

# THE INDUSTRIAL COURT OF TRINIDAD AND TOBAGO

Corner Queen & St. Vincent Streets, Port of Spain 6 Irving Street, San Fernando





# Occupational Safety and Health Act Chapter 88:08



#### LAWS OF TRINIDAD AND TOBAGO

# OCCUPATIONAL SAFETY AND HEALTH ACT CHAPTER 88:08

Act 1 of 2004 Amended by 3 of 2006

**Current Authorised Pages** 

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#### **CHAPTER 88:08**

#### OCCUPATIONAL SAFETY AND HEALTH ACT

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#### **CHAPTER 88:08**

#### OCCUPATIONAL SAFETY AND HEALTH ACT

An Act respecting the safety, health and welfare of persons at work.

[ASSENTED TO 30TH JANUARY 2004]

Preamble.

WHEREAS it is enacted *inter alia*, by subsection (1) of section 13 of the Constitution that an Act to which that section applies may expressly declare that it shall have effect even though inconsistent with sections 4 and 5 of the Constitution and, if any such Act does so declare, it shall have effect accordingly:

And whereas it is provided by subsection (2) of the said section 13 of the Constitution that an Act to which this section applies is one the Bill for which has been passed by both Houses of Parliament and at the final vote thereon in each House has been supported by the votes of not less than three-fifths of all the members of that House:

And whereas it is necessary and expedient that the provisions of this Act shall have effect even though inconsistent with sections 4 and 5 of the Constitution:

#### PART I

#### **PRELIMINARY**

Short title.

**1.** This Act may be cited as the Occupational Safety and Health Act.

Commencement. [48/2006 150/2007].

- **2.** (1) With the exception of section 98 this Act came into operation on 17th February 2006.
  - (2) Section 98 came into operation on 17th August 2007.

Act inconsistent with the Constitution.

**3.** This Act shall have effect even though inconsistent with sections 4 and 5 of the Constitution.

- **4.** (1) In this Act, except where otherwise expressly Interpretation. provided—
- "Agency" means the Occupational Safety and Health Agency established under section 69;
- "air contaminant" means airborne solid, liquid, fume or gaseous matter, radioactive fallout, odour, micro-organism or any combination of them, in such concentration or quantities as to impair the quality of the working environment or to expose persons to risks to their health;
- "approved standard" as the context may admit, means a national or international standard so declared or adopted by the Trinidad and Tobago Bureau of Standards under the Standards Act and includes an appropriate type as Ch. 82:03. determined by the Authority;
- "Authority" means the Occupational Safety and Health Authority established under section 64;
- "bodily injury" includes injury to physical and mental health;
- "building operation" means the construction, structural alteration, repair or maintenance of a building (including repainting, re-decoration and external cleaning of the structure), the demolition of a building, and the preparation for, and laying the foundation of, an intended building, but does not include any operation which is a work of engineering construction within the meaning of this Act;
- "calendar year" means the period of twelve months beginning with 1st January in any year;
- "Chief Inspector" means the person appointed as such under section 70(1);
- "Chief Medical Officer" means the public officer holding, or acting in, the office of Chief Medical Officer;
- "child" means a person under the age of eighteen years;
- "clerical work" includes writing, book-keeping, filing, duplicating, machine calculating, drawing, electronic data and word processing, the editorial preparation of matter for publication, computer data, word processing and secretarial work;

"confined space" means a space in which, because of its construction, location or contents, or of work activity therein, the accumulation of a dangerous dust or fume or the creation of oxygen deficient atmosphere may occur;

"Court"—

- (a) in relation to criminal proceedings, means a Court of summary jurisdiction; or
- (b) in relation to proceedings under sections 83A and 97A, means the Industrial Court;

"critical injury" means an injury that—

- (a) places life in jeopardy;
- (b) produces unconsciousness;
- (c) results in substantial loss of blood;
- (d) involves the fracture of a leg or arm, but not a finger or toe;
- (e) involves the amputation of a leg, arm, hand or foot, but not a finger or toe;
- (f) consists of burns to a major portion of the body; or
- (g) causes the loss of sight in an eye;
- "dangerous" means likely to create risk to safety or health or cause bodily injury;
- "employee" means any person who has entered into or works under a contract with an employer to do any skilled, unskilled, manual, clerical or other work for hire or reward, whether the contract is expressed or implied, oral or in writing or partly oral and partly in writing, and includes public officers, the protective services and teachers;
- "employer" means a person who employs persons for the purpose of carrying out any trade, business, profession, office, vocation or apprenticeship;
- "factory" means premises in which, or within the curtilage or precincts of which, persons are employed, by way of trade, or intended trade, or for purposes of gain, in or incidental to any process, including—
  - (a) the making, demolishing, altering, repairing, warehousing, ornamenting, furnishing,

- distributing, cleaning, washing, breaking up or adapting for sale, of any article or product, or the filling of containers;
- (b) the slaughtering of animals or poultry;
- (c) the production of cinematograph films or other audio-visual material;
- (d) the storing of gas;
- (e) the transforming or converting of materials or chemicals;
- (f) the supplying and maintaining of services in connection with water and sewerage; and
- (g) the testing or analysing of any substance,

and premises shall not be excluded from this definition by reason only that they are open-air premises;

- "fire authority" means the public officer holding, or acting in, the office of Chief Fire Officer;
- "fugitive emissions" means any gas, vapour or liquid which escapes unintentionally from any part of a plant or machinery;
- "hazard information" means information on the proper and safe use, storage, transport and handling of a dangerous substance and includes information relating to the toxicological properties of the substance and its chemical structure and formula;
- "health surveillance" means the periodic review, for the purpose of protecting health and preventing occupational related disease, of the health of employees, so that any adverse variations in their health that may be related to working conditions are identified as early as possible;
- "Industrial Court" means the Court established under the Industrial Relations Act;

Ch. 88:01.

- "industrial establishment" means a factory, shop, office, place of work or other premises but does not include—
  - (a) premises occupied for residential purposes only; or
  - (b) other categories of establishment exempted by the Minister in accordance with this Act;

- "inspector" means a person designated as such under section 71(1)(a);
- "intoxicant" means any alcohol, medicament, narcotics and psychotropic substances;
- "machinery" means a part or an assemblage of parts, fixed or movable, by which motion or force is transmitted;
- "maintained" means kept in an efficient state, in efficient working order, and in good repair;
- "medical inspector" means a person designated or appointed in accordance with section 71(1)(b);
- "medical practitioner" means a person registered under the Medical Board Act;
- "Minister" means the Minister to whom responsibility for the administration of occupational safety and health is assigned;
- "municipal corporation" means a Municipal Corporation continued or established under sections 3 and 4 of the Municipal Corporations Act;

Ch. 25:04.

Ch. 29:50.

Schedule 1.

- "occupational disease" means a disease listed in Schedule 1;
- "occupier" means the person who has the ultimate control over the affairs of an industrial establishment;
- "owner" means the person for the time being receiving the rack rent of the premises in connection with which the word is used, whether on his own account or as agent or trustee for any other person, or who would so receive the rack rent if the premises were let at a rack rent;
- "parent" includes a guardian or person having the legal custody of, or the control over, a child or young person;
- "period of employment" means the working hours of an employee, inclusive of the time allowed for meals and rest;
- "plant" includes equipment or appliance;
- "premises" includes any place, and, in particular—
  - (a) any vehicle, vessel, aircraft or hovercraft;
  - (b) any subterranean installation or installation on land, including the foreshore and other land intermittently covered by water;

- (c) any offshore installation and any other installation, whether floating or resting on the seabed or the subsoil thereof or resting on other land covered with water or the subsoil thereof; and
- (d) any tent or movable structure;
- "prime mover" means an engine, motor or other appliance which provides mechanical energy derived from steam, water, wind, electricity, the combustion of fuel or other source;
- "process" means a treatment applied to a substance or material to produce the desired result;
- "public emergency" means the public emergency declared by Proclamation by the President under section 8 of the Constitution;
- "safety and health committee" means a committee to be established pursuant to section 25E;
- "sanitary conveniences" includes urinals, water closets, latrines and other lavatories and such other conveniences necessary for the personal hygiene of an employee;
- "self-employed person" means an individual who works for gain or reward otherwise than under a contract of employment, whether or not he himself employs others;
- "ship" includes any description of vessel used in aquatic navigation but not propelled by oars;
- "shop" means a building, booth, stall or place where goods are handled or exposed for sale, or where services are offered for sale, and includes a hotel, restaurant, pub, and recreational facility;
- "toxic substance" means any disinfectant, and any other substance known to be poisonous, corrosive, irritating, sensitising or harmful to man or animal that is used in agriculture, the arts, commerce or industry, or for any domestic or other purpose but does not include an antiseptic, drug or preservative;
- "woman" means a female person who has attained the age of eighteen years;

- "work of engineering construction" means the construction, structural alteration or repair (including repointing and repainting) or the demolition of any dock, harbour, inland navigation, tunnel, bridge, viaduct, waterworks, reservoir, pipeline, aqueduct, sewer, sewerage works, gasholder, oil tank or road and includes any other works prescribed by the Minister:
- "workroom" means a room in which an employee is required to work;
- "young person" means a child of the age of sixteen years and under the age of eighteen years.
- (2) A railway line or siding which is used in connection with and for the purpose of a factory shall be deemed to be part of the factory, but if such line or siding is used in connection with more than one factory belonging to different occupiers, the line or siding shall be deemed to be a separate factory.
- (3) A workplace in which, with the permission of or under agreement with the owner or occupier, two or more persons carry on work, which would constitute the workplace a factory, if the persons working therein were in the employment of the owner or occupier, shall be deemed to be a factory for the purposes of this Act, and the provisions of this Act shall apply as if the owner or occupier of the workplace were the occupier of the factory and the persons working therein were persons employed in the factory.
- (4) Premises shall not be excluded from the definition of an industrial establishment by reason only that they are open-air premises.
- (5) Where the Minister by Order so directs, as respects all or any of the purposes of this Act, two or more industrial establishments shall be deemed to be a single industrial establishment.
- (6) Where the Minister on the advice of the Chief Inspector on the basis of prescribed criteria so directs, as respects all or any of the purposes of this Act, different branches or departments of work carried on in the same industrial establishment shall be deemed to be separate industrial establishments.

- (7) Premises belonging to or in the occupation of the State shall not be excluded from the definition of an industrial establishment.
- (8) For the purposes of this Act, machinery or plant shall be deemed to have been constructed or reconstructed before the commencement of this Act and an industrial establishment or building shall be deemed to have been constructed, reconstructed, extended, added to or converted for use as an industrial establishment, before the commencement of this Act or the coming into operation of any of the provisions of this Act, if the construction, reconstruction, extension, addition, or conversion was begun before the passing of this Act or the coming into operation of any of the provisions of this Act, as the case may be.
- (9) A person who works in an industrial establishment, whether employed by the occupier or not, either in a process or in cleaning a part of the industrial establishment used for a process, or in cleaning or oiling the machinery or plant, or in any other kind of work whatsoever incidental to or connected with the process, or connected with the article made or otherwise the subject of the process therein, shall except as is otherwise provided by this Act, be deemed to be employed therein for the purposes of this Act.
- (10) A young person who works in an industrial establishment, whether for remuneration or not, in collecting, carrying or delivering goods, carrying messages or running errands, shall be deemed to be employed in the industrial establishment for the purposes of this Act.
- (11) Except where otherwise expressly provided, the provisions of this Act shall be in addition to and not in substitution for or in diminution of the provisions of any other written law.
- **5.** (1) Except as in this Act otherwise expressly provided, General this Act shall apply only to industrial establishments.

application

(2) This Act shall apply to industrial establishments belonging to or occupied by the State but in case of any public

emergency the Minister may, by Order, for the duration of the period specified in the Order, exempt from this Act any industrial establishment—

- (a) belonging to or occupied by the State;
- (b) in which work is being carried out on behalf of the State; or
- (c) whose activities are vital to the national welfare.
- (3) Where any of the rights of an employee established by any other Act, collective agreement, contract of employment, custom or practice are more favourable than this Act requires, the provisions so established prevail over this Act.
  - (4) This Act binds the State.

#### PART II

#### **GENERAL DUTIES**

General duties of employers to their employees. [3 of 2006].

- **6.** (1) It shall be the duty of every employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his employees.
- (2) Without prejudice to the generality of an employer's duty under subsection (1), the matters to which that duty extends include in particular—
  - (a) the provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health;
  - (b) arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of equipment, machinery, articles and substances;
  - (c) the provision of adequate and suitable protective clothing or devices of an approved standard to employees who in the course of employment are likely to be exposed to the risk of head, eye, ear, hand or foot injury, injury from air contaminant

- or any other bodily injury and the provision of adequate instructions in the use of such protective clothing or devices;
- (d) the provisions of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the safety and health at work of his employees;
- (e) so far as is reasonably practicable as regards any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks;
- (f) the provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risks to health, and adequate as regards amenities and arrangements for their welfare at work; and
- (g) compliance with sections 7, 12, 37, 46, 75 and 76, Parts III and IX and such other duties that may be imposed on him by this Act.

