

BERMUDA

MERCHANT SHIPPING AND FISHING VESSELS (HEALTH AND SAFETY AT WORK) (ASBESTOS) REGULATIONS 2019

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SCHEDULE

Practical recommendations for the clinical assessment of workers

The Minister responsible for Maritime Administration, in exercise of his powers conferred by section 93 of the Merchant Shipping Act 2002, and after consulting with the persons referred to in section 94(3) of that Act, makes the following Regulations:

PART 1

GENERAL

Citation

1 These Regulations may be cited as the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Asbestos) Regulations 2019.

Interpretation

- 2 (1) In these Regulations—
 - "1997 WHO recommended method" means the method of determining airborne fibre concentrations recommended in the document "Determination of airborne fibre concentrations: a recommended method, by phase-contrast optical microscopy (membrane filter method)" published by the World Health Organization, Geneva, 1997 (ISBN 92 4 154496 1), or any other method giving equivalent results which is approved by the Minister responsible for Health or the Chief Marine Surveyor;
 - "area of activity" means the area where activity likely to involve a risk of exposure to asbestos is carried out;
 - "asbestos" means the following fibrous silicates, and any materials or products consisting of or containing these fibrous silicates—

asbestos actinolite, CAS No 77536-66-4; asbestos gruenerite (amosite), CAS No 12172-73-5;

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asbestos anthophyllite, CAS No 77536-67-5; chrysotile, CAS No 12001-29-5; crocidolite, CAS No 12001-28-4; asbestos tremolite, CAS No 77536-68-6;
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"Bermuda ship" means a ship which is—

- (a) a Bermuda ship within the meaning of section 16(3) of the Act;
- (b) a Government ship; or
- (c) a hovercraft;
- "Bermuda waters" means the sea or other waters within the seaward limits of the territorial sea of Bermuda;
- "CAS No" means the number in the Registry of the Chemical Abstracts Service (CAS) (4);
- "contract of employment" means a contract of employment, whether express or implied, and if express, whether oral or in writing;
- "demolition" means ship-breaking or ship-recycling;
- "employer" means a person by whom a worker is employed on a ship under a contract of employment;
- "General Duties Regulations" means the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 2004;
- "Government ship" has the meaning given in section 4(3) of the Act;
- "health and safety" includes the occupational health and safety of persons whilst on board a ship and whilst boarding or leaving the ship;
- "health surveillance" means the assessment of the state of health of an individual worker related to exposure to asbestos, which is intended to prevent, and to provide early diagnosis of any disorder linked with exposure to asbestos;
- "ISO 17020" and "ISO 17025" mean, respectively, European Standard EN ISO/IEC 17020, "General criteria for the operation of various types of bodies performing inspection" and European Standard EN ISO/IEC 17025, "General requirements for the competence of testing and calibration laboratories" issued by the Comité Européen de Normalisation Electrotechnique (CENELEC), or any version of those documents which the Minister considers relevant from time to time and is specified in a Merchant Shipping Notice which contains a statement to that effect;
- "limit value" means an airborne concentration of asbestos of 0.1 fibres per cm3 as a four-hour time-weighted average, averaged over a continuous period of 4 hours;

[&]quot;maintenance" includes the refitting or repair of a ship;

- "Merchant Shipping Notice" means a Notice described as such and issued by the Chief Marine Surveyor or the equivalent UK Merchant Shipping Notice, as applicable;
- "personal protective equipment" means all equipment (including clothing) which is intended to be worn or held by a person at work and which protects that person against one or more risks to health, and any addition or accessory designed to meet that objective;
- "ship" includes hovercraft;
- "site clearance certificate for reoccupation" means a certificate issued to confirm that a ship or part of a ship where work with asbestos has been carried out has been thoroughly cleaned upon completion of that work;
- "surveyor of ships" has the meaning given by section 217 of the Act.
- (2) In the application of these Regulations to a hovercraft, a reference to the master of a ship includes a reference to the captain of that hovercraft.

Meaning of "worker"

- 3 (1) In these Regulations "worker" means any person employed under a contract of employment, including a trainee or apprentice, other than a person who is training in a vessel which is being used to provide instruction in—
 - (a) the principles of responsibility, resourcefulness, loyalty and team endeavour and to advance education in the art of seamanship; or
 - (b) navigation and seamanship for yachtsmen,

and which is operating under a relevant code.

