No. S 000

WORKPLACE SAFETY AND HEALTH ACT (CHAPTER 354A)

WORKPLACE SAFETY AND HEALTH (DESIGN FOR SAFETY) REGULATIONS 2014

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In exercise of the powers conferred by section 65 of the Workplace Safety and Health Act, the Minister for Manpower hereby makes the following Regulations:

PART I

PRELIMINARY

Citation and commencement

1. These Regulations may be cited as the Workplace Safety and Health (Design for Safety) Regulations 2014 and shall come into operation on

Definitions

2.—(1) In these Regulations, unless the context otherwise requires —

"adopt" in relation to a design by a designer, means the use or endorsement of the design by another designer;

"business" means a trade, business or other undertaking for profit or gain;

"construction phase" means the period of time starting when construction work in a project starts and ending when construction work in that project is completed;

"construction work" means the carrying out of any building operation or work of engineering construction;

"contract sum", in relation to any construction work, means the value specified in a contract of the works to be carried out by the contractor undertaking the construction work, which value includes the goods and services tax payable in relation to the supply of the work;

"contractor" means a person (whether or not he is also a main contractor or sub-contractor) who has entered into a contract for the purpose of carrying out any building operation or works of engineering construction;

"developer", in relation to a project, means any person for whom or on whose behalf the project is carried out;

"design" includes drawings, building information modelling, design details, specifications, materials and bills of quantities (including specification of articles or substances) relating to a temporary or permanent structure, and calculations prepared for the purpose of a design;

"design-for-safety register" means the record referred to in regulation 6.

"designer", in relation to a project, means any person (including a developer, contractor or other person referred to in these Regulations) who—

(a) prepares, adopts or modifies a design; or

(b) arranges for or instructs any person under his control to do so, relating to a structure or to a product or mechanical or electrical system intended for a particular structure, and a person is deemed

- to prepare a design where a design is prepared by a person under his control;
- "domestic developer" means a developer for whom a project is being carried out which is not in the course or furtherance of a business of that developer;
- "hazard" means anything with the potential to cause bodily injury, and includes any physical, chemical, biological, mechanical, electrical or ergonomic hazard;
- "main contractor" means any contractor engaged by a developer, and includes an occupier of a worksite;
- "pre-construction information" means information in the developer's possession or which is reasonably obtainable, which is relevant to the work and is of an appropriate level of detail and proportionate to the risks involved, including information about
 - (a) the project;
 - (b) planning and management of the project;
 - (c) safety and health hazards, including design and construction hazards and how they will be addressed; and
 - (d) information in any existing design-for-safety register;
- "pre-construction phase" means any period of time during which design or preparatory work is carried out for a project, prior to the construction phase;
- "project" means a process undertaken for the development of a structure, which includes or is intended to include construction work and includes all planning, design, management or other work involved in a project until the end of the construction phase;
- "risk" means the likelihood that a hazard will cause a specific bodily injury to any person;

"structure" means —

- (a) any building, timber, masonry, metal, composite or reinforced concrete structure, structure designed or used to provide support or means of access, railway line or siding, dock, harbour, inland navigation, tunnel, shaft, bridge, viaduct, waterworks, reservoir, pipe or pipe-line, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast, tower, pylon, underground tank, earth retaining structure or structure designed to preserve or alter any natural feature, fixed plant and any structure similar to those listed; or
- (b) any temporary structure, and includes any formwork, falsework, scaffold or other structure designed or used to provide support or means of access during construction work,

and any reference to a structure includes part of a structure;

"worksite" means any premises where any construction work is or are being carried out, whether or not by or on behalf of the Government or a statutory body, and includes any line or siding (not forming part of a railway) which is used in connection with the construction work.

Application

- **3.**—(1) These Regulations shall apply to every project which includes or intended to include any construction work of a contract sum of \$10 million or more.
 - (2) Paragraph (1) shall not apply to a project
 - (a) whose developer is a domestic developer; or
 - (b) which application for planning permission under the Planning Act (Cap. 232) is made before (date of commencement of these Regulations).