#### (3) An employer shall—

- (a) ensure that all hazardous chemicals present in the industrial establishment are labelled in a way easily understandable to the employees, or are identified in the prescribed manner;
- (b) obtain or prepare, as may be prescribed, an unexpired chemical safety data sheet for all hazardous chemicals present in the workplace;
- (c) ensure that the identification required by paragraph (a) and chemical safety data sheets required by paragraph (b) are available in English and such other languages as may be prescribed;
- (d) ensure that when hazardous chemicals are transferred into other containers or equipment,

- the contents are indicated in a manner which will make known to employees, their identity, any hazards associated with their use, and any safety precautions to be observed; and
- (e) ensure that information is provided on the handling and disposal of hazardous chemicals which are no longer required and containers which have been emptied but which may contain residues of hazardous chemicals, so that the risk to safety and health and to the environment is eliminated or minimised.
- (4) An employer shall ensure that a hazardous chemical is not used, handled or stored in the industrial establishment unless the prescribed requirements concerning identification, chemical safety data sheets and worker instruction and training are met.
- (5) An employer shall advise the Chief Inspector in writing if the employer, after making reasonable efforts, is unable to obtain a label or chemical safety data sheet required by subsection (3).
- (6) A copy of the most recent version of the inventory and of every unexpired chemical safety data sheet required by this Part in respect of hazardous chemicals in a workplace shall be—
  - (a) made available by the employer in such a manner as to allow examination by the employees;
  - (b) furnished by the employer to a representative of the health and safety committee, if any, or to an employee selected by the employees to represent them, if there is no such committee or if there is no trade union, an employee selected by the employees to represent them;
  - (c) filed by the employer with the Chief Inspector on request or if so prescribed.
- (6A) No person shall remove or deface the identification referred to in subsection (3)(a), for a hazardous chemical.

- (7) An employer of an industrial establishment of twenty-five or more employees, shall prepare or revise, in consultation with the representatives of his employees, a written statement of his general policy with respect to the safety and health of persons employed in the industrial establishment, specifying the organisation and arrangements for the time being in force for carrying out that policy and the requirements of subsections (1) to (6A), and the employer shall submit the statement and any revision thereof to the Chief Inspector and bring them to the notice of all persons employed in the industrial establishment.
- (7A) The Chief Inspector may, having regard to the statement submitted under subsection (7) direct the employer to appoint at his own expense, a safety practitioner who shall assist in ensuring that the policy and the provisions specified in section 6 are complied with.
- (8) The Chief Inspector may direct an employer of fewer than twenty-five persons to effect under his supervision, a preparation or revision of the type referred to in subsection (7).
- (9) An employer shall, after being notified by a female employee that she is pregnant and upon production of a medical certificate to that effect, adapt the working conditions of the female employee to ensure that she is not—
  - (a) involved in the use of, or exposed to, chemicals, substances or anything dangerous to the health of the unborn child; or
  - (b) subjected to working conditions dangerous to the health of the unborn child,

and where appropriate, the employer may assign alternative work, where available, to her without prejudice to her right to return to her previous job.

(10) Where a female employee who has notified her employer of her pregnancy under subsection 6(9) is no longer pregnant she shall immediately upon discovery of this fact notify her employer and shall produce a medical certificate to that effect.

- (11) No employer shall require or permit a pregnant employee or an employee who is nursing her child to perform work that is hazardous to her health or the health of the child.
- (12) Notwithstanding any other law, during an employee's pregnancy, and for a period of six months after the birth of her child, her employer shall offer her suitable, alternative employment on terms and conditions that are no less favourable than her ordinary terms and conditions of work, where the employee is required to perform work that poses a danger to her safety or health or that of her child, unless there is no other available suitable alternative employment or that in doing so the employer will incur costs greater than ordinary administrative costs.
- (13) An employee may challenge a decision of the employer in accordance with section 83A.

General duties of employers and selfemployed persons to persons other than their employees.

- 7. (1) It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment, who may be affected thereby are not thereby exposed to risks to their safety or health.
- (2) It shall be the duty of every self-employed person to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that he and other persons, not being his employees, who may be affected by his actions are not thereby exposed to risks to their safety or health.
- (3) In such cases as may be prescribed, it shall be the duty of every employer and every self-employed person, in the prescribed circumstances and in the prescribed manner, to give to persons, not being his employees, who may be affected by the way in which he conducts his undertaking, the prescribed information about such aspects of the way in which he conducts his undertaking as might affect their safety or health.

General duties of occupiers. [3 of 2006].

**8.** (1) Subject to Part X and except as otherwise expressly provided, it shall be the duty of every occupier of an industrial

establishment to ensure that the following provisions are complied with:

- (a) Parts IV to VII;
- (b) section 62;
- (c) Part XI; and
- (d) such other provisions of this Act or such regulations as imposed duties on him.
- (2) An occupier of an industrial establishment employing twenty-five or more persons shall prepare or revise, in consultation with worker representatives in the industrial establishment—
  - (a) a written statement of his general policy with respect to the safety and health of persons employed in the industrial establishment, specifying the organisation and arrangements for the time being in force for carrying out that policy and the provisions specified in subsection (1); and
  - (b) an emergency plan in writing based on a risk assessment made in accordance with section 13A which shall include—
    - (i) suitable and rapid means of obtaining first-aid help and transportation from the industrial establishment to a hospital for injured workers; and
    - (ii) measures and procedures to be used to control a major fire, to react to serious damage to the industrial establishment, to evacuate the industrial establishment and to notify rescue personnel,

and the occupier shall submit the statement or the emergency plan, as the case may be, and any revision thereof to the Chief Inspector and bring them to the notice of all persons employed in the industrial establishment.

(3) The Chief Inspector may, having regard to the statement or the emergency plan submitted under subsection (2), direct the occupier to appoint at his own expense, a Safety

Practitioner who shall assist in ensuring that the policy and the provisions specified in subsection (1) or the requirements of the emergency plan, as the case may be, are complied with.

- (4) An occupier shall ensure, as far as is reasonably practicable, that no unsafe structure exists in the industrial establishment that is likely to expose persons to risks to bodily injury.
- (5) An occupier shall ensure that the requirements under this section are complied with within three months of the employment of its twenty-fifth employee.

General duty of occupier to protect safety and health of public. [3 of 2006].

- **9.** The occupier of every industrial establishment shall—
  - (a) be under a duty to take steps within the standards established by the Authority responsible for managing the environment, to protect the safety and health of the public in the vicinity of his industrial establishment from dangers created by the operation or processes carried on therein; and
  - (b) take special care to ensure that plant and equipment used therein are of such integrity and that such adequate safety systems exist as to prevent the occurrence of fugitive emissions not conforming with an approved standard.

General duties of employees at work. [3 of 2006].

- **10.** (1) It shall be the duty of every employee while at work—
  - (a) to take reasonable care for the safety and health of himself and of other persons who may be affected by his acts or omissions at work;
  - (b) as regards any duty or requirement imposed on his employer to co-operate with him so far as necessary to ensure that that duty or requirement is performed or complied with;
  - (c) to report to his employer, any contravention under this Act or any Regulations made thereunder, the existence of which he knows:

- (d) to use correctly the personal protection clothing or devices provided for his use;
- (e) to exercise the discretion under section 15 in a responsible manner; and
- (f) to ensure that he is not under the influence of an intoxicant to the extent that he is in such a state as to endanger his own safety, health or welfare at work or that of any other person.
- (1A) A person who refuses to comply with subsection (1) commits a safety and health offence and is subject to the jurisdiction of the Industrial Court.
- (2) An employee who wilfully and without reasonable cause does anything which results in the death or critical injury to another person at work, commits an offence and is liable in accordance with the Offences Against the Person Act.

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- (3) An employer may discipline, in the customary manner, an employee who breaks the safety provisions of this Act.
- 11. (1) No person shall wilfully or recklessly interfere with Duty not to or misuse any means, appliance, convenience or other thing misuse things provided in the interests of safety, health or welfare in pursuance provided pursuant to Act. of this Act.

- (2) A person who contravenes subsection (1) commits an offence and is liable, on summary conviction to a fine of one thousand dollars and to imprisonment for three months.
- 12. (1) No employer shall levy or permit to be levied on Certain charges any employee of his in respect of anything done or provided in pursuance of any specific requirement of this Act, except in respect of—

- (a) foodstuffs and other items served in a canteen;
- (b) things lost or damaged wilfully or through the negligence of the employee; and
- (c) protective clothing and devices where the employee is employed for one month or less.

(2) Amount levied under subsection (1)(c), shall not be in excess of one-half of the value of the protective clothing or devices.

General duties of manufacturers and suppliers.

- **13.** (1) A person who designs, manufactures, imports or supplies any technology, machinery, plant, equipment or material for use in any industrial establishment shall—
  - (a) ensure, so far as is reasonably practicable, that the technology, machinery, plant, equipment or material is safe and without risks to health when properly used;
  - (b) take such steps as are necessary to ensure that there will be available in connection with the use of technology, machinery, plant, equipment or material, adequate information about the use for which it was designed and tested and about any conditions necessary to ensure that it will be safe and without risks to health or the environment when properly used.
- (2) A person who undertakes the design or manufacture of any technology, machinery, plant, equipment or material shall carry out or arrange for the carrying out of any necessary research with a view to the discovery and, so far as is reasonably practicable, the elimination or minimisation of any risks to safety or health to which the machinery, plant, equipment or material may give rise.
- (3) It shall be the duty of any person who erects or installs any machinery, plant, equipment or component thereof, in any premises when that article is to be used by persons at work to ensure, as far as is reasonably practicable, that nothing about the way in which it is erected or installed makes it unsafe or exposes persons to risks to their safety or health when properly used.
- (4) Nothing in the preceding provisions of this section shall be taken to require a person to repeat any testing, examination or research which has been carried out otherwise than by him or at his instance, in so far as it is reasonable for him to rely on the results thereof for the purpose of those provisions.

- (5) Any duty imposed on any person by any of the preceding provisions of this section shall extend only to things done in the course of a trade, business or other undertakings carried out by him (whether for profit or not) and to matters within his control.
- (6) Where a person designs, manufactures, imports or supplies any technology, machinery, plant, equipment or material for, from or to another on the basis of a written undertaking by that other to take specified steps sufficient to ensure, so far as is reasonably practicable, that the article will be safe and without risks to health when properly used, the undertaking shall have the effect of relieving the first-mentioned person from the duty imposed by subsection (1) to such extent as is reasonable having regard to the terms of the undertaking.
- (7) Where a person ("the ostensible supplier") supplies any technology, machinery, plant, equipment or material to another ("the customer") under a hire-purchase agreement, conditional sale agreement or credit-sale agreement, and the ostensible supplier—
  - (a) carries on the business of financing the acquisition of goods by others by means of such agreements; and
  - (b) in the course of that business acquired his interest in the machinery supplied to the customer as a means of financing its acquisition by the customer from a third person ("the effective supplier"),

the effective supplier and not the ostensible supplier shall be treated for the purpose of this section as supplying the technology, machinery, plant, equipment or material to the customer, and any duty imposed by the preceding provisions of this section on suppliers shall accordingly fall on the effective supplier and not on the ostensible supplier.

(8) For the purpose of this section, technology, machinery, plant or material is not to be regarded as properly used where it is used without regard to any relevant information or advice relating

to its use which has been made available by a person by whom it was designed, manufactured, imported or supplied.

(9) A person who sells or lets on hire, or as agent of the seller or hirer causes or procures to be sold or let or hire, for use in an industrial establishment, any technology, machinery, plant or material which does not comply with the requirements of this section, commits an offence and is liable on summary conviction to a fine of ten thousand dollars.

Annual risk assessment. [3 of 2006].

- **13A.** (1) Every employer shall make a suitable and sufficient annual assessment of—
  - (a) the risks to the safety and health of his employees to which they are exposed whilst they are at work; and
  - (b) the risks to the safety and health of persons not in his employment arising out of or in connection with the environmental impact of his undertaking,

for the purpose of identifying what measures are necessary for compliance with this Act or any other statutory provision.

- (2) Any assessment referred to in paragraph (a) or (b) shall be reviewed by the employer who made it if—
  - (a) there is reason to suspect that it is no longer valid; or
  - (b) there has been a significant change in the matters to which it relates,

and where as a result of any such review, changes to an assessment are required, the employer or self-employed person concerned shall make them.

- (3) Where the employer employs twenty-five or more employees, he shall keep a record in accordance with section 75 of—
  - (a) the findings of the assessment; and
  - (b) any group of his employees identified by the assessment as being exposed to an occupational safety and health risk.

#### PART III

# RIGHTS OF EMPLOYEES TO REFUSE WORK WHERE SAFETY OR HEALTH IN DANGER

- **14.** (1) This Part does not apply with respect to an employee Application described in subsection (2)—
  - (a) when a circumstance described in section 15(a),(b), (c) or (d), is inherent in the employee's work or is a normal condition of the worker's employment; or
  - (b) when the employee's refusal to work would directly endanger the life, safety or health of another person.
  - (2) The employee referred to in subsection (1) is—
    - (a) a member of the Defence Force, Police Service, Fire Service or Prison Service:
    - (b) a person employed in the operation of—
      - (i) a hospital, clinic, health centre, nursing home, psychiatric institution, home for the aged, rehabilitation centre or other establishment;
      - (ii) a laboratory;
      - (iii) a power plant or technical service or facility used in conjunction with an institution, facility or service described in sub-paragraph (i) or (ii).
- (3) Nothing in this Part shall be construed as relieving an employee referred to in section 14(2) from his duty referred to in section 10(1)(c).
- (4) An employer who receives a report pursuant to section 10(1)(c), shall forthwith take steps to comply with section 6(1) and report to the Chief Inspector the existence of the danger and any steps that he has taken or intends to take to remove the danger.

Refusal to work. [3 of 2006].

- **15.** An employee may refuse to work or do particular work where he has sufficient reason to believe that—
  - (a) there is serious and imminent danger to himself or unusual circumstances have arisen which are hazardous or injurious to his health or life;
  - (b) any machine, plant, device or thing he is to use or operate is likely to endanger himself or another employee;
  - (c) the physical condition of the workplace or the part thereof in which he works or is to work is likely to endanger himself;
  - (d) any machine, plant, device or thing he is to use or operate or the physical condition of the workplace or part thereof in which he works or is to work is in contravention of this Act or the Regulations made under it and such contravention is likely to endanger himself or another employee.