- (2) In paragraph (1) "relevant code" means
 - (a) the Large Commercial Yacht Code as set out in a Merchant Shipping Notice issued by the Chief Marine Surveyor or the equivalent UK Merchant Shipping Notice, as applicable;
 - (b) the Code of Practice for the Safety of Small Commercial Sailing Vessels;
 - (c) the Code of Practice for the Safety of Small Commercial Motor Vessels; or
 - (d) the Code of Practice for the Safety of Small Vessels in Commercial Use for Sport or Pleasure Operating from a Nominated Departure Point.
- (3) In paragraph (2), each reference to a Code includes a reference to any document containing an amendment or replacement of that Code, which is considered by the Minister to be relevant from time to time and is specified in a Merchant Shipping Notice which contains a statement to that effect.

Application

4 (1) Without prejudice to Regulation 5 (general duties) of the General Duties Regulations, and subject to paragraphs (2) to (5), these Regulations apply in relation to

activities in which workers on a Bermuda ship are or may be exposed to asbestos during their work.

(2) Where—

- (a) a ship is being used in the course of public service activities or activities for the purposes of the civil protection services; and
- (b) characteristics peculiar to those activities inevitably conflict with a provision of these Regulations, that provision does not apply in relation to that ship to the extent of that conflict.
- (3) To the extent that a provision of these Regulations does not apply in relation to a ship because of paragraph (2), there is in relation to that ship a duty on the employer to ensure, so far as is reasonably practicable, the health and safety of workers who are or may be exposed to asbestos during their work.
- (4) This Regulation (other than paragraph (1)) and Regulations 25 and 27, apply in relation to activities on ships other than Bermuda ships, which are for the time being in Bermuda waters, during which workers are or may be exposed to asbestos in the course of their work.
 - (5) In paragraph (2)—
 - (a) "civil protection services" includes the fire and rescue and ambulance services, and search and rescue services provided by any other person; and
 - (b) "public service activities" includes the activities of the Bermuda Regiment and Customs, immigration officers, police, prison officers and the security and intelligence services.
- (6) The General Duties Regulations continue to apply to activities to which these Regulations apply, without prejudice to any more stringent or specific provisions contained in these Regulations.
- (7) Regulations 6 and 17 and paragraphs (1) to (3) of Regulation 18 do not apply where— $\,$
 - (a) worker exposure to asbestos is sporadic and of low intensity;
 - (b) it is clear from the results of the risk assessment required in accordance with Regulation 5, that the limit value will not be exceeded in the air of the area of activity; and
 - (c) work involves—
 - (i) short, non-continuous maintenance activities;
 - (ii) removal of materials in which the asbestos fibres are firmly linked in a matrix;
 - (iii) encapsulation or sealing of asbestos-containing materials which are in good condition; or

- (iv) air monitoring and control, and the collection of samples to ascertain whether a specific material contains asbestos.
- (8) For the purposes of paragraph (8)(a), exposure to asbestos will not be sporadic and of low intensity if the concentration of asbestos in the atmosphere when measured in accordance with the 1997 WHO recommended method, exceeds or is liable to exceed 0.6 fibres per cm3 in the air measured over a ten-minute period or if the limit value is, or is likely to be exceeded.

PART 2

DUTIES OF EMPLOYERS AND OTHERS

Assessment of risks

- $5\,$ $\,$ $\,$ In case of any activity likely to involve a risk of exposure to asbestos, the employer must—
 - (a) in carrying out the risk assessment required by Regulation 7 (risk assessment) of the General Duties Regulations—
 - (i) determine the nature, degree and duration of the workers' exposure in order to make it possible to assess any risk to the workers' health or safety and to lay down the measures to be taken;
 - (ii) in assessing the risk of such exposure, take account of all routes of exposure; and
 - (iii) give particular attention to any effects concerning the health and safety of workers at particular risk and take account of the desirability of not employing such workers in areas where they may come into contact with asbestos; and
 - (b) review the assessment regularly and in any event where there is reason to believe that it is incorrect or when any change occurs in the conditions which may affect workers' exposure.

