	Goggles or safety glasses are forms of protective eyewear that usually enclose or protect the area surrounding the eye in order to prevent particulates, water or chemicals from striking the eyes. They are used in chemistry laboratories and in woodworking.	BS EN 172:1995

Job Hazard/s	Main Personal protective equipment's	General description	Related/applicable Standard
Work at height hazards	Safety helmet (when there is falling objects hazards / working near roofs/ water pipes)	Safety helmet is a form of protective equipment worn to protect the head from injuries, from falling objects and pumping hits	BS EN 397:2012
	Full body harness	A body holding device used to protect workers from falls by distributing the force of the fall over a large area of the body, ensuring that the subject of the fall remains suspended in an upright position after the fall has occurred.	EN 363:2008
	Safety lanyard	Safety lanyards are ropes, wires or cords used to secure personal working tools and other light equipment with the body	EN 363:2008
	General Safety goggles	Goggles or safety glasses are forms of protective eyewear that usually enclose or protect the area surrounding the eye in order to prevent particulates, water or chemicals from striking the eyes. They are used in chemistry laboratories and in woodworking.	• BS EN 172:1995
Mechanical hazards (moving machinery, rollers, nips, that can cause injury)	Mechanical gloves	Gloves giving protection from mechanical risks (Abrasions, blade cut, tear resistance, puncture resistance)	EN388 : 2005
	General Safety goggles	Goggles or safety glasses are forms of protective eyewear that usually enclose or protect the area surrounding the eye in order to prevent particulates, water or chemicals from striking the eyes. They are used in chemistry laboratories and in woodworking.	BS EN 172:1995
	General Safety shoes	A steel-toe boot (also known as a safety boot, steel-capped boot or safety shoe) is a durable boot or shoe that has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid-sole plate to protect against punctures from below	BS EN ISO 20345:2011

Transport hazards Examples (Collison with moving vehicles, forklifts, tugs, etc.....)	High Visibility clothing (jacket/vest)	Clothing which provides visibility	BS EN 471:2003 +A1:2007
	General Safety shoes	A steel-toe boot (also known as a safety boot, steel-capped boot or safety shoe) is a durable boot or shoe that has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid-sole plate to protect against punctures from below	BS EN ISO 20345:2011
Biological hazard (ex. medical waste or samples of a microorganism, virus or toxin (from a biological source) that can affect human health)	Medical gloves	Medical gloves are disposable gloves used during medical examinations and procedures that help prevent cross-contamination between caregivers and	BS EN ISO 11193-1:2008
	Overall Clothing	Full body wear that is usually water proof	BS EN ISO 17491-4:2008
Biological hazard (ex. medical waste or samples of a microorganism, virus or toxin (from a biological source) that can affect human health)	Medical gloves	Medical gloves are disposable gloves used during medical examinations and procedures that help prevent cross-contamination between caregivers and	BS EN ISO 11193-1:2008
	Overall Clothing	Full body wear that is usually water proof	BS EN ISO 17491-4:2008
	Eye protection	Eye protection to be used while working with biological hazard	BS EN 166:2002
Physical hazards (Examples, radiation, heat and cold stress, vibration hazards, and noise hazards)	Ear defender (range 35-40) (reducing 40 dB max, if worn all the working time)	Ear defenders protect the wearer from extreme noises. The head-band and outer covering is usually made from a hard thermoplastic or metal. The protection usually comes from acoustic foam – this absorbs sound waves by increasing air resistance, thus reducing the amplitude of the waves.	BS EN 458:2004
	Ear plugs (range 25-30) (reducing 30 dB max if worn all the working time)	Earplug is a device that is meant to be inserted in the ear canal to protect the user's ears from loud noises or the intrusion of water, foreign bodies, dust or excessive wind.	BS EN 458:2004
	Sun caps	a hat to protect head from the sun	-----
	Sunglasses	Glasses tinted to protect the eyes from sunlight or glare.	BS EN 1386:2005 Sunglasses and Sun Glare filters
	Welding goggles	Welding Goggles are forms of protective eyewear that usually	BS EN 7028:1988

		protect the eyes the from welding sparks and glare	
	Welding face protection	A face shield is a device used to protect wearer's entire face (or part of it) from impact hazard such as flying objects and road debris, chemical splashes (in industry), or potentially infectious fluid (in medical).	BS EN 175:1997
	General Safety goggles	Goggles or safety glasses are forms of protective eyewear that usually enclose or protect the area surrounding the eye in order to prevent particulates, water or chemicals from striking the eyes. They are used in chemistry laboratories and in woodworking.	• BS EN 172:1995