Report of refusal. [3 of 2006].

- **16.** (1) Upon refusing to work or do particular work the employee shall immediately report the circumstances of the refusal or intended refusal to the employer or his representative and a representative of the safety and health committee.
- (2) The employer shall cause the safety and health committee to forthwith investigate the report in the presence of the employee and in the presence of—
  - (a) a person who because of knowledge, experience and training is selected by the trade union that represents the employee;
  - (b) an employee selected by the employees to represent them, where there is no trade union; or
  - (c) the employer or his representative,

who shall be made available by his employer and shall attend without delay.

(3) Where there is no safety and health committee the employee, upon refusing to work or do particular work, shall report the circumstance of the intended refusal to the employer or his representative and the Chief Inspector who shall deal with it in accordance with section 18.

17. Where, following the investigation or any steps taken to Refusal to work deal with the circumstances that caused the employee to refuse to following investigation. work or do particular work it is, pursuant to section 16, found that the employee has reasonable grounds to believe anything mentioned in section 15, the employee may refuse to work or to do the particular work and the employer or the employee or a person on behalf of the employer or employee shall cause an inspector to be notified thereof.

18. (1) An inspector shall, within twenty-four hours from Investigation by the time of the refusal to work, investigate the refusal in the [3 of 2006]. presence of the employer or his representative, the employee and the person mentioned in section 16(2)(a), (b) or (c) and make a decision.

- (2) The inspector shall, following the investigation, decide whether the machine, plant, equipment, device or thing or the workplace or part thereof is likely to endanger the employee or another person and shall give his decision in writing within twenty-four hours to the employer, the employee and the person mentioned in section 16(2)(a) or (b) and the decision of the inspector shall be complied with unless the Chief Inspector decides otherwise.
- (3) A person who is aggrieved by the decision of the inspector may apply to the Chief Inspector to review the decision of the inspector.
- (4) A person who is aggrieved by a decision of the Chief Inspector may apply to the Industrial Court to have the matter determined.
- (5) A person who fails to comply with the decision of an inspector in accordance with subsection (2) or the decision of the Chief Inspector pursuant to subsection (2) commits an offence.
- 19. (1) Pending and during an investigation, or pending the Employee to be making of a decision, under this Part, the employee shall, during available. [3 of 2006]. normal working hours, be in a safe place in the industrial establishment and make himself or, as the case may require, be made available to assist, if necessary, in the carrying out of the investigation.

- (2) Subject to subsection (1) and section 16 and the provisions of any collective agreement, the employer may—
  - (a) assign the employee reasonable alternative work during his normal hours; or
  - (b) subject to section 76, where assignment of reasonable alternative work is not practicable, give other directions to the worker.

Employee deemed to be at work.

- **20.** (1) Pending the investigation and decision of the Chief Inspector, no employee shall be assigned to use or operate the equipment, machine, device or article or to work in the industrial establishment or in the part of the industrial establishment being investigated as long as there is continuing imminent and serious danger to the life or health of any employee or person and until after the employer or his representative has taken remedial action, if necessary, to deal with the circumstances that caused the employee to refuse to do particular work.
- (2) The employee who refuses to work under section 15, shall be deemed to be at work and his employer shall pay him at the regular or premium rate, as may be proper for the time extending from the time when the worker started to refuse to work under section 15 to the time when the Inspector or the Chief Inspector has decided under section 18 that the equipment, machine, device, article or the industrial establishment or part thereof presents an imminent and serious danger to the life or health of the employee or any person.

No discipline, dismissal, reprisal by employer.

- **20A.** No employer or person acting on behalf of an employer shall—
  - (a) dismiss or threaten to dismiss a worker;
  - (b) discipline or suspend or threaten to discipline or suspend a worker;
  - (c) impose any penalty upon a worker, or intimidate or coerce a worker,

because the worker has acted in compliance with this Act or the Regulations or an Order made thereunder, has sought the enforcement of this Act or the Regulations, has observed the procedures established by the employer or has given evidence in a proceeding in respect of the enforcement of this Act or the Regulations.

21. Pending and during an investigation under this Part, the Entitlement to employee and the person mentioned in section 16(2)(a) or (b) be paid. [3 of 2006]. shall be deemed to be at work and his employer shall pay him at the usual rate.

#### PART IV

#### **SAFETY**

22. (1) In every industrial establishment, no young person Employment of shall work at a machine to which this section applies, unless he on dangerous has been fully instructed as to the dangers arising in connection with its operation, and the precautions to be observed, and—

- (a) has received sufficient training in work at the machine: or
- (b) is under adequate supervision by a person who has special knowledge and experience in the operation of the machine.
- (2) This section applies to such machines as may be prescribed, being machines which are of such a dangerous character that a young person ought not to work at them unless the requirements of subsection (1) are complied with.
- 23. (1) All persons entering an area in an industrial Protective establishment where they are likely to be exposed to the risk of devices. head, eye, ear, hand or foot injury, injury from air contaminant or any other bodily injury, shall be provided with suitable protective clothing or devices of an approved standard and adequate instructions in the use of such protective clothing or devices, and no person shall be permitted to be in any such area unless he is wearing such protective clothing or device.

- (2) In every area where protective clothing or devices are required to be worn under subsection (1), a notice to that effect shall be conspicuously displayed.
- **24.** (1) Where, in connection with the carrying on of a process, Removal of dust there is given off dust or fumes or other impurity of such a character and to such an extent as to be likely to be injurious or offensive to

employees in an industrial establishment, all practicable measures shall be taken by the occupier to protect the employees against inhalation of the dust or fumes or other impurity and to prevent its accumulation in any workroom, and where the nature of the process makes it practicable, exhaust appliances shall be provided and maintained as near as possible to the point of origin of the dust or fumes or other impurity, so as to prevent contamination of the air of the workroom.

(2) Where steam is discharged into a room where persons are normally required to work, effective steps shall be taken to dissipate the steam from that room.

Dangerous fumes and lack of oxygen in confined spaces. [3 of 2006].

- **25.** (1) The requirements of section 25(2) to 25(8) apply, with all necessary modifications, to any confined space while an employee is in that space.
- (2) Subject to section 25(4), a confined space shall be entered only where—
  - (a) there is an easy egress from all accessible parts of the confined space;
  - (b) mechanical equipment in the confined space is—
    - (i) disconnected from its power source; and
    - (ii) locked out;
  - (c) all pipes and other supply lines whose contents are likely to create a hazard are blanked off; and
  - (d) the confined space is tested and evaluated by a competent person who—
    - (i) records the results of each test in a permanent record; and
    - (ii) certifies in writing in the permanent record that the confined space—
      - (A) is free from hazard; and
      - (B) will remain free from hazard while any worker is in the confined space having regard to the nature and duration of the work to be performed.
- (3) Subject to section 25(4) a confined space in which there exists or is likely to exist a hazardous gas, vapour, dust or

fume or an oxygen content of less than eighteen per cent or more than twenty-three per cent at atmospheric pressure, shall be entered only when—

- (a) the requirements of section 25(2) are complied with;
- (b) the space is purged and ventilated to provide a safe atmosphere;
- (c) the measures necessary to maintain a safe atmosphere have been taken;
- (d) another worker with appropriate rescue equipment is stationed outside the confined space;
- (e) suitable arrangements have been made to remove the worker from the confined space should the worker require assistance; and
- (f) a person adequately trained in artificial respiration is conveniently available.
- (4) A confined space in which there exists or is likely to exist, a hazardous gas, vapour, dust or fume or an oxygen content of less than eighteen per cent or more than twenty-three per cent at atmospheric pressure, and cannot be purged and ventilated to provide and maintain a safe atmosphere shall be entered only when—
  - (a) all the requirements of section 25(2) except subparagraph (d)(ii) are complied with;
  - (b) the employee entering is using a suitable breathing apparatus and a safety harness or other similar equipment to which is securely attached a rope, the free end of which is attached to rescue equipment operated by an employee equipped with an alarm, who is keeping watch outside the confined space;
  - (c) the employee entering is using such other equipment as is necessary to ensure the employee's safety;
  - (d) the safety harness, rope and other equipment referred to in paragraph (b) have been inspected

- by a competent person and are in good working order; and
- (e) a person adequately trained in artificial respiration is conveniently available.
- (5) Subject to paragraph (4)(b) where the gas or vapour in a confined space is or is likely to be explosive or flammable, the confined space shall be entered only where—
  - (a) the concentration of the gas or vapour does not or is not likely to exceed fifty per cent of the lower explosive limit of the gas or vapour; and
  - (b) the only work to be performed is that of cleaning or inspecting and of such a nature that it does not create any source of ignition.
- (6) Cold work may be performed in a confined space that contains or is likely to contain an explosive or flammable gas or vapour where the concentration does not, and is not likely to exceed ten per cent of the lower explosive limit of the gas or vapour.
  - (7) For the purposes of this section—
    - (a) "competent person" means a person, whether employed by the occupier or not, who has adequate knowledge of and experience in dealing with dangerous fumes, and who is certified by the Chief Inspector, to perform examinations and issue certificates under this section; and
    - (b) "fumes" includes gas or vapour.
- (8) The Minister may make Regulations to provide for the process of certification of competent persons by the Chief Inspector.
- (9) It shall be the duty of the occupier and in the case of employment, the employer to ensure as far as is reasonably possible that the requirements of this section are complied with to the satisfaction of the Chief Inspector.

Effective safeguarding of machinery

- **25A.** In an industrial establishment every—
  - (a) prime mover;

- (b) part of the transmission machinery;
- (c) dangerous part of a machine,

shall be effectively safeguarded in accordance with sections 25B, 25C and 25D.

- **25B.** (1) Every flywheel directly connected to any prime Prime movers. mover and every moving part of any prime mover, except such prime movers as are mentioned in subsection (3) of this section, shall be securely fenced, whether the flywheel or prime mover is situated in an engine house or other enclosure or not.
- (2) The head and tail race of every water wheel and of every water turbine shall be securely fenced.
- (3) Every part of electric generators, motors and rotary converters, and every flywheel directly connected thereto, shall be securely fenced unless it is in such a position or of such construction as to be as safe to every person employed or working on the premises as it would be if securely fenced.
- **25C.** (1) Every part of the transmission machinery shall be Transmission securely fenced unless it is in such a position or of such construction as to be safe to every person employed or working on the premises as it would be if securely fenced.

- (2) Efficient devices or appliances shall be provided and maintained in every room or place where work is carried on by which the power can promptly be cut off from the transmission machinery in that room or place.
- (3) No driving belt when not in use shall be allowed to rest or ride upon a revolving shaft which forms part of the transmission machinery.
- (4) Suitable striking gear or other efficient mechanical appliances shall be provided and maintained and used to move driving belts to and from fast and loose pulleys which form part of the transmission machinery, and any such gear or appliances shall be so constructed, placed and maintained as to prevent the driving belt from creeping back on to the fast pulley.

Other machinery.

- **25D.** (1) Every dangerous part of any machinery, other than prime movers and transmission machinery, shall be securely fenced unless it is in such a position or of such construction as to be safe to every person employed or working on the premises as it would be if securely fenced, save that, in so far as the safety of a dangerous part of any machinery cannot by reason of the nature of the operation be secured by means of a fixed guard, the requirements of this section shall be deemed to have been complied with if a device is provided which automatically prevents the operator from coming into contact with that part.
- (2) Any part of a stock-bar which projects beyond the head-stock of a lathe shall be securely fenced unless it is in such a position as to be safe to every person employed or working on the premises as it would be if securely fenced.

Establishment of safety and health committees.

- **25E.** Every employer in consultation with the representatives of his employees shall establish a safety and health committee at an industrial establishment in accordance with this section where—
  - (a) there are twenty-five or more persons employed at that establishment; or
  - (b) the Chief Inspector on the basis of prescribed criteria, directs the establishment of such a committee at the industrial establishment where fewer than twenty-five persons are employed.

Functions of safety and health committee.

- **25F.** Every safety and health committee established at a place of work in accordance with this Act shall—
  - (a) keep under review the measures taken to ensure the safety and health of persons at the place of work:
  - (b) investigate any matter at an industrial establishment—
    - (i) which a member of the committee or a person employed thereat considers is not safe or is a risk to health; and
    - (ii) which has been brought to the attention of the employer;

- (c) attempt to resolve any matter referred to in paragraph (b) and, if it is unable to do so, shall request the Chief Inspector to undertake an inspection of the place of work for that purpose;
- (d) have such other functions as may be prescribed.

# **25G.** (Repealed by Act No. 3 of 2006).

**25H.** All fencing or other safeguards provided in pursuance Construction of the foregoing provisions of this Part of this Act of any and maintenance Regulations or Orders made in pursuance thereof shall be of of fencing. substantial construction, and constantly maintained and kept in position while the parts required to be fenced or safeguarded are in motion or in use, except when any such parts are exposed for examination, lubrication or adjustment which it is necessary to carry out while they are in motion.

251. (1) In the case of any machine in a factory being Construction machine intended to be driven by mechanical power—

and sale of new machinery.

- (a) every set-screw, bolt, nut, key or keyway, on any revolving shaft, spindle, wheel or pinion shall be so sunk, encased or otherwise effectively guarded as to prevent danger; and
- (b) all spur and other toothed or friction gearing, which does not require frequent adjustment while in motion, shall be completely encased unless it is so situated as to be as safe as it would be if completely encased.
- (2) Any person who sells or lets on hire, or as agent of the seller or hirer causes or procures to be sold or let on hire, for use in a factory in Trinidad and Tobago any machine intended to be driven by mechanical power which does not comply with the requirements of this section shall be guilty of an offence and liable to a fine of ten thousand dollars.
- (3) Nothing in this section shall apply to any machine constructed before the passing of this Act.
- **25J.** No person shall clean any part of a prime mover or of any Cleaning of transmission machinery while the prime mover or transmission motion.

machinery is in motion by mechanical power, and no person shall clean any part of any machine if the cleaning thereof would expose him to risk of injury from any moving part either of that machine or of any adjacent machinery.