Notification of work relating to asbestos

- 6 (1) An employer whose workers are to undertake activities in which they are or may be exposed to asbestos must notify the Minister in writing, of the matters listed in paragraph (3)—
 - (a) if reasonably practicable, not less than 14 days before the work commences; and
 - (b) otherwise, as soon as is reasonably practicable and in any event, before the work commences.
- (2) An employer whose workers are to undertake or are undertaking activities in which they are, or are likely to be exposed to asbestos must notify the Minister in writing,

of the matters listed in paragraph (3), immediately on becoming aware that a change in working conditions is likely to result in a significant increase in exposure to asbestos.

- (3) The matters which must be notified under paragraphs (1) and (2) are—
 - (a) the location of the area of activity;
 - (b) the type and quantities of asbestos used or handled;
 - (c) the activities and processes involved;
 - (d) the number of workers involved;
 - (e) the starting date and duration of the work;
 - (f) measures taken to limit the exposure of workers to asbestos; and
 - (g) if the work consists of demolition or the removal of asbestos from a ship-
 - (i) evidence of the employer's ability in that field of work; and
 - (ii) the plan of work, drawn up in accordance with Regulation 12.
- (4) The employer must give workers and their representatives, access to any documents notified to the Minister, which concern their own undertaking or establishment.

Prohibition of certain activities relating to asbestos

- The employer must ensure, so far as is reasonably practicable, that workers do not undertake, and workers must not undertake, the following—
 - (a) the application of asbestos by means of the spraying process;
 - (b) working procedures that involve using low-density (less than 1 gram per cm3) insulating or soundproofing materials which contain asbestos; and
 - (c) activities which expose workers to asbestos during—
 - (i) the extraction of asbestos;
 - (ii) the manufacture or processing of asbestos products; or
 - (iii) the manufacture or processing of products containing intentionally added asbestos,

other than the treatment or disposal of products resulting from demolition or asbestos removal.

Prevention and reduction of exposure

- 8 (1) The employer must reduce to a minimum the exposure of workers to asbestos, and in any case must ensure that no worker is exposed to asbestos in excess of the limit value.
- (2) In order to achieve the requirements of paragraph (1), the employer must in particular— $\,$

- (a) limit to the lowest possible figure the number of workers exposed or likely to be exposed to asbestos, consistent with safe working;
- (b) design work processes so as not to produce asbestos fibres or, if that proves impossible, to avoid or minimise the release of asbestos fibres into the air;
- (c) ensure that all—
 - (i) areas of activity; and
 - (ii) equipment involved,
 - are capable of being regularly and effectively cleaned and maintained and are so cleaned and maintained;
- (d) store and transport all asbestos in suitable sealed packing; and
- (e) collect and remove waste from the area of activity as soon as possible and store it in suitable sealed secure packing with labels indicating that it contains asbestos.

Measurement of air quality

- 9 (1) Having regard to the results of the initial assessment of risk in accordance with Regulation 5, in order to ensure that the limit value is not exceeded, the employer must measure regularly the airborne concentration of asbestos fibres in the area of activity.
- (2) The employer must ensure that sampling carried out in accordance with paragraph (1)—
 - (a) is representative of the exposure of the workers to asbestos;
 - (b) is carried out after consultation with the workers or their representatives;
 - (c) is carried out by suitably qualified personnel;
 - (d) has a duration such that representative exposure can be established for a continuous four-hour reference period by means of measurements or time-weighted calculations; and
 - (e) takes into consideration only fibres with—
 - (i) a length of more than 5 micrometres;
 - (ii) a breadth of less than 3 micrometres; and
 - (iii) a length to breadth ratio greater than 3:1.
- (3) The employer must ensure that samples taken are analysed in laboratories equipped for fibre counting, which must be carried out wherever possible, in accordance with the 1997 WHO recommended method.

