#### MINISTRY OF LABOUR

#### MINISTERIAL ORDER NO.(4) OF 2014 WITH RESPECT TO DETERMINING THE REQUIRED CONDITIONS AND PRECAUTIONARY MEASURES FOR THE PROTECTION OF WORKERS ENGAGED IN BUIDLING WORKS, CONSTRUCTION AND CIVIL ENGINEERING

The Minister of Labour,

Having reviewed Law No.(25) of 2009 with respect to the Accession of the Kingdom of Bahrain to the International Labour Organisation's Convention No.(155) of 1981 with respect to Occupational Safety and Health, and Work Environment,

And the Labour Law for the Private Sector promulgated by And Legislative Decree No.(36) of 2012, particularly Article (166) thereof,

And Decree No.(7) of 1983 with respect to the Arabian Agreement No.(13) of 1981 with respect to Work Environment,

And Decree No.(2) of 1994 with respect to the Accession by the State of Bahrain to the Arabian Agreement No.(7) of 1977 and Recommendation No.(1) of 1977 with respect to the Occupational Safety and Health,

And Order of the Minister of Labour No.(12) of 1977 with respect to the Organisation of Precautionary Measures necessary for the Protection of Workers Engaged in Construction, Civil Engineering and Shipbuilding,

And having sought the opinion of the Concerned Authorities,

And upon the submission of the Undersecretary of the Ministry of Labour,

#### **HEREBY ORDERS:**

### Article 1

In the application of the provisions of this Order, the terms and expressions shall have the meanings assigned against each unless the context otherwise requires:

- **BUILDING WORKS**: Construction work of buildings, assembling factories, substantial change, rebuild or maintain them which include repainting, re-ornamentation, external cleaning, demolishing and all preliminary

works to carry on the above works which shall not include engineering installations as indicated in its definition.

- **CONSTRUCTION WORK**: Steel or reinforced construction works with the exception of buildings, substantial changes or re-building (including repainting) or demolishing. It includes road works, airport runways, wave breakers, reclamation, river works, used pipelines laying for any purpose, constructing harbours, dry docks, reservoir, aqueduct, sewer, sewage works or gasholders and any civil or constructional engineering works of a similar nature to the foregoing.
- **COMPETENT PERSON**: a person who is properly trained and qualified and has sufficient experience for the work and is not suffering from any physical defect or disability that would prevent him from carrying out the work properly.
- **WORK PLACE**: A place prepared by an employer at which a worker shall perform his duties and also amongst one of the following work places:
  - 1. Any part of the establishment workers may be available therein.
  - 2. Any chamber, gangway, hall, room, staircase, road or any other place inside the establishment and is used as an entrance to the establishment or exit therefrom by the workers.
- **SCAFFOLDING**: A platform rose on or attached to pillars and structures used to carry out duties, moving vertically or horizontally and to carry equipment, materials and work material at a elevated place.
- **TYING-IN**: Rigidly connecting any scaffold to a building or fixed structure.

### Article 2

The provisions of this Order shall be applicable to building works, construction and civil engineering works.

# Article 3

The following shall be secured upon entrusting an entity or entities the execution of a project or task at a work place:

- 1. To ensure the capability of an entity entrusted with executing a project or task and holding a licence to pursue such activity by the concerned authority.
- 2. To adopt suitable arrangements to adopt legal requirements of the occupational safety and health. Such arrangement must be documented and approved by all the concerned authorities and immediately inform the Ministry of Labour upon approval. Such action shall not relieve an employer from observing all legal conditions.

- 3. To maintain, whenever possible, all necessary information about possible hazards at a work place.
- 4. To effectively co-ordinate with various concerned entities.
- 5. To periodically or whenever a need may arise, review the arrangements indicated in the preceding Clauses of this Article.
- 6. To identify the hazardous areas and ensure that no unauthorised personnel enter such areas by placing barricade or guard rails to prevent the presence of workers in such areas.

The main-contractor at the work place shall co-ordinate with sub-contractors about the occupational safety and health issued.