Health surveillance. [3 of 2006].

- **25K.** (1) Every employer shall ensure that his employees are provided with such health surveillance as is appropriate having regard to the risks to their safety and health which are identified by the annual risk assessment.
- (2) Every employer shall keep a record of the health surveillance referred to in subsection (1) in accordance with section 75.

# PART V

# **FIRE**

Means of escape in case of fire. [3 of 2006].

**26.** (1) This section applies only to industrial establishments—

- (a) in which the aggregate number of persons employed in a building exceeds twenty;
- (b) in which more than ten persons are employed in the same building, above the ground floor of the building; or
- (c) in which explosive or highly flammable substances are stored or used.
- (2) Every occupier shall ensure that his industrial establishment is certified in the manner prescribed under this Act by the fire authority as being provided with such means of escape in the case of fire for the persons employed therein as may reasonably be required in the circumstances of each case and, if premises with respect to which no such certificate is in force are used as an industrial establishment, the occupier commits an offence and is liable, on summary conviction, to a fine of ten thousand dollars and to imprisonment for six months and to a further fine of one thousand dollars for each day on which the offence continues.
- (3) It shall be the duty of the fire authority to examine the industrial establishment and on being satisfied that subsection (2) is complied with, give a certificate to that effect, and where that

subsection is not complied with, the fire authority may by notice in writing require the occupier to make such alterations, within such period as may be specified in the notice.

- (4) The certificate, which shall be kept on the premises by the occupier and made available for inspection by the fire authority or an inspector, shall specify precisely and in detail the means of escape provided and shall contain particulars as to—
  - (a) the maximum number of persons in the industrial establishment as a whole and, if the fire authority thinks fit, the maximum number in any specified part thereof;
  - (b) explosive or highly flammable material stored or used;
  - (c) the nature and frequency of the periodic firefighting drills;
  - (d) the purposes for which the premises are used;
  - (e) the means for giving warning in the event of a fire;
  - (f) the means available to persons on the premises in fighting fire;
  - (g) the measures for securing the means of escape; and
  - (h) any other matters taken into account in granting the certificate,

and the fire authority shall send a copy of the certificate to both the Chief Inspector and the appropriate Municipal Corporation.

- (5) The means of escape specified in the certificate shall be properly maintained and kept free from obstruction at all times.
- (6) Where, after the grant of a certificate, it is proposed to make any extension or structural alteration of the premises or to increase the number of persons employed in the industrial establishment, or to store or use explosive or highly flammable material in the industrial establishment or to increase the extent of such storage or use, the occupier shall give notice in writing of the proposal to the fire authority and also to the appropriate Municipal Corporation.

- (7) Where the fire authority on receipt of the notice referred to in subsection (6) is of the opinion that the means of escape will be adversely affected by the proposed changes, or that such means have by reason of changed conditions become insufficient, it may by notice in writing require the occupier to comply with such directives, within such period of time, as it may specify.
- (8) The fire authority may, by notice in writing, prohibit or restrict the use of an industrial establishment or require the occupier to make, within the period specified in the notice, alterations for the purposes of providing a safe means of escape in case of fire if—
  - (a) it appears to the fire authority that dangerous conditions with regard to escape in case of fire exist in the industrial establishment; or
  - (b) it appears to an inspector that conditions referred to in paragraph (a) exist and the inspector requests the fire authority in writing to examine the industrial establishment for the purposes of exercising his powers under this section.
- (9) The occupier shall, within the period specified in the notice issued by the fire authority under this section, carry out, the alterations required by the notice, and upon their being carried out, the occupier shall notify the fire authority in writing and the fire authority shall amend the certificate or issue a new certificate, and shall send a copy of the amended or new certificate to the Chief Inspector, and if the alterations are not so carried out, the fire authority shall, without prejudice to the taking of other proceedings, cancel the certificate.
- (10) Where the occupier fails to notify the fire authority in respect of the matters referred to in subsection (6), or where he fails to comply with such directives as the fire authority may give under subsection (7) or (8), he commits an offence and is liable, on summary conviction, to a fine of ten thousand dollars and to a further fine of one thousand dollars for each day on which the offence continues.
- (11) Where a request is made by an inspector under subsection (8), the fire authority shall inform the Chief Inspector

and the appropriate Municipal Corporation of his findings and of any action taken for remedying the dangerous conditions, if any.

- (12) Where the occupier is aggrieved by a decision of the fire authority under this section, he may object by way of complaint within seven days of the decision to the Court and, pending the final determination of the complaint, the Court may, on ex parte application by the occupier, make such interim orders as it thinks fit.
- (13) An examination by the fire authority under this section shall be carried out only by officers authorised in writing by that authority (hereinafter referred to as "authorised officers") to carry out that examination or generally to carry out examinations under this section.
- (14) An authorised officer may, in the exercise of his powers under subsection (13), be accompanied by any person approved by the fire authority.
- (15) An authorised officer may, for the purposes of exercising his powers under subsection (13), enter an industrial establishment at any time, on the condition that he produces documentary evidence of his authority if required to do so.
- (16) A person who wilfully obstructs an authorised officer in the exercise of his duty under this Act is liable, on summary conviction, to a fine of two thousand dollars and to imprisonment for six months.
- (17) An employer shall take into consideration the results of the annual risk assessment carried out pursuant to section 13A in determining what is necessary to provide a means of escape in case of fire.
- 27. (1) In every industrial establishment, the doors that are Safety provided for use as fire exits shall, while work is in progress at case of fire. that industrial establishment, be either left unlocked, or secured in such a way as to be capable of being readily and quickly opened from the inside.

(2) Every door opening onto a staircase or corridor from a room in which more than ten persons are employed, and all other 42

doors affording a means of exit from the industrial establishment for persons employed therein, shall be constructed to open outwards and a sliding door shall not be the final exit of an industrial establishment unless the occupier obtains the written permission of the fire authority to use such a door.

- (3) Every liftway inside a building shall be completely enclosed with fire resisting material, and all means of access to the lift shall be fitted with doors of fire resisting materials, except that the top of such liftway shall be enclosed by some material easily broken in case of fire, or shall be provided with a vent.
- (4) Every door or other exit or exit route affording means of escape in case of fire or giving access thereto, other than the means of exit in ordinary use, shall be distinctly and conspicuously marked by a notice printed in green letters on a white background and the letters shall be of such size as the fire authority may specify.
- (5) The doors, exit or exit routes mentioned in subsection (4) shall be fitted with emergency lighting and well maintained luminous or illuminated exit signs if the industrial establishment is used at night or where insufficient lighting is likely to occur during an electrical power failure.
- (6) Subject to subsection (7), where in an industrial establishment more than twenty persons are employed in the same building, or where explosives or highly flammable materials are stored or used in a building in which persons are employed, the fire authority shall direct the occupier to make effective provisions for giving warning in case of fire, and such warning shall be clearly audible throughout the building and distinct from any other signal in use on the premises.
- (7) Where part of a building is let as an industrial establishment and the aggregate number of persons employed in the building at any one time exceeds twenty, the fire authority shall direct the owner of the building to make effective provisions for giving warning in case of fire, and such warning shall be clearly audible throughout the building and distinct from any other signal in use on the premises.

- (8) Such warning signs as the fire authority may specify shall be prominently displayed in an industrial establishment in which explosives or highly flammable materials are stored or used.
- (9) The contents of every room in which employees work shall be so arranged that there is for all employees in the room a free passageway leading to a means of escape in case of fire.
- 28. Where in an industrial establishment more than twenty Instructions as persons are employed in the same building above the ground of escape in floor, or where explosive or highly flammable materials are stocked or used in a building where persons are employed, effective steps shall be taken to ensure that all employed persons are familiar with the means of escape, their use and the routine to be followed in case of fire and a record of the number and frequency of evacuation drills shall be kept and presented, on demand, for inspection by the fire authority.

case of fire.

29. In every industrial establishment there shall be provided, Provision for maintained and kept readily available for use appropriate fire firefighting equipment approved by the fire authority for fighting fire and the occupier shall ensure that a sufficient number of persons trained in using such equipment are available during the working hours and a record of the number of persons trained and the frequency of lectures and fire drills shall be kept and presented on demand, for inspection by the fire authority.

equipment.

**30.** The Chief Inspector on receiving a report in writing by Power of Chief the fire authority may prosecute or conduct before the Court any conduct Court complaint or other proceedings arising under, or in the discharge of his duties under, sections 26 to 29.

30A. Where it appears to the Chief Inspector that in an Compliance industrial establishment or a factory with twenty or less employees any provisions of this Part is by reason of special circumstances appropriate or adequate for the purpose, he may direct that the occupier of that industrial establishment or an employer therein comply with those provisions or that the provisions shall apply as varied by his direction.

with provisions.

#### PART VI

#### HEALTH

Cleanliness.

- **31.** Every industrial establishment shall be kept clean and free from effluvia arising from any drain, sanitary convenience or other source, and, without prejudice to the generality of the foregoing provision—
  - (a) accumulations of dirt and refuse shall be removed daily, where practicable, by suitable methods from the floors, benches, furniture, furnishings and fittings of workrooms, and from the staircases and passages;
  - (b) the floors of every workroom shall be kept clean and properly maintained;
  - (c) effective means shall be provided, maintained and used to prevent the breeding of insects, rats, mice or other vermin; and
  - (d) effective means shall be provided and maintained for the draining of wet floors and yards, where necessary.

Respiratory protection.

**32.** Respiratory protection of an approved standard shall be provided and maintained, where necessary, for use by all persons in the industrial establishment.

Lighting.

- **33.** (1) In every part of an industrial establishment where employees are working or passing, there shall be provided and maintained sufficient and suitable lighting, natural or artificial, or both, in accordance with approved standards.
- (2) In every industrial establishment, effective provision shall, so far as is practicable, be made for the prevention of—
  - (a) glare, either directly from a source of light or by reflection from a smooth or polished surface; and
  - (b) the formation of shadows to such an extent as to cause eye-strain or the risk of accident to any person.

- (3) In every industrial establishment, all glazed windows and sky lights used for the lighting of workrooms shall be kept clean from inside and outside and shall be free from any obstruction.
- 34. (1) Every owner, occupier or employer shall take Noise and adequate steps to prevent hearing impairment caused by noise, [3 of 2006]. and diseases caused by vibration, from occurring to persons in, or in the vicinity of, his industrial establishment and shall comply with such directives as-

- (a) the Chief Inspector may issue an order to reduce the level of noise or vibration generated by a machine, device or process; and
- (b) the Chief Medical Officer may issue an order to protect persons employed from hearing impairment caused by noise or from diseases caused by vibration.
- (2) It shall be the duty of the owner, occupier or employer-
  - (a) to ensure that all protective equipment necessary for compliance with subsection (1) is worn or used by employees at all appropriate times;
  - (b) to arrange for the initial and periodic medical examination and assessment of those employees who are exposed to the risk of injury to their hearing or of contracting a disease caused by vibration;
  - (c) to keep a record of the results of examinations and assessments under paragraph (b) which shall include audiometric tests and the monitoring of the work environment; and
  - (d) to arrange programmes for hearing conservation.
- 35. (1) An industrial establishment shall not be so Overcrowding. overcrowded as to cause risk of injury to the health of the persons employed therein.
- (2) Without prejudice to the generality of subsection (1), in every workroom or other work space in a factory there shall be

allowed for every person employed in the room or space not less than eleven and a half cubic metres of space, except that in any workroom or other work space with not less than one side, or the equivalent area of openings, being not less than twenty-five per cent of the total area of all sides of the room or space, open to the outer air the amount of space allowed for every person employed in the room or space shall not be less than seven and a half cubic metres.

- (3) In calculating, for the purposes of this section, the amount of cubic space in any workroom or work space, no space more than three metres from the floor shall be taken into account, and, where a room contains a gallery in which persons are employed, the gallery shall be treated for the purposes of this section as if it were partitioned off from the remainder of the room and form a separate room.
- (4) There shall be posted in every workroom a notice specifying the number of persons who may, under the provisions of this section, be employed in that room.

Ventilation.

**36.** Every occupier of an industrial establishment that is not ventilated by a functioning air-conditioning system shall secure and maintain therein adequate and suitable ventilation by the circulation of fresh air.

Medical examination of persons employed in industrial establishment. [3 of 2006].

- **37.** (1) Where, after the commencement of this Act, a person seeks employment, or is already employed, in an industrial establishment, he may be required by the employer to undergo a medical examination as a pre-condition of permanent employment, or to determine fitness for work, except in such shops or places of work as the Minister may, by Order, exempt.
- (2) The cost of the medical examination shall be borne by the employer.
- (3) Where a medical inspector is of the opinion that the health of a person employed in an industrial establishment has been injured by reason of the nature of work he is called upon to do, the medical inspector may serve on the employer a written notice requiring him to permit a medical examination of that person, who may or may not submit to that examination.

- (4) The notice under subsection (3) shall name the place where the medical examination is to be conducted and the date and time when it will begin and, if the examination is to be conducted at the industrial establishment, the occupier shall provide suitable accommodation for the conduct of the examination.
- (5) In this section, "medical examination" may include pathological, biochemical, physiological, radiological and audiometric tests and other relevant investigations.
- **38.** Where the Minister is advised by the medical inspector Power to and is of the opinion—

require medical supervision.