Exposure to asbestos

10 (1) Where the limit value is exceeded, the employer must—

- (a) identify the reasons for this and take appropriate measures to remedy the situation as soon as possible; and
- (b) prevent work from continuing in the affected area until adequate measures have been taken for the protection of the workers concerned.
- (2) In order to check the effectiveness of the measures mentioned in paragraph (1) (a), the employer must immediately carry out a further determination of the airborne concentration of asbestos fibres.
- (3) Where exposure cannot be reduced by other means and where compliance with the limit value makes necessary the wearing of individual protective breathing equipment, the employer—
 - (a) may not require a worker to carry out work requiring the wearing of such equipment on a permanent basis; and
 - (b) must keep work requiring the wearing of such equipment to the strict minimum necessary for each worker.
- (4) Where in the case of activities such as demolition, repair, maintenance and the removal of asbestos, it is foreseeable that the limit value will be exceeded, despite the use of technical preventative measures for limiting the airborne concentration of asbestos fibres, the employer must determine the measures necessary to ensure protection of workers engaged in those activities, and in particular must—
 - (a) issue suitable respiratory and other personal protective equipment to workers and ensure that it is worn;
 - (b) put up warning signs indicating that it is foreseeable that the limit value will be exceeded; and
 - (c) prevent asbestos from spreading outside the area of activity.
- (5) During periods of work which require the use of individual protective breathing equipment, the employer must, in consultation with the workers or their representatives, make provision for breaks appropriate to the physical and climatological conditions.

Maintenance and demolition of ships

- 11 (1) Before beginning any maintenance to or demolition of a ship, the employer must take all necessary steps to identify any asbestos present or presumed to be present, if appropriate, by—
 - (a) obtaining information from the owner of the ship or any other person or body who has such information; or
 - (b) by taking samples of materials for analysis, provided that such sampling is carried out—
 - (i) after consultation with the workers or their representatives; and
 - (ii) by suitably qualified personnel.

(2) If the employer is in any doubt about the presence of asbestos in the ship or in any material or product present in the ship, the employer must comply with the relevant provisions of these Regulations, as though asbestos were present.

Plans of work

- 12 (1) Before work is started on demolition of a ship or removal of asbestos from a ship, the employer must draw up a written plan of work which prescribes the measures necessary to ensure the safety and health of workers at the area of activity and that of other workers nearby, and in particular specifies that—
 - (a) any asbestos is to be removed before demolition techniques are commenced, except where this would cause a greater risk to workers than if the asbestos had been left in place;
 - (b) the respiratory and other personal protective equipment referred to in Regulation 10(4)(a) is to be provided where necessary; and
 - (c) when the demolition or removal has been completed, the absence of asbestos exposure risks in the area of activity is to be verified by means of the production of a site clearance certificate for reoccupation.
- (2) The employer, before requesting a person to assess whether the ship or the area of activity has been thoroughly cleaned upon completion of that work and is suitable for reoccupation, such that a site clearance certificate for reoccupation can be issued, must first ensure that, that person is accredited by an appropriate body as competent to perform work in compliance with the paragraphs of ISO 17020 and ISO 17025 which cover organisation, quality systems, control of records, personnel, accommodation and environmental conditions, test and calibration methods, method validation, equipment, handling of test and calibration items and reporting results.
- (3) The employer must ensure, so far as is reasonably practicable, that the work to which the plan of work relates, is carried out in accordance with that plan and any subsequent written changes to it.

Training

- 13 (1) The employer must provide appropriate training at regular intervals, for all workers who are, or who are likely to be, exposed to asbestos.
- (2) The content of the training must be easy for workers to understand and must enable them to acquire the necessary knowledge and skills in terms of prevention and safety, particularly as regards—
 - (a) the properties of asbestos and its effects on health, including when combined with smoking;
 - (b) the types of products or materials likely to contain asbestos;
 - (c) the operations which could result in asbestos exposure and the importance of preventive controls to minimise exposure;
 - (d) safe work practices, controls and personal protective equipment;

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- (e) the appropriate role, choice, selection, limitations and proper use of respiratory equipment;
- (f) emergency procedures;
- (g) decontamination procedures;
- (h) waste disposal; and
- (i) medical examination requirements.

Access to risk areas

- $14\,$ $\,$ The employer must take appropriate measures to ensure that the areas of activity—
 - (a) are clearly demarcated and indicated by warning signs;
 - (b) are not accessible other than to workers who by reason of their work or duties are required to enter them; and
 - (c) constitute areas where smoking, eating and drinking are not permitted.