PART II

DUTIES OF DEVELOPER

General duties of developer

- **4.**—(1) It shall be the duty of the developer to allocate sufficient time and resource to enable persons with a duty under these Regulations to ensure that the construction work is carried out so far as is reasonably practicable without risk to the safety and health of any person who may be affected by the project.
- (2) It shall be the duty of a developer to plan, manage and monitor the project during the pre-construction phase, taking into account the general principles of prevention specified in the Schedule to ensure
 - (a) that so far as is reasonably practicable, the project is carried out without risks to safety or health of any person who may be affected by the project;
 - (b) the identification, elimination, or control, so far as is reasonably practicable, of foreseeable risks to the safety and health of any person
 - (i) carrying out or liable to be affected by construction work,
 - (ii) maintaining or cleaning a completed structure, or
 - (iii) using a completed structure designed as a workplace;
- (3) It shall be the duty of the developer to ensure that the preconstruction information is provided as soon as practicable to
 - (a) every designer engaged by the developer; and
 - (b) every contractor who is engaged or may be engaged by the developer.

(4) It shall be the duty of the developer who engages a designer or main contractor to take all reasonably practicable measures to ensure that –

- (a) any designer he engages is competent to perform the duties under regulation 7(1) and (2); and
- (b) any main contractor he engages is competent to perform the duties under regulation 8.
- (5) A developer may appoint a person whom the developer reasonably believes is competent to perform the functions and duties under regulation 5 and 6(1) and (2).
- (6) Where a person is appointed under paragraph (5), it shall be the duty of the developer to provide the person with relevant information necessary for the person to perform his duties under regulation 5 and 6(1) and (2).

Design-for-safety review process

- 5.—(1) It shall be the duty of the developer or the person appointed under regulation 4(5), as the case may be, to ensure that the design-for-safety review process is implemented with the relevant designer and contractor so as to eliminate, so far as is reasonably practicable, foreseeable risks to the safety and health of any person
 - (a) carrying out or liable to be affected by construction work;
 - (b) maintaining or cleaning a completed structure; or
 - (c) using a completed structure designed as a workplace.
- (2) Where it is not reasonably practicable to eliminate the risks in accordance with paragraph (1), it shall be the duty of the developer or the person appointed under paragraph (1), as the case may be, to ensure that
 - (a) the risk is reduced to as low as reasonably practicable; and
 - (b) all residual risks highlighted in the design-for-safety review process are recorded.
- (3) It shall be the duty of a developer or the person appointed under regulation 4(5), as the case may be, to take all reasonably practicable measures to ensure that all residual risks as highlighted in the design-forsafety review process are communicated to relevant contractor engaged by the developer.
- (4) It shall be the duty of the person appointed under regulation 4(5) to provide the developer with the relevant information of the design-for-safety review process necessary for the developer to perform their duties under the Regulations.

Design-for-safety register

6.—(1) It shall be the duty of a developer or the person appointed under regulation 4(5), as the case may be, to ensure that an appropriate design-for-safety register for the project is prepared, which —

(a) includes information provided by the developer, including records of design-for-safety review process and the residual risks;

- (b) is revised from time to time as appropriate to incorporate any relevant new information:
- (c) is shared with the relevant designer and contractor; and
- (d) is kept available for inspection by an inspector upon request.
- (2) It shall be the duty of the person appointed under regulation 4(5) to provide the developer, as soon as practicable, with an updated a copy of the design-for-safety register.
- (3) If a developer disposes of his interest in a structure, it shall be the duty of the developer -
 - (a) to provide the design-for-safety register to the person who acquires the interest in the structure; and
 - (b) to ensure that the person is aware of the nature and purpose of the design-for-safety register.
- (4) It shall be the duty of any person who acquires the interest in a structure
 - (a) to keep available the design-for-safety register for inspection by an inspector;
 - (b) to provide the design-for-safety register to the person who subsequently acquires the interest in the structure; and
 - (c) to ensure that the subsequent person is aware of the nature and purpose of the design-for-safety register.
- (5) Any developer or person appointed under regulation 4(5) who contravenes paragraph (1)(d) or 4(a) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$2,000.