- (a) that in any industrial establishment—
  - (i) a case of illness has occurred which he has reason to believe may be due to the nature of a process or other conditions of work;
  - (ii) by reason of changes in any process or in the substances used, or of the introduction of a new process, there may be risk of injury to the health of employees in that process; or
  - (iii) young persons are or are about to be employed in work which may cause risk of injury to their health; or
- (b) that there may be risk of injury to the health of employees in an industrial establishment—
  - (i) from any substance or material brought to the industrial establishment to be used or handled therein; or
  - (ii) from any change of conditions of work or other conditions in the industrial establishment.

he may make Regulations specifying the arrangements to be made for the medical supervision of those employees or young persons, as the case may be, or any class thereof.

#### PART VII

## WELFARE

Drinking water. [3 of 2006].

- **39.** (1) In every factory, effective arrangements shall be made to provide and maintain at suitable points conveniently situated for all persons employed therein, a sufficient supply of cool, wholesome, drinking water.
- (2) Except as otherwise permitted by the Chief Inspector, in every factory there shall be legibly and conspicuously displayed near any tank, pipe or other source of water or liquid unfit for human consumption, a notice to that effect.

Washing facilities.

**40.** The occupier of every factory shall provide and maintain separately for men and women employed therein, adequate, clean and easily accessible washing facilities which are provided with soap and suitable hand drying materials or devices and such other provisions as are prescribed.

Sanitary conveniences

- **41.** The occupier of every factory shall—
  - (a) provide and maintain separately for men and women employed therein adequate, clean and easily accessible sanitary conveniences;
  - (b) provide and maintain suitable receptacles or disposal units for use by women;
  - (c) provide adequate lighting and ventilation in sanitary conveniences and an open or ventilated space separating workrooms from such conveniences; and
  - (d) provide safe and covered access to sanitary conveniences.

Accommodation for clothing.

**42.** In every factory, there shall be provided and maintained, distinct and apart from any sanitary convenience or lunchroom and separately for the use of men and women, adequate and suitable changing rooms with locks on the inside and accommodation for their clothing not worn during working hours.

**43.** (1) In every factory, there shall be provided and First-aid maintained so as to be readily accessible during all working hours, appliances. such number of fully equipped first-aid boxes or cupboards as may be prescribed.

- (2) The Chief Inspector shall, where necessary, direct in writing the occupier of a factory to provide for deluge showers, eye baths and other similar first-aid devices.
- (3) Each first-aid box or cupboard shall be under the control of responsible persons who are trained in first-aid treatment and retested every three years and who shall always be readily available during the working hours of the factory.
- (4) In every factory or industrial estate where there is a risk as determined in accordance with section 13A, there shall be provided and maintained emergency health facilities and a firstaid room of a prescribed size, containing the prescribed equipment and being in the charge of such medical and nursing staff as may be prescribed.
- (4A) The Chief Inspector may direct the manager of an industrial estate to comply with subsection (4).
- (5) Where the factory provides a first-aid room and an ambulance, it may be exempt by the Chief Inspector from subsections (1) and (3).
- (6) In this section "industrial estate" means any land with suitable infrastructure such as roads, water or power, divided into plots for sale or rental for entrepreneurs to build factories or to occupy existing buildings thereon for the purpose of storage, processing or manufacture of products or repair of articles.

**44.** Every occupier in whose factory there is ordinarily Canteens. employed a total of more than two hundred and fifty persons, may provide and maintain for the use of those employees therein a canteen equipped and operated in the manner that may be prescribed by agreement between the employer, employee and union.

**45.** (1) In every factory the occupier shall provide and Restrooms and maintain for the persons employed therein, adequate and suitable

restrooms or lunchrooms and lunchrooms shall be convenient for the eating of meals and shall be provided with adequate lighting, ventilation and drinking water.

(2) An occupier who provides a canteen in accordance with section 44 shall be regarded as having satisfied the requirements of subsection (1).

Application of the Part.

- **45A.** (1) This Part applies to factory in which is employed more than five people.
- (2) An occupier of a factory in which is employed five persons or less shall ensure that the changing room or sanitary convenience can be locked from the inside.

Compliance with provisions.

**45B.** Where it appears to the Chief Inspector that in an industrial establishment or a factory with five or less employees any provisions of this Part is by reason of special circumstances appropriate or adequate for the purpose, he may direct that the occupier of that industrial establishment or an employer therein comply with those provisions or that the provisions shall apply as varied by his direction.

#### PART VIII

# NOTIFICATION AND INVESTIGATION OF ACCIDENTS AND OCCUPATIONAL DISEASES

Notification of accidents.

- **46.** (1) Where an accident which causes death or critical injury occurs—
  - (a) in an industrial establishment, the occupier; or
  - (b) in the course of employment, the employer,

shall inform the Chief Inspector of the accident forthwith by telephone, facsimile, e-mail or other direct means and shall send a written notice of the accident, in the prescribed form and accompanied by the prescribed particulars, to the Chief Inspector within forty-eight hours of his learning of the accident.

(2) Where an incident which may be prejudicial to the safety or health of the public, or which has the potential of causing critical injury, including fire, explosion or the release of toxic

substances, occurs in an industrial establishment, the occupier shall inform the Chief Inspector of the incident forthwith by telephone, facsimile or e-mail and shall send a written notice of the incident to the Chief Inspector within forty-eight hours of his learning of the incident.

- (3) Where an accident resulting in critical injury occurs and death follows the notification of the accident, a further notice in writing of the death shall be sent to the Chief Inspector by the employer within forty-eight hours of his learning of the death.
- (4) Where the occupier is not the employer of a person who is killed or seriously injured in an industrial establishment, it shall be the duty of the employer, as soon as he becomes aware of the accident to report it to the occupier, and if he fails to do so, he commits an offence and is liable, on summary conviction, to a fine of ten thousand dollars and to imprisonment for three months.
- (5) Every occupier and every employer shall keep a register of each accident, incident or death reported to the Chief Inspector under subsections (1), (2) and (3) and each entry into the register shall be kept for not less than five years.
- 46A. Where an accident causes injury to a person at a Notice of injury. workplace whereby the person is unable to perform his usual work or requires medical attention, and such occurrence does not cause death or critical injury leading to disability, the employer shall give notice in the prescribed form within four days of the occurrence, to the Chief Inspector, containing information and particulars of the accident.

**47.** (1) Where a person is killed or sustains a critical injury Preservation at an industrial establishment, no person shall, except for the purpose of—

- (a) saving life or relieving human suffering;
- (b) maintaining an essential public utility service or a public transportation system; or
- (c) preventing unnecessary damage to equipment or other property,

interfere with, disturb, destroy, alter or carry away any wreckage, article or thing at the scene of or connected with the occurrence until permission so to do has been given by an inspector.

(2) A person who contravenes subsection (1) commits an offence and is liable, on summary conviction, to a fine of five thousand dollars and to imprisonment for three months.

Notification of occupational diseases. [3 of 2006].

- **48.** (1) Where a medical practitioner who, having attended to a patient, forms the opinion that the patient is suffering from an occupational disease contracted in any industrial establishment or in the course of his employment, he shall within forty-eight hours of having formed that opinion send to the Chief Medical Officer a notice stating the disease from which the medical practitioner is of the opinion that the patient is suffering and the industrial establishment in which the patient is and was last employed.
- (2) The Chief Medical Officer shall send forthwith to the Chief Inspector any notice that he receives under subsection (1).
- (3) If an employer is advised by or on behalf of an employee that the employee suffers from a disease referred to in Schedule 1, he shall give notice in writing to the Chief Inspector within four days of being so advised.
- (4) Where a notice is sent to the Chief Inspector under this section, he shall arrange, within two weeks of having received the notice, for a medical inspector to investigate and submit to him a report on the case of occupational disease referred to in the notice within two weeks.
- (5) The Chief Inspector, upon receiving the report referred to in subsection (4), shall conduct the necessary enquiries.
- (6) Every employer who contravenes subsection (3) commits an offence and is liable on summary conviction to a fine of five thousand dollars and to imprisonment for three months.
- (7) Every medical practitioner who contravenes subsection (1) commits an offence and is liable, on summary conviction, to a fine of five thousand dollars, and to imprisonment for three months if it is proven that he ought reasonably to have

formed the opinion that the patient was suffering from an occupational disease contracted in an industrial establishment or in the course of his employment.

**49.** Where a District Medical Officer has reason to believe Autopsy in that a death is caused by an accident in an industrial cases of death by accident or establishment or in the course of employment or by occupational disease. disease, he shall arrange for an autopsy to be conducted in respect of such death and shall forward, within twenty-one days of the death, a copy of the results of the autopsy to the Chief Medical Officer, who shall forward forthwith to the Chief Inspector a statement as to the cause of death.

**50.** (1) Where a coroner holds an inquest on the body of a Inquest in the person whose death may have been caused by accident or disease accident or of which notice is required by this Act to be given, the coroner occupational disease. shall, at least forty-eight hours before holding an inquest, send to the Chief Inspector a notice in writing of the time and place of holding the inquest.

- (2) Where an inspector is not present to witness the proceedings of an inquest, the coroner may adjourn the inquest and shall, at least four days before holding the adjourned inquest, send to the Chief Inspector notice in writing of the time and place of holding the adjourned inquest, but the coroner may, before the adjournment, take evidence to identify the body and order the interment thereof.
- (3) Subject to the power of the coroner at an inquest referred to in this section to disallow a question, which in his opinion is not relevant, or is otherwise not a proper question, the following persons shall be entitled to examine a witness either in person or through an Attorney-at-law or an agent:
  - (a) an inspector;
  - (b) a relative of the person in respect of whose death the inquest is being held;
  - (c) the employer of the person in respect of whose death the inquest is being held;

- (d) the occupier of the industrial establishment in which the accident occurred or the disease is alleged to have been contracted;
- (e) a person appointed in writing by—
  - (i) a trade union, friendly society or other association to which the deceased at the time of his death belonged; and
  - (ii) an association of employers of which the occupier or employer is a member.
- (4) Where at an inquest at which an inspector is not present, evidence is given of neglect as having caused or contributed to the accident or disease, or of a defect in or about the industrial establishment appearing to the coroner to require a remedy, the coroner shall send to the Chief Inspector notice in writing of the neglect or defect, as the case may be.
  - (5) In this section, "inspector" includes a medical inspector.

Enquiry into accidents and cases of occupational disease.

Ch. 19:01.

Medical

report.

inspector to investigate and

- **51.** Where the Minister is of the opinion that any accident occurring or any case of occupational disease contracted or suspected to have been contracted in an industrial establishment is a matter of public interest, he may so advise the President who may cause an enquiry to be held, in accordance with the Commissions of Enquiry Act, into such accident or case of industrial disease and its causes and circumstances.
- **52.** (1) The Chief Medical Officer shall arrange for a medical inspector to investigate and submit to him a report—
  - (a) on such cases of death or critical injury occurring in an industrial establishment or in the course of employment as the Chief Inspector may refer to the Chief Medical Officer; and
  - (b) on any other matter that the Minister may direct.
- (2) The Chief Medical Officer shall forward a copy of a report made under—
  - (a) subsection (1)(a) to the Chief Inspector; or
  - (b) subsection (1)(b) to the Minister.

# PART IX

### EMPLOYMENT OF YOUNG PERSONS

**53.** (1) No young person shall be employed to work in Young persons an industrial establishment for a period of three months or certificate. more unless—

- (a) a medical practitioner, on the application of the young person or his parent, has examined the young person and ascertained his fitness for work in that industrial establishment; and
- (b) a document signed by the employer to the effect that such young person will be employed in the industrial establishment is submitted to the medical practitioner no later than at the commencement of the medical examination.
- (2) The Minister may, by Order, exempt such industrial establishment as he thinks fit from subsection (1).
- (3) After an examination under subsection (1), the medical practitioner may grant to such young person, in the prescribed form, or may renew—
  - (a) a certificate of fitness to work in an industrial establishment if he is satisfied that the young person has attained the prescribed physical standard and that he is fit for such work; or
  - (b) a certificate of fitness to work in an industrial establishment as an adult, if he is satisfied that the young person has attained the age of sixteen years and that he is fit for a full day's work in an industrial establishment.
- (4) Unless the examining physician has personal knowledge of the place where the young person proposes to work and of the process in which he will be employed, he shall not grant or renew a certificate under subsection (3).
  - (5) A certificate of fitness granted under subsection (3)—
    - (a) shall be valid for a period of twelve months from the date thereof; and

- (b) may be issued subject to conditions regarding the nature of work in which the young person may be employed, or conditions requiring a medical re-examination of the young person before the expiry of the period of twelve months.
- (6) Where a certificate under this section is granted or renewed subject to such conditions as are referred to in subsection (5)(b), the young person shall not be required to work in any industrial establishment except in accordance with those conditions.

Hours of employment for young persons. Ch. 46:01.

- **54.** (1) Except as provided for by section 90(2) of the Children Act, no young person shall be employed—
  - (a) between the hours of 10.00 p.m. and 7.00 a.m.;
  - (b) during the period of twelve consecutive hours immediately following the end of the period during which he last worked; or
  - (c) for more than eight hours a day.
- (2) The hours of employment under subsection (1) shall include a rest period of at least one hour.
- (3) No young person shall be required to work more than forty-eight hours in any week.
- (4) The Minister may, in relation to such industrial establishment as he thinks fit, by Order, vary or waive the provisions of subsection (1) or (3).

Duty to maintain register.

- **55.** (1) An employer shall maintain a register recording therein the names of young persons, the date of their employment, particulars of the certificate of fitness, the nature of their work and such other particulars in such form as the Minister may prescribe.
- (2) An employer who contravenes subsection (1) commits an offence.