Hygiene and individual protection

- 15 (1) The employer must take appropriate measures to ensure that—
 - (a) areas are set aside where workers can eat and drink without risking contamination by asbestos;
 - (b) separate storage places are provided for working or protective clothing and for non-work clothing;
 - (c) workers are provided with appropriate and adequate washing and toilet facilities, including showers, in the case of dusty operations;
 - (d) personal protective equipment is placed within a well-defined place and is checked and cleaned after each use;
 - (e) workers are provided with appropriate working or protective clothing which, subject to paragraph (2), remains within the ship;
 - (f) equipment found to be defective is repaired or replaced before further use; and
 - (g) any working or protective clothing to be disposed of is treated as asbestos waste.
- (2) The employer must ensure that the cleaning of working or protective clothing is carried out either on the ship where that clothing was worn, if the ship is suitably equipped for such cleaning, or in a suitably equipped laundry.
- (3) The employer must store and transport working or protective clothing for cleaning, packed in suitable sealed and labelled containers.

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Information for workers

- 16 (1) The employer must take appropriate measures to ensure that workers and their representatives receive adequate information concerning—
 - (a) the potential risks to health from exposure to asbestos;
 - (b) the existence of the limit value and the need for the atmosphere to be monitored;
 - (c) hygiene requirements, including the need to refrain from smoking;
 - (d) the precautions to be taken as regards the wearing and use of personal protective equipment; and
 - (e) special precautions designed to minimise exposure to asbestos.
 - (2) The employer must in addition, take appropriate measures to ensure that—
 - (a) workers and their representatives have access to the results of the measurements of the airborne concentration of asbestos fibres and can be given explanations of the significance of those results; and
 - (b) if the results exceed the limit value, the workers concerned and their representatives are informed as quickly as possible of the fact and the reasons for it, and are consulted on the measures to be taken or, in an emergency, are informed of the measures which have been taken.

Health records and medical surveillance

- 17 (1) The employer must ensure that—
 - (a) a health record is maintained, containing particulars of the matters set out in paragraph (2), for each worker who is exposed to asbestos; and
 - (b) the health record, or a copy of it, is kept available in a suitable form, for at least 40 years from the date of the last entry made in it.
- (2) The health record must, as a minimum, contain the following information about the worker—
 - (a) the full name, sex, date of birth, permanent address and National Insurance number;
 - (b) where relevant, the types of work carried out with asbestos, its location, start and end dates, information relating to the average duration of exposure to asbestos and the personal protective equipment used;
 - (c) information, where available, on any previous work undertaken with asbestos; and
 - (d) dates of medical examinations and assessments carried out pursuant to these Regulations.

- (3) The employer must ensure that each worker who is to undertake activities in which that worker is exposed to asbestos is under adequate health surveillance by a doctor or other medical authority.
 - (4) The health surveillance required by paragraph (3), must—
 - (a) include an assessment of the worker's state of health, including a specific examination of the chest;
 - (b) be undertaken, subject to paragraph (5), not more than 3 years prior to the beginning of the worker's exposure or risk of exposure to asbestos at the place of work;
 - (c) be undertaken at least once every three years for as long as the worker's exposure or risk of exposure to asbestos continues; and
 - (d) have regard to the practical recommendations for the clinical assessment of workers contained in the Schedule to these Regulations.
- (5) If the employer knows, or ought reasonably to know, that a worker has been, or has been at risk of being exposed to asbestos, before the coming into force of these Regulations—
 - (a) if the worker informs the employer of a previous health assessment which included a specific chest examination, the employer must ensure that the outcome of that health assessment, if available, is reviewed by a doctor or other medical authority immediately after the coming into force of these Regulations; and
 - (b) if the worker's state of health has not previously been assessed, including a specific chest examination, or if the results of a previous health assessment referred to in sub-paragraph (a) are not available, the employer must ensure that such an assessment, including a specific chest examination, is undertaken immediately on the coming into force of these Regulations.
- (6) Where a worker is assessed in accordance with paragraph (4) or (5)(b), or a health assessment is reviewed in accordance with paragraph (5)(a), the doctor or other medical authority must issue a certificate to the employer and the worker, stating—
 - (a) that the worker has been so assessed or the previous health assessment has been reviewed, as the case may be; and
 - (b) the date of the health assessment or review,

and the employer must keep that certificate or a copy of it for at least four years from the date on which it was issued.