Physical hazards (Examples, radiation, heat and cold stress, vibration hazards, and noise hazards)	General Safety shoes	A steel-toe boot (also known as a safety boot, steel-capped boot or safety shoe) is a durable boot or shoe that has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid-sole plate to protect against punctures from below	BS EN ISO 20345:2011
Confined space related hazards	Scuba (Self-contained breathing apparatus)	Compressed air breathing apparatus (CABA), or simply breathing apparatus (BA), is a device worn by rescue workers, firefighters, and others to provide breathable air in an immediately dangerous to life or health atmosphere (IDLH).	BS EN 1146:2005 BS EN 137:2006
	Safety helmet (when there is falling objects hazards / working near roofs/ water pipes)	Safety helmet is a form of protective equipment worn to protect the head from injuries, from falling objects and pumping hits	BS EN 397:2012
	Chemical mask	a mask connected to a chemical air filter and used to protect the face and lungs from toxic gases	BS EN 149:2001 +A1:2009
	Full face Chemical mask	full face chemical mask is a mask used to protect the user from inhaling airborne pollutants and toxic ... Some have one or two filters attached to the face mask while others have a large	BS EN 136:1998

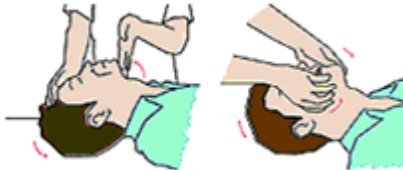
		filter connected to the face mask with a hose, oxygen cylinder	
	General Safety shoes	A steel-toe boot (also known as a safety boot, steel-capped boot or safety shoe) is a durable boot or shoe that has a protective reinforcement in the toe which protects the foot from falling objects or compression, usually combined with a mid-sole plate to protect against punctures from below	BS EN ISO 20345:2011

Appendix 4 first aids instructions

- **Purpose** The purpose of First-aid is to preserve life, assist recovery, prevent aggravation and minimize complications at a later date.
- **General First aid treatment:** People with serious injuries will need treatment from civil defense, but the below first aid treatments should be applied while waiting them.
 - When someone has lost consciousness secure the airway.
 - When someone loses consciousness due to an injury to the head or for some other reason, the back of the tongue may roll down the throat, blocking the airway to the lungs. In such situations you must facilitate a passage for air down the windpipe. This is called securing the airway.
 - When someone has lost consciousness but is breathing regularly. Put the person in the position shown below:



- When someone is not breathing or is not breathing comfortably. Secure the airway by laying the person face-up, tilting their head back and by lifting their chin up.



- When securing an airway, always check that the mouth is clear of obstruction and remove any foreign objects or phlegm.
- When someone is bleeding >> Stop the bleeding
 1. Apply pressure directly above the wound with a gauze or wide and thick handkerchief.
 2. If the wrist is bleeding then raising that part of the body to a position higher than the heart and then applying pressure is effective.



- When there is facial bleeding, apply pressure in front of the ears.



- When the upper arm is bleeding, apply pressure underneath the armpit.



- When there is bleeding beneath the elbow, apply pressure on the inside of the elbow.



- When there is bleeding from the leg, apply pressure at the top of the thigh.



- **First aid treatment When there are burns:**

- Cool the area that has been burnt with clean water as quickly as possible.
- Before removing clothes or stockings, cool that area with water. Then wrap the area with a clean blanket and take the injured person to a hospital. When more than 10% of the body has been burnt then it is considered to be a serious injury and must be treated by a doctor quickly.

- **First aid treatment, When there is suspected to be a broken bone**

- If there is a life-threatening condition then give priority to the treatment of that.
- When fixing a splint, fix it in the position that the injured person is in, without trying to set the bone and making sure you don't rock the body carelessly.
- Affix the splint over a length that encompasses the joints both above and below the suspected break.
- When the broken bone is exposed, treat the wound with clean gauze first and then affix a splint

- **First aid treatment, When there has been an electrocution:**

- Firstly, switch off the electrical mains. Take appropriate caution -rushing in carelessly to help a victim can result in the rescuer also being electrocuted.
- Move the injured to a safe location and Lay the patient on his back
- It may be the case that the victim's clothes have been burnt by the shock and there are burns that need to be dealt with in the same manner as other burns.
- Fluids may be given by mouth in small amounts, if the patient is conscious
- Arrange immediate medical aid.