# Article 5

Work places shall meet the following conditions:

- 1. All entrances, exits, passages and roads used by the workers should be safe.
- 2. A work place shall be designed in a safe manner so as it shall not form any harm to any worker or any one available therein.
- 3. Necessary practical measures should be taken to prevent workers from using unsafe passages.
- 4. A work place area should be sufficient and adequate to carry out the work taking into consideration any equipment or instrument used for work.

- 1. All hazards at a working place must be evaluated particularly elevated places, analyse previously adopted procedures and their effectiveness in addition to adopting the required measures that secures workers safety at a working place.
- 2. All permanent grounds and preventative guard rails or any other mean intended to prevent falling to any of the elevated places must previously been be inspected by a qualified person and should secure that in a practical manner.

The following shall be observed at working places:

- 1. All construction working places must be arranged and in an accepted cleaning state.
- 2. A working place must be surrounded by a suitable fence and is identified by placing clear marks thereon.
- 3. Panels with visible nails or parts of sharp objects that may sustain injury to any worker should not be left.
- 4. To take suitable measures to store materials and objects in addition to proper procedures to dispose of garbage ad refuse in a manner that may avoid hazard to any person either by colliding or falling material.

### Article 8

Without prejudice to other provisions of this Order, where work cannot safely be done from or on the ground or from part of a building or other permanent structure there shall be provided, places and kept in position for use and properly maintained either scaffolds, or where there can be used safety ladders, all of which shall be sufficient and suitable and safe for the purposes.

### Article 9

1. Every scaffold and every part thereof shall be:

- a) Of good construction.
- b) Of suitable and sound material.
- c) Of adequate strength, including where necessary bracing, strutting and tying-in, for the purpose which it is used.
- d) It shall be properly maintained and supplied with a card indicating date of examination by a qualified person.

2. All material and parts for scaffolds shall not in use be kept under good condition and shall be properly maintained.

3. Where any part of the scaffold is incomplete or is not compliance with the requirement of this Order, access to such part shall be prevented.

- 1. Standards or uprights shall be:
  - a) Vertical or slightly inclined towards the buildings.

- b) Fixed sufficiently close together to secure the stability of the scaffold.
- 2. Ledgers and putlogs shall be securely connected together and to upright as necessary.

Scaffold erecting or dismantling shall be made under the supervision of a qualified person while observing the safety of workers erecting such scaffold through training provided the following precautions shall be taken upon erecting or dismantling:

- 1. Awareness of the approved measurement and plan to dismantle or construct a scaffold.
- 2. Safety work awareness on a scaffold.
- 3. Taking precautionary measures to prevent workers or materials from falling.
- 4. Taking into consideration the weather conditions, their effect and extent of work safety on scaffolds.
- 5. Observe the permitted loads.

### Article 12

Every scaffold fitted with wheels shall:

- 1. be constructed with due regard to stability, if necessary including weights at the base and tying-in,
- 2. be used only on a firm, level surface,
- 3. have a locking device for the wheels which shall be properly secured when the scaffold is in use.
- 4. be moved from one place to another only when it is unoccupied and then only by pressure at the bas.

# Article 13

No scaffold shall be erected, add to, altered or dismantled except by competent scaffolders. All materials used for the work as well as the completed scaffold shall be inspected and passed by a foreman scaffolder before being taken into use. Thereafter every scaffold shall be inspected by a competent person at least once every week.

The following shall be observed when working on a platform:

- 1. To be with sufficient diameters that allows workers passage, safe use of required materials and provide a suitable working area while observing the work in progress.
- 2. To be of a suitable surface with no gaps a worker or material may fall therefrom, or causes injury to a worker except if necessary measures and precautions are adopted to protect workers from hazards.
- 3. To be constructed and maintained in a manner that prevents sliding or stumbling and prevents workers falling between the work platform and the other adjacent platform.

### Article 15

Loading on the platform that leads to collapsing or occurrence of any effect that leads to losing its balance, shall be prohibited.

### Article 16

Stairs shall be provided throughout their length with hand rails on the open side or sides, of sufficient strength to prevent to fall of persons therefrom.