- (7) The employer must ensure so far as is reasonably practicable that the doctor or other medical authority referred to in paragraph (6), who carries out a health assessment or review, advises on or determines any individual protective or preventive measures to be taken, including, where appropriate—
 - (a) the withdrawal of the worker concerned, from all exposure to asbestos; and

- (b) the continuation of health surveillance after the end of exposure.
- (8) The employer must ensure that a worker is given information and advice regarding any health assessment which that worker may undergo following the end of exposure.
- (9) If the doctor or other medical authority responsible for the health surveillance of a worker indicates that health surveillance must continue after the end of the worker's exposure, that continuing surveillance must be carried out for as long as the doctor or other medical authority considers necessary, to safeguard the health of the person concerned.
 - (10) The employer must—
 - (a) on reasonable notice being given, allow a worker access to that worker's health record referred to in paragraph (1);
 - (b) provide the Minister with copies of such health records as the Minister may require; and
 - (c) on ceasing to trade, notify the Minister immediately in writing, and make available to the Minister all health records kept in accordance with this Regulation.
- (11) The doctor or other medical authority responsible for the health surveillance of workers under this Regulation must, on reasonable request by a worker or employer, for a review of the results of health surveillance, undertake that review with a view to determining whether that health surveillance is adequate for the purposes of this Regulation.
- (12) In this Regulation and Regulation 18, "doctor or other medical authority" means a person who has suitable qualifications to undertake the requirements of these Regulations.

Register of workers and notification of cases

- 18 (1) The employer must enter in a register, the names of workers responsible for carrying out activities in which they are, or are at risk of being exposed to asbestos, indicating the nature and duration of the activity and the exposure to which they have been subjected.
 - (2) The employer must give access to the register referred to in paragraph (1), to—
 - (a) every doctor or other medical authority responsible for health surveillance of workers entered in the register;
 - (b) each worker as respects the results in the register which relate to that worker personally; and
 - (c) the workers and their representatives as respects anonymous, collective information in the register.
- (3) The employer must keep the register referred to in paragraph (1), for at least 40 years from the date of the last entry made in it, and if the undertaking ceases trading, must notify the Minister immediately in writing, and make the register available to the Minister.

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- $\mbox{\em (4)}\;$ The employer must notify the Minister immediately, on becoming aware of any case of—
 - (a) asbestos;
 - (b) mesothelioma;
 - (c) bronchial carcinoma; or
 - (d) gastro-intestinal carcinoma,

which is diagnosed in any worker whose details are listed in the register referred to in paragraph (1), and the Minister must keep any information so notified, in a register of recognised cases of asbestosis, mesothelioma, bronchial carcinoma, and gastro-intestinal carcinoma.

Consultation with and participation of workers

- 19 In consulting with workers in accordance with Regulation 20 (consultation with workers) of the General Duties Regulations, an employer must consult workers or their representatives on the control of exposure to asbestos and in particular on—
 - (a) the assessment of risk under Regulation 5;
 - (b) measures taken to prevent or reduce risks arising from exposure to asbestos in accordance with Regulation 8;
 - (c) measures determined to be necessary to ensure protection of workers in accordance with Regulation 10(4);
 - (d) the provision of training and information in accordance with Regulations 13 and 16; and
 - (e) the arrangements for health surveillance in accordance with Regulation 17.

Persons upon whom duties are imposed

- 20 (1) Where a person on whom a duty is imposed by any of the preceding provisions of these Regulations does not have control of the matter to which that provision relates, because responsibility for the operation of the ship falls upon another person, that duty also extends to any other person who has control of that matter.
- (2) It is the duty of every worker performing activities to which these Regulations apply— $\,$
 - (a) to make full and proper use of all personal protective equipment provided by the employer, in pursuance of these Regulations; and
 - (b) to give effect to all instructions and training provided under Regulations 13 and 16.