Power to require medical examination.

- **56.** Where an inspector is of the opinion—
  - (a) that any person working in an industrial establishment without a certificate of fitness is a young person; or

(b) that a young person working in an industrial establishment with a certificate of fitness is no longer fit to work in the capacity stated therein,

he may serve on the employer a notice requiring that such young person shall be examined by a medical practitioner and such young person shall not, if the inspector so directs, be employed in an industrial establishment until he has been so examined and has been granted a certificate of fitness or a renewed certificate of fitness, as the case may be, under section 53.

#### PART X

# SPECIAL APPLICATION AND EXTENSIONS

**57.** (1) The owner or occupier of any premises shall, before Provisions re: letting any premises or part of premises for use as an industrial lease of part of premises as a establishment—

industrial

- (a) in which the aggregate number of persons establishment. [3 of 2006]. employed exceeds twenty;
- (b) in which more than ten persons are employed in the same building above the ground floor of the building; or
- (c) in which explosive or highly flammable substances are stored or used,

obtain from the Chief Inspector a certificate as to the suitability of the premises or part thereof, as the case may be, for its intended use.

- (1A) Where it appears to the Chief Inspector that in an industrial establishment with twenty or less employees any provisions of this Part is by reason of special circumstances appropriate or adequate for the purpose, he may direct that the owner or occupier of that industrial establishment or an employer therein comply with those provisions or that the provisions shall apply as varied by his direction.
- (2) Where part of premises is let as an industrial establishment, this Act shall apply to any other part of the premises used for the purposes of the industrial establishment though not itself a part of that industrial establishment.

- (3) Subject to subsection (4), where part of premises is let as an industrial establishment, the owner of the premises shall be liable for any contravention of the provision of this Act as they apply under subsection (2), except that the owner shall not be liable for a contravention of those provisions in so far as they relate to matters outside his control, in which case the occupier of an industrial establishment in respect of which that contravention is made, shall be liable.
- (4) Except where otherwise provided by the terms of the agreement between the owner and the occupier of premises referred to in this section, the owner shall be responsible for complying with the provisions of this Act relating to any sanitary conveniences, lifts, lifting machines, floors, passages, stairs, walls, means of escape and any other machinery, thing or part of premises used in common by more than one tenant.

Application of Act to institutions. [3 of 2006].

- **58.** (1) Where in premises, not being an industrial establishment but forming part of an institution carried on for charitable, educational, reformatory or penal purposes, work is performed in or incidental to the making, altering, repairing, ornamenting, finishing, washing, cleaning, breaking or adapting for sale, of articles, this Act shall, subject to subsection (2) apply to those premises.
- (2) Where in a charitable, educational, reformatory or penal institution to which this Act applies, the persons having the control of the institution (hereinafter referred to as "the managers") shall satisfy the Minister that the only persons working therein are persons who are residents of and supported by the institution, or persons engaged in the supervision of the work or the management of machinery, and that such work is carried on in good faith for the purposes of the support, education or training of persons engaged in it, and that any posting required by section 61 is not necessary, the Minister may, by Order, direct that such provisions of Part XI as to the posting of abstracts and notices as the Minister thinks fit shall not apply.

#### PART XI

# SPECIAL PROVISIONS IN RESPECT OF FACTORIES, BUILDING OPERATIONS AND WORKS OF ENGINEERING CONSTRUCTION

59. (1) No person shall undertake, without the prior Construction approval of the Chief Inspector—

and alteration of factories. [3 of 2006].

- (a) the construction of any new factory or warehouse;
- (b) the reconstruction of any existing factory or warehouse or the extensive installation of any new plant or machinery therein; or
- (c) the alteration, modification or changes in the existing plant or machinery which is likely to change significantly the working environment in a factory or warehouse.
- (2) A period of not more than thirty days shall be allowed for the consideration of every application made under this section and where the Chief Inspector's decision is not issued to the applicant during that period, such application shall be deemed approved for the purposes of this section.
- (3) Every application under this section shall be made on the prescribed form and shall be accompanied by the prescribed documents.
- **60.** (1) Every person shall, within one month after he begins Notice of to occupy, or to use any premises, as a factory, serve on the factory and use inspector and the local health authority for the district a written power. notice stating the name of the occupier or the title of the firm, the postal address of the factory, the nature of the work, whether mechanical power is used and, if so, its nature, the name of the local health authority within whose district the factory is situated and such other particulars as may be prescribed, and if he fails to do so, he shall be guilty of an offence and liable, on summary conviction, to a fine of five thousand dollars and to a further fine of five hundred dollars for each day on which the offence continues.

(2) Within one month of the date upon which mechanical power is, after the commencement of the Act, first used in any factory, the occupier shall serve on the inspector and the local health authority for the district a written notice stating the nature of such mechanical power.

Postings.

- **61.** (1) Every occupier shall keep prominently displayed in an appropriate part of the factory—
  - (a) the prescribed abstract of this Act; and
  - (b) a suitable clock.
- (2) In every factory a printed copy of this Act and of the Regulations or Orders for the time being in force together with the rules of that factory shall be provided and maintained in good condition in a location readily accessible to employees.
- (3) An inspector may direct that any document required to be posted under this section shall be in the prescribed form and shall be posted in such part of the factory as he may think fit.
- (4) A person who removes, damages or defaces any document required by this Act to be posted in a factory commits an offence and is liable, on summary conviction, to a fine of five hundred dollars.

Periodical returns of factory employees.

**62.** The occupier of every factory shall, at intervals of not less than one year, send to the Chief Inspector a correct return specifying with respect to such period as the Minister may direct, the number of persons employed in his factory, and giving such particulars as may be prescribed, as to the hours of employment of each employee, as to the age, sex and occupation of all persons employed, and as to such other matters, if any, as the Minister may direct.

Building operations and works of engineering construction. **63.** Any person undertaking any building operations or works of engineering construction shall, not later than seven days after the beginning thereof, serve on the Chief Inspector a written notice stating the name and postal address of the person so undertaking the operations or works, the place and nature of the operations or

works, the name of the regional health authority within whose district the operations or works are situated and such other particulars as may be prescribed where—

- (a) this section shall not apply to any operations or works which the person undertaking them has reasonable grounds for believing will be completed in a period of less than six weeks, except in such cases as the Chief Inspector may direct; and
- (b) where a person undertakes any building operations or works of engineering construction in a place where such operations or works are in progress, he shall not be required to give notice, if a notice was given in respect of the operations or works in progress.

#### PART XII

# THE OCCUPATIONAL SAFETY AND HEALTH AUTHORITY

- **64.** (1) There is hereby established an Authority to be Establishment known as "The Occupational Safety and Health Authority" (hereinafter referred to as "the Authority").
- (2) Schedule 2 shall have effect with respect to Schedule 2. the Authority.
  - (3) The Minister may, by Rules, amend Schedule 2.
  - **65.** (1) The Authority shall consist of—

Composition of the Authority. [3 of 2006].

- (a) a Chairman appointed by the Minister;
- (b) a Deputy Chairman appointed by the Minister;
- (c) the Executive Director of the Agency created under Part XIII of this Act;
- (d) a representative of the Ministry responsible for occupational safety and health;
- (e) a representative of the Ministry responsible for health;

- (f) a representative of the Ministry responsible for energy industries;
- (g) a representative of the body responsible for standards in Trinidad and Tobago;
- (h) a representative of the Tobago House of Assembly; and
- (i) nine other members appointed by the Minister in accordance with subsection (2).
- (2) Before appointing the members of the Authority, other than the Chairman and the Deputy Chairman, the Minister shall—
  - (a) as to two of them, consult such organisations representing employers as he considers appropriate;
  - (b) as to two of them, consult such organisations representing employees as he considers appropriate; and
  - (c) as to five of them, consult such other organisations, the activities of which are concerned with matters relating to any of the general purposes of this Act, as he considers appropriate, including the Medical Board of Trinidad and Tobago, the Board of Engineering of Trinidad and Tobago and organisations representing women's affairs.
  - (3) Subject to this Part, the Authority may—
    - (a) appoint such employees as it considers necessary for the performance of its functions;
    - (b) fix qualifications and terms and conditions of service for employees, save that salaries in excess of one hundred and fifty thousand dollars per annum shall be subject to the Minister's approval;
    - (c) engage persons having suitable qualifications and experience as consultants on such terms and conditions as are approved by the Minister.

# **66.** (1) The functions of the Authority shall be—

Functions of the Authority.

- (a) to assist and encourage persons concerned with matters relevant to any of the general purposes of this Act to further those purposes;
- (b) to make such arrangements as it considers appropriate for the carrying out of research, the publication of the results of research and the provision of training and information in that connection with those purposes, and to encourage research and the provision of training and information in that connection by others;
- (c) to make such arrangements as it considers appropriate for securing that Government departments, employers, employees, organisations representing employers and employees respectively, and other persons concerned with matters relevant to any of those purposes are provided with an information and advisory service and are kept informed of, and adequately advised on, such matters;
- (d) to perform such acts and functions in accordance with law to enforce the provisions of this Act;
- (e) to submit from time to time to the Minister such proposals as the Authority considers appropriate for the making of Regulations under this Act; and
- (f) to advise the Minister on the organisational structure, staff requirements and operations for the proper and efficient functioning of the Agency.
- (2) It shall be the duty of the Authority—
  - (a) to give effect to any directions given to it by the Minister;
  - (b) to submit to the Minister from time to time particulars of what it proposes to do for the purpose of performing its functions; and
  - (c) to ensure that its activities are in accordance with proposals approved by the Minister.

Approval of codes of practice.

- **67.** (1) For the purpose of providing practical guidance with respect to the requirements of any provision of this Act or Regulations made under it, the Authority may, subject to subsection (2)—
  - (a) approve and issue such codes of practice, whether prepared by it or not as in its opinion are suitable for that purpose; and
  - (b) approve such codes of practice issued or proposed to be issued otherwise than by the Authority as in its opinion are suitable for that purpose.
- (2) The Authority shall not approve a code of practice under subsection (1) without the consent of the Minister and shall, before seeking his consent, consult—
  - (a) any Government department or other body that appears to the Authority to be appropriate; and
  - (b) such Government departments and other bodies, if any, as in relation to any matter dealt with in the code, the Authority is required to consult under this section by virtue of directions given to it by the Minister.
- (3) Where a code of practice is approved by the Authority under subsection (1), the Authority shall cause a notice to be published in the *Gazette* and in a daily newspaper circulating in Trinidad and Tobago—
  - (a) identifying the code in question and stating the date on which its approval by the Authority is to take effect; and
  - (b) specifying for which of the provisions of this Act or Regulations made under it, the code is approved.
  - (4) The Authority may—
    - (a) from time to time revise the whole or any part of any code of practice prepared by it in pursuance of this section;
    - (b) approve any revision or any proposed revision of the whole or any part of any code of practice for the time being approved under this section,

and the provisions of subsections (2) and (3) shall, with the necessary modifications, apply in relation to the approval of any revision under this subsection as they apply in relation to the approval of a code of practice under subsection (1).

- (5) The Authority may at any time with the consent of the Minister withdraw its approval from any code of practice approved under this section, but before seeking his consent shall consult the same Government departments and other bodies as it would be required to consult under subsection (2) if it were proposing to approve the code.
- (6) Where under subsection (5), the Authority withdraws its approval from a code of practice approved under this section, the Authority shall cause a notice to be published in the Gazette and in a daily newspaper circulating in Trinidad and Tobago identifying the code in question and stating the date on which its approval of it is to cease to have effect.
- (7) References in this section to an approved code of practice are references to that code as it has effect for the time being by virtue of any revision of the whole or any part of it approved under this section.
- (8) The power of the Authority under subsection (1)(b)to approve a code of practice issued or proposed to be issued otherwise than by the Authority shall include power to approve a part of such a code of practice; and accordingly in this section "code of practice" may be read as including part of such a code of practice.
- **68.** (1) A failure on the part of any person to observe any Use of approved provision of an approved code of practice shall not of itself codes of practice in render him liable to any civil or criminal proceedings; but where criminal proceedings. in any criminal proceedings a party is alleged to have committed an offence by reason of a contravention of any requirement or prohibition imposed by or under any provision of this Act being a provision for which there was an approved code of practice at the time of the alleged contravention, subsection (2) shall have effect with respect to that code in relation to those proceedings.

- (2) Any provision of the code of practice which appears to the Court to be relevant to the requirement or prohibition alleged to have been contravened shall be admissible in evidence in the proceedings; and if it is proved that there was at any material time a failure to observe any provision of the code which appears to the Court to be relevant to any matter which it is necessary for the prosecution to prove in order to establish a contravention of that requirement or prohibition, that matter shall be taken as proved unless the Court is satisfied that the requirement or prohibition was in respect of that matter complied with otherwise than by way of observance of that provision of the code.
  - (3) In any criminal proceedings—
    - (a) a document purporting to be notice published by the Authority under section 68 shall be taken to be such a notice unless the contrary is proved; and
    - (b) a code of practice which appears to the Court to be the subject of such a notice shall be taken to be the subject of that notice unless the contrary is proved.

# PART XIII

# **ADMINISTRATION**

Establishment of the Agency.

- **69.** (1) There is hereby established the Occupational Safety and Health Agency (hereinafter referred to as "the Agency").
- (2) The Agency shall consist of the following persons who shall be appointed by the Authority:
  - (a) an Executive Director who shall be the head of the Agency;
  - (b) a Deputy Director;
  - (c) a Secretary; and
  - (d) such persons who in the opinion of the Authority, have the necessary training, qualifications and expertise to assist in the effective management and delivering of the services of the Agency.