- 1. It shall not be permitted to use any scheme to prevent persons from falling except with the availability of the following conditions:
  - a) To conduct hazards analysis and evaluation that proves carrying out the work using this scheme is the most practical one to protect against hazards.
  - b) A user and all available persons in the working place have received suitable and proper training to pursue their duties in addition to the full knowledge of the protection steps and means.
- 2. Personal protection for falling persons scheme should observe the following:
  - a) It shall be suitable, appropriate with sufficient strength and durability for the purpose designed for and weights expected to be thereon.
  - b) It shall be suitable and appropriate for a user person
  - c) It shall be properly and correctly tied.

- d) Tying means shall be suitable and of sufficient strength and durability provided it shall be tightly fastened.
- 3. The following shall be available in the falling protection means:
  - a) It shall be of appropriate strength and sufficient dimensions for the purposes intended thereof.
  - b) It shall be stable and secure.

The following shall be observed upon working in elevated places:

- 1. Upper protective guard rails or any similar method should be at least one metre elevated from the surface edge that workers may possibly fall therefrom.
- 2. Foot guard rails shall be suitable and appropriate for protecting persons and preventing material and equipment from falling.
- 3. Side middle guard rails or any other mean shall be identical so as the gap between them, the upper side guard rails and foot guard rails shall not exceed one half metre.
- 4. Work shall be banned if the protection mean is not present unless other effective and secure safety means are present to carry out the job.

# Article 19

The following shall be observed in protective guard rails:

- a) In case of designing protective guard rails, they shall be connected to designed tie-in means and securely linked of strength and stability for the workers safety and materials falling.
- b) In the presence of an air pillow or protective net, it shall be stable.
- c) Suitable and appropriate measures shall be available to secure workers safety from injury in case of falling together with ensuring the practical suitability of such measures.

# Article 20

The following shall be observed upon using ladders:

1. An employer must observe upon using ladders for work in elevated places, to analyse and evaluate hazards that prove using them are the proper practical means.

- 2. A surface where a ladder is placed shall be steady and does not skid to prevent its movement or tilting.
- 3. A ladder must be securely placed to secure its stability while carrying out the work.
- 4. Every Ladder used as part or an access to a working place must project above any landing or working point for a distance of one meter unless other adequate hand hold is provided.
- 5. Extendable ladders shall not be used unless the parts do not collapse while using.
- 6. Caution must be taken not to move mobile ladders with wheels while climbing and protection means to avoid falling while using them as work platform.
- 7. Suitable practical rest platforms must be maintained and added to the ladders with heights exceeding 9 metres from the base.
- 8. Ladders must not be used in the following cases:
  - a) If a ladder has been repaired by means of nails, wire or rope.
  - b) If any of its steps are broken, lost or misplaced.
  - c) If it is painted in such a manner that would render it difficult to find out any cracks therein.

- 1. Necessary precautions must be taken to prevent any person at the working place to work on breakable material, pass through or nearby.
- 2. If impractical to avoid working on breakable material, avoid passing through or close by them, the following precautions must be adopted:
  - a) To ensure the availability of sufficient and appropriate work platforms, guard rails or any other method to prevent substances from falling through these materials.
  - b) To take the proper and suitable measures to reduce possible distances and damages for falling through safety nets or belts.
- 3. Warning and directing signs should be placed in areas where there breakable materials a worker is likely to pass through, close by, work on or alert worker by any other appropriate mean.

- 1. Where any work is being done on a slopping roof exceeding 12.5 degrees, there shall be provided at the edge of the roof below the working place a working platform to be wide enough to prevent any person who slips down the roof from falling to the ground below.
- 2. It shall not be permitted to carry on any work on slopping roofs or movement thereon except by properly made sliding ladders.
- 3. Where any Work is being done on whatever slopping roof degree, weather conditions that may affect objects stability and steadiness must be observed.

### Article 23

In case of carrying out any work that is likely to reduce or affect the stability and safety of any part of an existing building, existing or temporary construction, or under construction that may subject any person to risk, all necessary practical measures must be taken by designing pillars to securely stand weights and used for the purpose they were designed therefor so as to prevent any person from exposing to danger as a result of the collapse of a building, construction or any part thereof.