PART 3

ENFORCEMENT

Offences and penalties

- 21 (1) A person who fails to comply with Regulation 5, 7, 8, 10, 17(1), (3), (5), (6), (7), (8) or (10) or 18(1), (2) or (3) commits an offence and is liable—
 - (a) on summary conviction, to a fine not exceeding \$10,000; and
 - (b) on conviction on indictment, to imprisonment for a term not exceeding two years or to a fine not exceeding \$10,000 or to both.
- (2) A person who fails to comply with Regulations 6, 9, 11 to 16 or 19 commits an offence and is liable on summary conviction, to a fine not exceeding \$5,000.
- (3) A person who acts in contravention of Regulation 29 commits an offence and is liable on summary conviction, to a fine not exceeding \$2,000.
- (4) A worker who fails to comply with Regulation 20(2) commits an offence and is liable on summary conviction, to a fine not exceeding \$1,000.
- (5) Section 145(1) of the Act (enforcement of fines) applies to any fine imposed for an offence under paragraphs (1) to (3) as if the reference to proceedings against the owner or master of a ship for an offence under Chapter II were a reference to proceedings against any person for an offence under those paragraphs.

Offences by bodies corporate

- 22 (1) Where a body corporate commits an offence under these Regulations and that offence is proved to have been committed with the consent or connivance of, or to be attributable to any neglect on the part of any director, manager, secretary or other similar officer of the body corporate or a person who was purporting to act in any such capacity, that person as well as the body corporate commits that offence and is liable to be proceeded against and punished accordingly.
- (2) Where the affairs of a body corporate are managed by its members, paragraph (1) applies in relation to the acts and defaults of a member, in connection with that person's functions of management as if that member were a director of the body corporate.

Onus of proving what is reasonably practicable

In any proceedings under these Regulations consisting of a failure to comply with a duty or requirement to do something so far as is reasonably practicable, it is for the defendant to prove that it was not reasonably practicable to do more than was in fact done to satisfy that duty or requirement.

Detention of a Bermuda ship

24 (1) Where a surveyor of ships is satisfied that there is or has been a failure by an employer or other person referred to in Regulation 20(1), to comply in relation to any Bermuda ship, with the preceding requirements of these Regulations, that ship is liable to be detained until a surveyor of ships is satisfied that those requirements are complied with.

- (2) A surveyor of ships may permit a ship which is liable to be detained under paragraph (1), to proceed to sea for the purposes of proceeding to the nearest appropriate repair yard.
 - (3) A ship must not be delayed or detained unreasonably under this Regulation.
- (4) Where a ship is detained because in relation to it there has been a failure to comply with the requirements of these Regulations, and that failure has ceased, a person having power to detain the ship must, at the request of the owner or master, immediately release the ship—
 - (a) if no proceedings for an offence arising from the failure in question are instituted within the period of seven days beginning with the day on which the ship is detained;
 - (b) if proceedings for an offence arising from the failure in question, having been instituted within that period, are concluded without the employer or other person having control of the matter in question being convicted;
 - (c) if either—
 - (i) the sum of \$50,000 is paid to the Minister by way of security; or
 - (ii) security which, in the opinion of the Minister, is satisfactory and is for an amount not less than \$50,000, is given to the Minister,
 - by or on behalf of the employer or other person having control of the matter in question;
 - (d) where the employer or other person having control of the matter in question is convicted of an offence arising from the failure in question, if any costs or expenses ordered to be paid by the defendant, and any fine imposed on the defendant, have been paid; or
 - (e) the release is ordered by a court or tribunal referred to in article 292 of the United Nations Convention on the Law of the Sea 1982, and any bond or other financial security ordered by such court or tribunal is posted.
- (5) The Minister must repay any sum paid in pursuance of paragraph (4)(c) or release any security so given— $\,$
 - (a) if no proceedings for an offence arising from the failure in question are instituted within the period of seven days beginning with the day on which the sum is paid; or
 - (b) if proceedings for an offence arising from the failure in question, having been instituted within that period, are concluded without the employer or other person having control of the matter in question being convicted.
- (6) Where a sum has been paid, or security has been given, by any person in pursuance of paragraph (4)(c) and the employer or other person having control of the matter in question is convicted of an offence arising from the failure in question, the sum so paid or the amount made available under the security shall be applied as follows—

- (a) first, in payment of any costs or expenses ordered by the court to be paid by the employer or other person having control of the matter in question;
- (b) next, in payment of any fine imposed by the court; and
- (c) any balance shall be repaid to the first-mentioned person.
- (7) Section 144 of the Act (interpretation of section 143) applies for the purposes of paragraphs (4) to (6) as if— $\,$
 - (a) references to the master or owner of the ship were references to the employer or other person having control of the matter in question; and
 - (b) references to an offence under section 130 were references to an offence arising from the failure in question.