• General instruction on ARTIFICIAL RESPIRATION

- Keep the head slightly backward and open the jaw.
- Seal the casualty's nose to prevent escape of air by pinching with thumb and index finger.
- Take a deep breath, open your mouth widely, place it over the victim's mouth and make a tight seal.
- Quickly blow the full breath into the mouth of victim.
- Remove your mouth from the victim and allow him to exhale passively.
- Repeat the procedure 12 to 15 times per minute for adults and 15 - 18 times a minute for young children and babies, till medical aid is arranged.
- Make sure that the air that you blow in is entering the person's body and also being exhaled properly by looking at the rising and falling of the injured person's chest. In cases where the stomach area expands after you have blown in, gently press this area with the palm of your hand.
- During CPR, there is a danger that the contents of an expanded stomach may be pushed out and absorbed into the lungs so take appropriate caution.
- When there is neither respiration nor a pulse it will be necessary to carry out CPR and heart massaging in tandem.
- Do not give mouth to mouth resuscitation during CPR in the presence of toxins Ventilate the casualty by using a face mask or bag/valve/mask assembly
- Avoid mouth to mouth resuscitation if there is possibility of transmission of infection between the victim and the rescuer.

• General instruction in case of ABDOMINAL WOUNDS

- Keep the patient flat on his back.
- Give nothing by mouth.
- Maintain warmth.
- If intestines protrude from the wound, do not attempt to touch or replace them.
- Apply sterile dressing and binder on the wound.
- Provide immediate transportation to the hospital

• General instruction in case of HEAT STROKE

- Make the patient lie down.
- Remove all clothing's except the under innerwear.
- Keep the patient under the fan.
- Pour cold water on the body repeatedly.
- Wash the head thoroughly with cold water and dry it with towel.
- Record body temperature falls up to 38°C
- Stop pouring water.
- Give plenty of cold water with a pinch of common salt in each glass of water to drink.
- Send the patient to the hospital

• General instruction in case of BLEEDING NOSE

- Make the patient sit on a Chair with head downward.
- Pinch the nose with fingers and thumb.
- Apply ice or cold compression.
- Do not plug the nostrils.
- Do not put water or any medicine through the nostrils.
- Send for medical aid immediately.

• General instruction in case of BLEEDING EAR

- Lay the patient with the head slightly raised.
- Incline the head to the affected side and apply a dry dressing over the ear with loose bandage.
- Do not plug the ear.
- Apply pressure in front of the ear.
- Send for medical aid immediately

• General instruction in case of SNAKE BITE

- Reassure the patient
- Do not allow the person to run or walk
- Apply a ligature above the wound (in between the heart and the wound) if the bite is in the leg or hand.
- Wash the wound with soap and water.
- Allow free bleeding.
- Never suck the blood from the wound.
- Treat for shock.
- Arrange immediate hospitalization, by transporting the patient in a lying down position.

• General instruction in case of DOG BITE

- Clean the wound immediately with water.
- Then wash with antiseptic soap and water.
- Do not try to stop bleeding.
- Do not cover the wound.
- Send the patient to hospital for treatment

• General instruction in case of INSECT BITE

- The sting bite should be pulled out.
- Apply cold compression.
- Apply vinegar diluted with water.
- Soda-bicarbonate paste should be applied at the site.
- Prevent shock.
- Send for medical aid immediately

Versions Records					
Version	Amendment No.	Revision Date	Effective Date	Revision Purpose	Revision Pages/Sections
V4	AMDT 1	Oct 2020	18 th of Oct 2020	- Modify the legislation list - Add Procedure #20: Social Impact Assessment	Page 4 Page 48
	-	Jan2020	10 th of Jan 2020	Review the safety instructions Add EHS risk assessment Add Appendix 2& 3& 4	Whole documents
V3	-	July,2018	Oct,2018	Change documents reference	
V2	-	21st Aug.2016	Aug,2016	Add procedure 17, hazardous waste Change name from contractor safety handbook to Environment & Safety handbook	30-31 Page All
1	-	July 2016	Aug/2016	Original	

Record Control: (if Document Type is Form)			
Record Type:	NON	Retention Period:	Non
Record storage location:	Share point-Quality public AIG website	In charge of storage:	Quality Management

- Does the new version or amendment needs training for interested parties? ☐

Reviewed by	Approved by	Validated by
EHS Manager	QSD Director	QMS