- (3) The Executive Director shall be the Accounting Officer on the Exchequer Account for the Authority and shall—
  - (a) carry out any directions given to him by the Authority in pursuance of its functions; and
  - (b) if requested by the Minister, provide the Minister with information about the activities of the Authority or any other related matter.
- (4) The salary, allowances and other terms and conditions of service of the Executive Director shall be reviewed by the Salaries Review Commission in accordance with section 141 of the Constitution.
- (5) The Agency shall not later than three months after the commencement of this Act, initiate consultation with governmental entities performing various inspection functions, with the objective of formulating memoranda of understanding or other arrangements between the Agency and such other governmental entities, which shall establish the mechanisms for co-ordination across jurisdictional lines and provide for the implementation of integrated occupational safety and health programmes.
  - (6) The Agency, on the advice of the Authority, may—
    - (a) create; and
    - (b) direct operations of,

other bodies to give effect to the Act.

- 69A. (1) An officer in the public service may, with the Transfers. approval of the appropriate Service Commissions consent to be appointed on transfer to the service of the Authority or the Agency upon such terms and conditions as are acceptable to him or his trade union and the Authority.
- (2) The officer referred to in subsection (1) shall, upon transfer, have preserved his superannuation and pension rights accruing at the time of transfer.
- 70. (1) The Authority may appoint a suitably qualified Duties of Chief person as Chief Inspector.
- (2) It shall be the duty of a Chief Inspector to report to the Executive Director on such matters concerning the

administration, enforcement and furtherance of the purposes of this Act as the Executive Director may request and to carry out any directions given to him by the Executive Director.

(3) The Chief Inspector shall be *ex officio* a member of the Agency.

Inspector and medical inspectors. [3 of 2006].

# **71.** (1) The Minister may—

- (a) on the advice of the Chief Inspector—
  - (i) designate a suitably qualified public officer as an inspector; or
  - (ii) appoint a suitably qualified person as an inspector; and
- (b) on the advice of the Chief Medical Officer—
  - (i) designate a suitably qualified medical officer as a medical inspector; or
  - (ii) appoint a suitably qualified medical practitioner as a medical inspector on such terms and conditions as he sees fit.
- (2) An inspector shall not be eligible to serve on any jury.

Powers of inspectors. [3 of 2006].

- **72.** (1) Every inspector shall, for the purposes of the enforcement of this Act, have power to do all or any of the following:
  - (a) to enter, inspect, take photographs of and examine, at all reasonable times, either alone or together with such other person possessing technical or special knowledge as the Chief Inspector may authorise in writing, any premises which he has reasonable cause to believe are premises to which this Act applies;
  - (b) to request the presence and assistance of a police officer if he has reasonable cause to apprehend any serious obstruction in the execution of his duty;
  - (c) to be accompanied by—
    - (i) a representative of the management of the industrial establishment; or
    - (ii) a person, whether employed in the industrial establishment or not, nominated

by the collective bargaining unit for persons employed in the industrial establishment;

- (d) to request the production of any licence, drawing, specifications, permit, register, certificate, notice, report or other relevant document and to inspect, examine and copy them;
- (e) to make such examination and inquiry as may be necessary to ascertain whether this Act is being complied with;
- (f) to require any person whom he finds in an industrial establishment to give information as to the identity of the owner, occupier or employer;
- (g) to require a person—
  - (i) in an industrial establishment; or
  - (ii) whom he has reasonable cause to believe to be, or to have been within the preceding two months, employed in premises to which this Act applies,

to answer questions with respect to matters under this Act and to sign a declaration of the truth of such answers, except that no one shall be required under this paragraph to give any answers which may tend to incriminate himself;

- (h) to investigate accidents occurring in industrial establishments;
- (i) in the case of a medical inspector, to conduct such medical examinations as may be necessary for the purposes of this Act;
- (j) to take photographs for the purpose of any investigation; and
- (k) to exercise such other powers as may be necessary for the purposes of this Act.
- (2) Every inspector, in the discharge of his duties under this Act, is empowered to require of an occupier the means necessary for entry, inspection, examination, inquiry and, subject to section 73, the taking of samples in respect of premises to which this Act applies.

- (3) Any person who—
  - (a) wilfully delays an inspector in the exercise of any power under this section;
  - (b) fails to comply with the requisition of an inspector in pursuance of this section, or to produce a register, certificate, notice or document which he is required by or in pursuance of this Act to produce;
  - (c) wilfully withholds information as to who is the occupier of an industrial establishment;
  - (d) conceals or prevents, or attempts to conceal or prevent, a person from appearing before or being examined by an inspector; or
  - (e) uses or threatens to use physical force or violence against an inspector which results or could result in serious bodily harm,

is deemed to have obstructed an inspector in the execution of his duties under this Act.

- (4) Every inspector shall execute his duties under this Act expeditiously and with due care.
- (5) Any person who obstructs an inspector in the execution of his powers or duties under this Act, commits an offence and is liable, on summary conviction, to a fine of two thousand dollars and to imprisonment for six months.

Power to take samples.

- 73. (1) Where an inspector suspects that an occupier may be in contravention of a provision of this Act relating to the use of dangerous materials or relating to air contaminants, which materials or contaminants are likely to cause bodily injury to persons employed in an industrial establishment, he may, after giving notice to the occupier, or if the occupier is not readily available, to his agent, take for analysis samples of any materials or air contaminants in the industrial establishments.
- (2) The occupier or his agent shall be present when the samples are being taken, and, where practicable, the inspector shall divide each sample into three parts, mark and seal or fasten each part in such manner as its nature permits, and—
  - (a) deliver one part to the occupier or his agent;

- (b) retain one part for future comparison; and
- (c) submit one part to the analyst.
- (3) Every analysis made under this section shall be conducted by the Chief Chemist or such other suitably qualified analyst as the Chief Chemist may authorise in writing.
- (4) The Chief Chemist or the qualified analyst shall in writing, inform the inspector who submitted the sample for analysis and the occupier or his agent of the results of the analysis.
- (5) Subject to subsection (4), no persons shall, except in so far as it is necessary for the purposes of the prosecution of an offence under this Act, publish or disclose the results of an analysis made under this section and if any person acts in contravention of this subsection, he commits an offence and is liable on summary conviction, to a fine of five thousand dollars.
  - **74.** (1) Where an inspector is of the opinion that—
    - (a) a part of the ways, works, machinery, plant and equipment used in an industrial establishment is in such a condition, or is so constructed or is so placed that it cannot be used without risk of bodily injury or damage to the environment;
    - (b) a process or work is carried on or anything is or has been done in an industrial establishment in such a manner as to cause risk of bodily injury or damage to the environment;
    - (c) an industrial establishment is in such a condition that a process or work carried on therein cannot be so carried on without risk of bodily injury or damage to the environment;
    - (d) there exist in an industrial establishment conditions which expose employees or other persons therein to risk of bodily injury; or
    - (e) a person is contravening this Act or has contravened this Act in circumstances that make it likely that the contravention will continue or be repeated,

Powers of inspector *re:* dangerous conditions and practices. [3 of 2006].

he shall, after consultation with the Chief Inspector and without prejudice to his power to initiate legal proceedings, serve on the appropriate person a prohibition or improvement notice stating that he is of that opinion, giving particulars of the reasons why he is of that opinion and may, as the case may be—

- (f) in the case of a prohibition notice, prohibit or restrict the use of any premises or part thereof or thing in the industrial establishment until the existing danger has been removed or this Act has been complied with; or
- (g) in the case of an improvement notice, direct that alterations be carried out or that other steps be taken to remove the existing danger or to comply with this Act within such period as may be specified in the notice.
- (2) Where an inspector prohibits or restricts the use of a place or thing under subsection (1)(f), he shall display in the place or affix to the thing, as the case may be, a notice to that effect, which notice shall not be removed without the authority of an inspector.
- (3) Where an inspector is satisfied that a notice issued under subsection (1) has been complied with, he shall so certify in writing and shall remove any notice displayed or affixed under subsection (2).
- (4) A person on whom a notice is served under subsection (1) may, within seven days of the serving thereof, object by way of complaint to the Industrial Court and the Industrial Court may make such order as it thinks fit.
- (5) Where an objection is made pursuant to subsection (4) against a notice—
  - (a) in the case of the improvement notice, the filing of the objection shall have the effect of suspending the operation of the notice until the hearing of the objection is finally disposed of or, if the objection is withdrawn, until the withdrawal of the objection; or

- (b) in the case of a prohibition notice, the filing of the objection shall have like effect if, on the filing of the objection, the Industrial Court so directs.
- (6) Any person who, without lawful authority removes, defaces or in any way tampers with a notice posted under this section, is guilty of an offence and shall be subject to the jurisdiction of the Court in accordance with the Supreme Court of Judicature Act. Ch. 4:01.

**75.** (1) Every register or record kept in pursuance of this Act Preservation of shall be preserved and kept available for inspection by an inspector registers and records. for at least five years after the date of the last entry in the register or record, or for such other period as may be prescribed for any class or description of register or record, except in the case of a health record, the record shall be kept for at least twenty-five years.

- (2) Where an employer who holds health records in accordance with subsection (1) ceases to trade, he shall forthwith notify the Agency thereof in writing and offer these records to the Agency.
- 76. (1) No employer shall dismiss, suspend or otherwise Protection adversely affect the employment of an employee or alter his position against victimisation of to his prejudice, by reason only that an inspector in exercise of his employees. powers under this Act, sought or obtained from the employee information pertaining to the operation of the industrial establishment.

- (2) An employer who contravenes subsection (1) is guilty of an offence and is liable, on summary conviction, to a fine of five thousand dollars and to imprisonment for three months.
- 77. No inspector shall divulge to the occupier or any person Source of employed in the industrial establishment, the source of any to be divulged. information or complaint which reaches him concerning an alleged contravention of the provisions of this Act, even when such information or complaint is the reason for an inspection, visit or inquiry in respect of that industrial establishment.

77A. Where an inspector acts outside of the authority given Redress. him under this Act, a person aggrieved by such action may seek redress in accordance with section 83A.

Penalty for unlawful disclosures.

- **78.** (1) No inspector shall, while in the public service or after leaving such service, disclose, otherwise than in execution of or for the purposes of this Act, any information that may come to his knowledge in the course of his official duties, relating to the manufacturing, commercial or other operations of an industrial establishment unless—
  - (a) the occupier thereof gives his consent in writing to the disclosure; or
  - (b) the disclosure is necessary for the purpose of legal proceedings pursuant to this Act.
- (2) An inspector who contravenes subsection (1) commits an offence and is liable, on summary conviction, to a fine of ten thousand dollars and to imprisonment for twelve months.

Inspector to produce certificate of appointment. [3 of 2006].

**79.** Every inspector shall, upon visiting an industrial establishment, produce the prescribed certificate of appointment, identifying himself as an inspector, to the agent or occupier of the industrial establishment.

Power of inspector to conduct Court proceedings.

**80.** An inspector may prosecute or conduct before the Court any complaint or other proceedings arising under this Act or in the discharge of his duties as an inspector.

Inspector not liable.

**81.** No suit, prosecution or other legal proceedings shall lie against an inspector for anything done under this Act in good faith.

"Inspector" defined.

**82.** In this Part, the word "inspector" includes a medical inspector, except in section 71(1)(a).

# PART XIV

# OFFENCES, PENALTIES AND LEGAL PROCEEDINGS

Onus of proving limits of what is practicable, etc.

**82A.** In any proceedings for an offence under any of the relevant statutory provisions consisting of a failure to comply with a duty or requirement to do something so far as is practicable, or so far as is reasonably practicable, or to use the best practicable means to do something, it shall be for the accused to prove, as the case may be, that it was not practicable

or not reasonably practicable to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means than was in fact used to satisfy the duty or requirement.

83. (1) Subject to subsection (2), where a person contravenes Criminal and a provision of this Act or any Regulations made thereunder or fails of 2006]. to comply with any duty, prohibition, restriction, instruction or directive issued under this Act or any such Regulations, he commits a safety and health offence and is subject to the jurisdiction of the Industrial Court unless otherwise specified.

- (2) A competent person, employer, occupier or owner of premises only commits an offence under this Act or Regulations made thereunder if it is proved that he failed to take reasonable steps to prevent the commission of the offence.
- (3) Where an offence under this Act or Regulations made thereunder is proved to have been committed with the consent, connivance or acquiescence of, or to have been facilitated by neglect on the part of a director, manager, secretary or other officer of a company, such director, manager, secretary or other officer, as well as the company, is liable to be proceeded against for the commission of the offence.
- 83A. An aggrieved person may apply to the Industrial Court Redress. for redress and the Industrial Court may make an award in favour of the aggrieved person and impose any penalty, other than a term of imprisonment, that a summary Court may impose in respect of that contravention or failure to comply.

84. (1) Where an employer, occupier or owner is convicted Power of Court of an offence under this Act, the Court may, in addition to or instead of imposing a penalty, order him within the time specified in the order, to take such steps as may be specified for remedying the matters in respect of which the offence occurred, and may, on the application of the employer, occupier or owner, extend the time so specified.

to order remedy.

(2) Where an order referred to in subsection (1) is made, the employer, occupier or owner shall not be liable under this Act in respect of the continuation of the contravention during the time

allowed by the Court, but if, after the expiration of that time as originally specified or extended, the order is not complied with, the employer, occupier or owner, as the case may be, commits an offence and is liable, on summary conviction, to a fine of ten thousand dollars, for each day on which the non-compliance continued after the said expiration.

Penalty where none is expressly provided. [3 of 2006].

- **85.** (1) Subject to the provisions of this Act, any person who commits an offence under this Act for which no penalty is expressly provided, is liable, on summary conviction to a fine of twenty thousand dollars and to imprisonment for one year, and if the offence, other than a safety and health offence, in respect of which he was convicted is continued after the conviction, he is liable to a further fine of ten thousand dollars for each day on which the offence continues.
- (2) A person who commits a safety and health offence under this Act for which no penalty is expressly provided, is liable upon conviction to a fine of twenty thousand dollars.