Inspection and other measures in respect of ships registered outside Bermuda

- 25 (1) When a ship which is not a Bermuda ship is in Bermuda waters, a relevant inspector may inspect that ship to ascertain whether the standards required in relation to Bermuda ships by these Regulations are met, in relation to that ship.
- (2) Where a surveyor of ships is satisfied that the standards required in relation to Bermuda ships by these Regulations are not met in relation to a ship which is not a United Kingdom ship but is in Bermuda waters, that surveyor of ships may—
 - (a) send a report to the government of the State whose flag the ship is entitled to fly, and a copy of it to the Director General of the International Labour Organization; and
 - (b) where conditions on board are clearly hazardous to health or safety, take such measures as are necessary, to ensure those conditions are rectified.
- (3) A ship to which paragraph (2)(b) applies is liable to be detained until a surveyor of ships is satisfied that those conditions are rectified.
- (4) A surveyor of ships may permit a ship which is liable to be detained under paragraph (3), to proceed to sea for the purposes of proceeding to the nearest appropriate repair yard.
- (5) If any of the measures specified in paragraph (2)(b) or (3) are taken, the surveyor of ships must immediately notify the nearest maritime, consular or diplomatic representative of the State whose flag the ship is entitled to fly.
- (6) A ship must not in the exercise of the power under this Regulation be delayed or detained unreasonably.
- (7) In paragraph (1), "relevant inspector" means a person mentioned in section 219(1) of the Act.

Application of powers of inspectors in relation to Government ships

Sections 219 to 227 of the Act apply to these Regulations as if they were for all purposes, made under section 93 (safety and health on ships) of the Act and accordingly, those sections apply in relation to Government ships.

Enforcement of detention

- 27 (1) Section 242 of the Act (enforcing detention of ship) applies where a ship is liable to be detained under these Regulations as if— $\,$
 - (a) references to detention of a ship under the Act were references to detention of the ship in question under these Regulations; and
 - (b) subsection (7) were omitted.
- (2) Where a ship is liable to be detained under these Regulations, the person detaining the ship must serve on the master of the ship, a detention notice which must—
 - (a) state that a surveyor of ships is of the opinion that in relation to that ship there is a failure to comply with the requirements of these Regulations;
 - (b) specify the matters which, in the opinion of the surveyor of ships, have the effect that, in relation to that ship, those requirements are not met; and
 - (c) require the terms of the notice to be complied with, until the ship is released by any person mentioned in section 242(1) of the Act.

Right of appeal and compensation

Regulations 14 and 24 (right of appeal and compensation) of the Merchant Shipping (Port State Control) Regulations 2019 (which, by virtue of Regulation 22 of those Regulations, apply in relation to the exercise of powers of detention contained in safety Regulations), apply in relation to a detention notice served on a Government ship under these Regulations, as if these Regulations were for all purposes made under section 93 of the Act.

Prohibition on charging of workers

No charge in respect of anything done or provided in accordance with any requirement of these Regulations may be levied or permitted to be levied on any worker.

SCHEDULE

(Regulation 17(4))

PRACTICAL RECOMMENDATIONS FOR THE CLINICAL ASSESSMENT OF WORKERS

Practical recommendations for the clinical assessment of workers

- 1. Current knowledge indicates that exposure to free asbestos fibres can give rise to the following diseases— $\,$
 - (a) asbestosis;
 - (b) mesothelioma;
 - (c) bronchial carcinoma;
 - (d) gastro-intestinal carcinoma.
- 2. The doctor or other medical authority responsible for health surveillance must be familiar with the exposure conditions or circumstances of each worker.
- 3. Health examination of workers should be carried out in accordance with the principles and practices of occupational medicine: it should include at least the following measures—
 - (a) keeping records of a worker's medical and occupational history;
 - (b) a personal interview;
 - (c) a general clinical examination, with particular reference to the chest;
 - (d) lung function tests (respiratory flow volumes and rates).

Made this 14th day of February 2019

Minister of Tourism and Transport

[Operative Date: 18 February 2019]