### Article 24

- 1. Demolition, removal or any part thereof must be planned in a manner to prevent or reduce the hazard by adopting any practical operation possible.
- 2. Demolition shall only be carried out:
  - a) Under a licence from the competent authority.
  - b) Under the direct and constant supervision of a competent person.
  - c) So far as possible by workers trained and experienced in the work.
  - d) After all services, such as water, gas and electricity supplied to the building or structure being demolished have been disconnected by the relevant authority and a certificate to that effect has been given to the competent person carrying out the disconnection on behalf of the authority.

### Article 25

1. All possible measures should be taken to protect persons from the hazards of excavations, collapsing or any part thereof by adopting the following:

- a) To adopt all necessary practical measures to prevent works or materials from falling at the excavation place.
- b) To take all proper and sufficient measures to prevent excess loading of materials and equipment on the outskirts of the excavations.
- c) To provide sufficient number of entries, exits and safe access to the excavation.
- 2. Excavation shall not start except after adopting the following procedures:
  - a) Holes and trenches must be surrounded by a safe and secure guard rails together with placing warning signs thereon, provide suitable lighting that assist in knowing and identifying such holes at night in addition to providing each worker with a reflective jacket.
  - b) To examine the connector used in excavation by a qualified person prior to the commencement of the shift and after any incident that affects the strength and stability of the excavation or falling any materials inside the hole.

The following shall be observed in dams:

- 1. It shall be properly designed and executable to reduce hazards whenever practically possible.
- 2. It shall be supplied with a system that permits a worker from exiting in case of an emergency like entry of water or materials.
- 3. It shall be periodically maintained.
- 4. A dam shall be examined by a qualified person prior to commencement of a work shift and after any incident that affects the dam's strength and stability together with the availability of a qualified person having the authority to stop the work in case of any hazard to the workers.
- 5. Water suction carried out after the dam's construction should be carried out by a qualified person with a sufficient expertise in this field.

- 1. All electric mains, switches, fuse boxes cables and other electrical supply equipment shall be specially and adequately protected, installed and maintained to eliminate danger from electric shocks.
- 2. Before any operation or work to which this Order applies are commenced, and during the progress of such works, all practicable steps shall be taken to prevent danger to persons employed from any live electric cable whether

under-ground or overhead or other apparatus, which is liable to be a source of such danger whether from the operation of a lifting or excavating appliance or otherwise. Steps to be taken shall include rendering the cable or apparatus electrically dead or the erection of suitable barriers to prevent approach to the dangerous area.

# Article 28

- 1. When the worker is conveyed to or from any working place by a water vessel, proper measures shall be taken for his safe transport. Vessels used for this purpose shall be of suitable construction, properly maintained and in good working order, shall be in charge of competent persons and shall not be overloaded.
- 2. Where on or adjacent to the site of any industrial operations or workers there is water into which a worker is liable to fall with risk of drowning, suitable rescue equipment shall be provided and kept in any efficient state and ready for use and measures shall be taken to arrange for the prompt rescue of the workers who are in danger.

Where there is a special risk of such fall from the edge of a land or off a structure adjacent to or above the water or off a floating stage secure fencing shall be provided near the edge to prevent such fall. Where there is required movement of workers or materials over or close to the edge, fencing may be removed for the time and to the extent necessary to permit such movement.

### Article 29

Every construction site shall be safely organised in order to secure the workers safety upon their movement on the work place and all passages shall appropriate for the workers and vehicles in terms of suitable number, place, area and shall be supplied with direction signs.

# Article 30

The following shall be observed when using vehicles:

- 1. To take suitable and safe measures to safely organise vehicles movement and parking at the work place.
- 2. To take suitable and sufficient measures to organise workers movement near such vehicles.
- 3. A worker must be at a safe place during loading, unloading and transport of materials at the work place.
- 4. To take suitable measures to prevent vehicles falling in the holes or water, or overturn at the sides.