PART IIII DUTIES OF DESIGNER

Duties of designer

- 7.—(1) It shall be the duty of the designer to take into account the general principles of prevention specified in the Schedule and any preconstruction information to eliminate, so far as is reasonably practicable, foreseeable risks to the safety and health of any person
 - (a) carrying out or liable to be affected by the construction work;
 - (b) maintaining or cleaning a completed structure; or
 - (c) using a completed structure designed as a workplace.
- (2) Where it is not reasonably practicable to eliminate the risks in accordance with paragraph (1), it shall be the duty of the designer, so far as is reasonably practicable —

- (a) to take steps to reduce and control the risks through modification of the design;
- (b) to provide information about those risks to the developer and main contractor; and
- (c) to ensure appropriate information is included in the design-for-safety register.
- (3) Where required by the developer or the person appointed under regulation 4(5), as the case may be, it shall be the duty of the designer to, so far as is reasonably practicable, participate in the design-for-safety review process.
- (4) It shall be the duty of the designer to take all reasonably practicable measures to provide with the design sufficient information about aspects of the design of the structure or its construction or maintenance to adequately assist
 - (a) developer;
 - (b) other designer; and
 - (c) main contractor,

to comply with their duties under the Act.

(5) It shall be the duty of a designer who engages another designer in respect to a project to take all reasonably practicable measures to ensure that the designer he engages is competent to perform the duties under paragraph (1) and (2).

PART IV DUTIES OF CONTRACTOR

Duties of main contractor

- **8.**—(1) It shall be the duty of the main contractor to plan, manage and monitor the construction work of a project, taking into account the general principles of prevention specified in the Schedule to ensure that so far as is reasonably practicable, the construction work is carried out without risks to safety or health of any person who may be affected by the construction work;
- (2) It shall be the duty of the main contractor to ensure that relevant information is provided to the developer or the person appointed under regulation 4(5), as the case may be, for the update, review and revision of the design-for-safety register from time to time, taking into account of the work and any changes that have occurred.

Duties of contractor

9.—(1) It shall be the duty of a contractor who engages a designer in respect to a project to take all reasonably practicable measures to ensure that the designer he engages is –

- (a) competent; and
- (b) provided with the relevant information to adequately assist the designer,

to perform the duties under regulations 7(1) and (2).

(2) Where required by the developer or the person appointed under regulation 4(5), as the case may be, it shall be the duty of the contractor, so far as is reasonably practicable, participate in the design-for-safety review process.

PART V

MISCELLANEOUS

Offences

10. Any person who contravenes regulation 4(1), (2), (3), (4) or (6), 5(1), (2), (3) or (4), 6(1)(a), (b) or (c), 6(2) or (3), 6(4)(b) or (c), 7(1), (2), (3), (4) or (5), 8(1) or (2), or 9(1) or (2) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 1 year or to both.

THE SCHEDULE

Regulations 4(2), 7(1) and 8(1)

GENERAL PRINCIPLES OF PREVENTION

- (a) risk must be avoided or eliminated so far as is reasonably practicable;
- (b) if it is not reasonably practicable to avoid or eliminate the risk, the risk must be reduced to as low as reasonably practicable;
- (c) any residual risk must be mitigated so far as is reasonably practicable;
- (d) in reducing or mitigating the risk
 - (i) mitigate the risks at its source where possible;
 - (ii) collective protective measures must be adopted wherever possible instead of individual protective measures;
 - (iii) adapt the work to suit the employee to ensure his safety and health, particularly in respect to the
 - (A) the design of the workplace;
 - (B) choice of work equipment and work methods.

Made this day of 2014.

LOH KHUM YEAN Permanent Secretary, Ministry of Manpower, Singapore.

[C010-048-00019; AG/LLRD/SL/354/

(To be presented to Parliament under section 65(8) of the Workplace Safety and Health Act).