On using mechanically propelled vehicles, fork-lifts, trucks, tractors and bulldozers, no such vehicles shall be used unless:

- 1. It is in the charge of and being driven by a competent person properly trained and licensed to drive with a valid Bahraini licence.
- 2. It shall be in a good state, efficient working order and in good repair.
- 3. It is used only on proper manner and is not loaded in such a way as to interfere with the safe operation of the vehicle.
- 4. It shall be equipped with seats suitable for the number of passengers if it is intended for such purpose.

### Article 32

Workers shall not be required to lift, carry or move any heavy load likely to cause injury to them.

### Article 33

The following shall be observed in confined space in which there is reason to apprehend the presence of any dangerous fumes:

- 1. No person shall enter or remain in any confined space in which there is reason to apprehend the presence of any dangerous fumes to such extent as to involve risk of persons being overcome thereby, unless they are wearing breathing apparatus of a type approved for the purpose of this Article, or a responsible person has certified the space as being, for a specified period, safe for entry without breathing apparatus, and the period so specified has nit expired; but no person shall enter or remain in the space without breathing apparatus unless he has been warned when the period so specified will expire.
- 2. A space shall not be certified under paragraph (1) of this Article unless:
  - a) Effective steps have been taken to prevent any ingress of dangerous fumes.
  - b) Any sludge or other deposit liable to give off dangerous fumes has been removed and the space contains no other material liable to give off dangerous fumes.
  - c) The space has been adequately ventilated and tested for dangerous fumes and has a supply of air adequate for respiration;

But no account shall be taken for the purposes of sub-paragraph (b) of Paragraph (2) of any deposit or other material liable to give off dangerous fumes in insignificant quantities only.

- 3. Where any worker is employed in any space to which paragraph (1) of this Order applies, there shall be provided and kept readily available:
  - a) Not less than two sets of breathing apparatus of a type approved for the purpose of this Article at the site of operations.
  - b) Not less than two additional sets of such apparatus in nearby stores.
  - c) A suitable torch approved for the purpose of this Article with each set of breathing apparatus.
  - d) Two belts or ropes suitable for rescue purpose.

The apparatus, belts, ropes and torches shall be maintained and shall be thoroughly examined, at least once every month or at such other intervals as may be prescribed by a competent person; and a report on every such examination signed by the person making the examination and containing the prescribed particulars, shall be kept available for inspection

4. A sufficient number of workers shall be trained and practiced in the use of the apparatus mentioned in the preceding paragraph of this Article and in a method of restoring respiration.

# Article 34

In case of an emergency, necessary precautions must be adopted to include steps toward vacating the worksite and take into consideration the presence of workers assembly point.

# Article 35

Proper and suitable measures must be taken to combat fire hazards at worksites.

### Article 36

Suitable and sufficient lighting must be available at the worksite and observe providing secondary lighting in case of any malfunction in the lighting that may affect the workers.

### Article 37

Every worksite must be equipped with a suitable and proper shaded area to prevent workers in cases of any disorders and bad weather together with providing the necessary precautions from lightning hazards in case of working in high buildings. Work shall not be permitted in poor visibility due to dust or fog which does not permit carrying out the work.

### Article 38

A suitable place must be prepared to eat food and rest away from any work hazards.

#### Article 39

Suitable quantity of fresh and drinkable water must be provided at suitable and easy to reach place by the workers.

### Article 40

Every person who violates the provisions of this Order shall be liable for the punishment provided for in Article (192) of the Labour Law for the Private Sector promulgated by Law No.(36) of 2012.

### Article 41

Order of the Minister of Labour and Social Affairs No.(12) of 1977 with respect to the Organisation of Precautionary Measures necessary for the Protection of Workers Engaged in Construction, Civil Engineering and Shipbuilding shall be revoked and any provision that contravene the provisions of this Order shall be revoked.

### Article 42

The Undersecretary of the Ministry of Labour shall implement this Order which shall come into effect after three months from the date of its publication in the Official Gazette.

> Signed: Jameel bin Mohamed Humaidan, Minister of Labour.

Issued on: 2<sup>nd</sup> Rabie Al Akher, 1435 Hijra, Corresponding to: 2<sup>nd</sup> February, 2014 A.D.