Fines in case of death or injury. [3 of 2006].

- **86.** (1) Subject to subsection (2), where a person dies, is critically injured or develops an occupational disease in consequence of an employer, occupier or owner having contravened this Act, the employer, occupier or owner shall, without prejudice to any other liability or right of action arising out of the death or critical injury or disease, be liable to a fine of one hundred thousand dollars, or of an amount equivalent to three years pay of that person, whichever is greater, and the whole or part of the fine may be applied for the benefit of the victim or of his estate, or otherwise as the Court may determine.
- (2) In the case of an occupational disease, the employer, occupier or owner shall not be liable to a fine under this section unless the disease resulted directly from the contravention.

Fine for offence by parent.

**87.** Where a young person is employed in contravention of this Act, the parent of the young person, as the case may be, commits an offence and is liable, on summary conviction, to a fine of five thousand dollars, unless it appears to the Court that the contravention occurred without the consent, connivance, or wilful default of the parent.

to as "a false certificate");

Forgery of certificates,

# **88.** Where a person—

- (a) forges or counterfeits a certificate required by or for the purposes of this Act;
- false entries and declarations. (b) gives or signs a certificate knowing it to be false in any material particular (hereinafter referred
- (c) knowingly utters or makes use of a false certificate;
- (d) knowingly makes use of, as applying to a person, a certificate which does not so apply;
- (e) personates a person named in a false certificate;
- (f) wilfully connives at forging, counterfeiting, giving, signing, uttering or making use of a false certificate:
- (g) wilfully makes a false entry in a register, notice, certificate or document required by, or for the purpose of, this Act to be kept, served or sent;
- (h) wilfully makes or signs a declaration required by, or for the purpose of, this Act knowing the contents thereof to be false;
- (i) knowingly makes use of a false entry or false declaration; or
- (j) personates or pretends to be an inspector or medical inspector,

he commits an offence and is, without prejudice to any other liability, liable, on summary conviction, to a fine of twenty-five thousand dollars or to imprisonment for three years.

**89.** (1) Where an employer, occupier or owner is charged Provision for with an offence under this Act, he may make a complaint against occupier or any person whom he alleges to be the actual offender and the owner to exempt himself proceedings against the employer, occupier or owner and the from liability. person alleged to be the actual offender may be heard and determined at the same time.

(2) Where during proceedings instituted in accordance with this section, the employer, occupier or owner is acquitted and the Court finds that the person alleged to be the actual

offender committed the offence, that person is in addition to any other penalty, liable to pay any costs incidental to the proceedings.

- (3) Where an offence has been committed under this Act and an inspector is satisfied—
  - (a) that the employer, occupier or owner has taken reasonable steps to prevent the contravention;
  - (b) as to the identity of the person who is alleged to have committed the offence; and
  - (c) that it was committed without the consent, connivance or wilful default of the employer, occupier or owner, or in disobedience of his orders,

the inspector may proceed against the alleged offender without first proceeding against the employer, owner or occupier.

Proceedings against persons other than employers, occupiers or owners. **90.** Where under any of the provisions of this Act, a person is substituted for the employer, occupier or owner, any order, summons, notice or proceedings, which for the purpose of those provisions is by this Act required or authorised to be served or taken in relation to the employer, occupier or owner, shall be served on or taken in relation to that person.

Procedure for prosecution.

- **91.** (1) In proceedings under this Act, a complaint may state the name of the ostensible employer, occupier or owner, as the case may require.
- (2) Where, with respect to or in consequence of any accident in an industrial establishment, a report is made by a commission of enquiry or a coroner's inquest is held, and it appears from the report or from the proceedings at the inquest that this Act was not complied with at or before the time of the accident, summary proceedings against the person liable to be proceeded against in respect of such non-compliance may be commenced at any time within six months after the making of the report or the conclusion of the inquest.

Ch. 4:20.

(3) Subject to section 70 of the Summary Courts Act, all fines imposed under this Act shall, except as otherwise expressly provided for in this Act, be paid into the Consolidated Fund.

- 92. Any person aggrieved by an order made by the Court Appeal from under this Act may appeal to the Court of Appeal.
- 93. A complaint for an offence under this Act shall be made Limitation of within six months of the date on which the alleged commission prosecution. of the offence came to the knowledge of an inspector.

94. (1) Where a person is found in an industrial Special establishment when work is in progress or the machinery is in evidence. motion, except during the intervals for meals or rest, he shall, until the contrary is proved, be deemed for the purposes of this Act to be employed in the factory.

- (2) Where in proceedings under this Act involving a young person it appears to the Court that that young person is apparently of or below the age alleged by the complainant, the burden of proof is on the defendant to prove that the young person is not of or below that age.
- (3) Where an entry is required by this Act to be made in a register or record, the entry made by the employer, occupier or owner, as the case may be, or on his behalf shall, as against him, be prima facie evidence of the facts therein stated, and the fact that an entry so required with respect to the observance of a provision of this Act has not been made, shall be prima facie evidence that that provision has not been observed.
- 95. A document required or authorised to be served or sent Serving and under this Act may be served on or sent to—

sending of documents

- (a) an individual, by delivering it to him or sending it by registered post to his residence;
- (b) a firm, by delivering it to a partner of the firm or sending it by registered post to the registered office of the firm; and
- (c) a body corporate—
  - (i) by delivering it, to a person in a position of responsibility at its industrial establishment or registered office; or

(ii) by sending it by registered post to its industrial establishment or registered office.

Power of Court to modify agreements.

**96.** If by reason of an agreement between the owner and the occupier of premises, the whole or a part of which has been let as an industrial establishment, the owner or occupier is prevented from carrying out structural or other alterations to the premises that are necessary to enable him to comply with this Act, or in order to conform with any standard or requirement imposed by or under this Act, the owner or occupier may apply to the High Court, and the Court, after hearing the parties and any witnesses whom they desire to call, may make an order setting aside or modifying the terms of the agreement as the Court considers just and equitable in the circumstances of the case.

Power of Court to apportion expenses.

- **97.** (1) Where in premises, the whole or a part of which has been let as an industrial establishment, structural or other alterations are required in order to comply with this Act, or in order to conform with any standard or requirement imposed by or under this Act, and there is disagreement as to who should pay the expenses of such alterations, either party may apply to the High Court for a resolution of the dispute.
- (2) On receiving an application under subsection (1), the High Court may, after hearing the parties and any witnesses whom they desire to call and after having regard to the terms of the contract between the parties, make such order concerning the apportionment of expenses as the Court considers just and equitable in the circumstances of the case.

Determination of safety and health offences.

**97A.** All offences referred to as safety and health offences in this Act shall be determined by the Industrial Court.

Time limit.

**97B.** All proceedings under this Act shall be initiated no more than two years after the cause of action has arisen.

#### PART XV

#### **MISCELLANEOUS**

**98.** (1) The following Laws are hereby repealed:

Ordinance and Acts repealed. Ch. 30. No. 2.

- (a) The Factories Ordinance;
- (b) The Employment of Women (Night Work) Ch. 88:12. Act; and
- (c) The Gas Cylinders (Use, Conveyance and Ch. 35:52. Storage) Act.
- (2) Notwithstanding subsection (1), any Regulations, Orders or other statutory instruments made under the Factories Ordinance shall continue in force and are deemed to be made under sections 99 and 100.
- 99. (1) The Minister may make Regulations for the Power to make purposes of promoting the safety, health and welfare of employees and generally for the purpose of carrying out the provisions of this Act.

- (2) Without prejudice to the generality of subsection (1) Regulations may—
  - (a) impose conditions on the use of, or require anything to be done to or in connection with systems of work, machinery or plant or a class or description of machinery or plant;
  - (b) prescribe anything required to be prescribed by this Act;
  - (c) prohibit, limit or control the use of any material or process;
  - (d) require special supervision, control, training or inspection of all persons or a class of persons in connection with any manufacture, machinery, plant, process or description of work;
  - (e) require the provision of protective clothing and devices, welfare facilities, or any other thing necessary to promote the health and welfare of all employees or a class of employee;

- (f) impose duties on occupiers, owners, hirers, employers, employees and other persons;
- (g) provide for the examination and testing of mechanical or other devices required to be examined and tested under this Act;
- (h) declare as dangerous a process in which persons employed are exposed to serious risk of bodily injury, poisoning or disease;
- (i) provide for the medical examination of persons employed or seeking to be employed in a dangerous process, and prohibit the employment in the process of such persons who are not certified as medically fit for such employment;
- (*j*) provide for the protection of persons employed in a dangerous process and of other persons in the vicinity of the place where that process is carried on;
- (k) provide for the safety, health and welfare of persons employed in the construction and maintenance of buildings, agricultural work, field operations and other outdoor activities;
- (1) provide for the setting up of joint safety and health committees comprising representatives from the management and labour sectors;
- (m) provide for the prevention of the overcrowding of industrial establishments, which Regulations may authorise the Chief Inspector after consultation with the Chief Medical Officer, to issue a certificate exempting an occupier of an industrial establishment from compliance with any of those Regulations;
- (n) provide for the imposition of fines not exceeding two hundred thousand dollars for any contravention thereof;
- (o) provide for the payment of fees for services rendered in accordance with this Act; and
- (p) provide for the qualification of safety practitioners.

- (3) Regulations made under this section shall be subject to negative resolution of Parliament.
  - **100.** The Minister may, by Order—
    - (a) amend Schedule 1, subject to negative make certain resolution of Parliament; or
    - (b) vary any fine, term of imprisonment or other penalty provided for under this Act, subject to affirmative resolution of Parliament.

Minister to Orders. Schedule 1.

Power of

**SCHEDULE 1** 

[Section 4(1)].

## LIST OF OCCUPATIONAL DISEASES

#### 1. DISEASES CAUSED BY AGENTS

- 1.1. Diseases caused by chemical agents
- 1.1.1 Diseases caused by beryllium or its toxic compounds
- 1.1.2 Diseases caused by cadmium or its toxic compounds
- 1.1.3 Diseases caused by phosphorus or its toxic compounds
- 1.1.4 Diseases caused by chromium or its toxic compounds
- 1.1.5 Diseases caused by manganese or its toxic compounds
- 1.1.6 Diseases caused by arsenic or its toxic compounds
- 1.1.7 Diseases caused by mercury or its toxic compounds
- 1.1.8 Diseases caused by lead or its toxic compounds
- 1.1.9 Diseases caused by fluorine or its toxic compounds
- 1.1.10 Diseases caused by carbon disulphide
- 1.1.11 Diseases caused by the toxic halogen derivatives of aliphatic or aromatic hydrocarbons
- 1.1.12 Diseases caused by benzene or its toxic homologues
- 1.1.13 Diseases caused by toxic nitro- and amino-derivatives of benzene or its homologues

#### **DISEASES CAUSED BY AGENTS—**Continued

- 1.1.14 Diseases caused by nitroglycerin or other nitric acid esters
- 1.1.15 Diseases caused by alcohols, glycols, ketones
- 1.1.16 Diseases caused by asphyxiants; carbon monoxide, hydrogen cyanide or its toxic derivatives, hydrogen sulphide
- 1.1.17 Diseases caused by acrylonitrile
- 1.1.18 Diseases caused by oxides of nitrogen
- 1.1.19 Diseases caused by vanadium or its toxic compounds
- 1.1.20 Diseases caused by antimony or its toxic compounds
- 1.1.21 Diseases caused by hexane
- 1.1.22 Diseases of teeth caused by mineral acids
- 1.1.23 Diseases caused by pharmaceutical agents
- 1.1.24 Diseases caused by thallium or its compounds
- 1.1.25 Diseases caused by osmium or its compounds
- 1.1.26 Diseases caused by selenium or its compounds
- 1.1.27 Diseases caused by copper or its compounds
- 1.1.28 Diseases caused by tin or its compounds
- 1.1.29 Diseases caused by zinc or its compounds
- 1.1.30 Diseases caused by ozone, phosogene
- 1.1.31 Diseases caused by irritants: benzoquinone and other corneal irritants
- 1.1.32 Diseases caused by any other chemical agents not mentioned in the preceding items 1.1.1 to 1.1.31, where a link between the exposure of a worker to these chemical agents and the diseases suffered is established
- 1.2 Diseases caused by physical agents
- 1.2.1 Hearing impairment caused by noise
- 1.2.2 Diseases caused by vibration (disorders of muscles, tendons, bones, joints, peripherals blood vessels or peripherals nerves)
- 1.2.3 Diseases caused by work in compressed air
- 1.2.4 Diseases caused by ionizing radiations
- 1.2.5 Diseases caused by heat radiation
- 1.2.6 Diseases caused by ultraviolet radiation
- 1.2.7 Diseases caused by extreme temperature (e.g., sunstroke, frostbite)

- 1.2.8 Diseases caused by any other physical agents not mentioned in the preceding items 1.2.1 to 1.2.7, where a direct link between the exposure of a worker to these physical agents and the diseases suffered is established
- 1.3 Diseases caused by biological agents
- 1.3.1 Infectious or parasitic diseases contracted in an occupation where there is a particular risk of contamination

## 2. DISEASES BY TARGET ORGAN SYSTEMS

- 2.1 Occupational respiratory diseases
- 2.1.1 Pneumoconioses caused by sclerogenic mineral dust (silicosis, anthracosilicosis, asbestosis) and silicotuberculosis, provided that silicosis is an essential factor in causing the resultant incapacity or death
- 2.1.2 Bronchopulmonary diseases caused by hard-metal dust
- 2.1.3 Bronchopulmonary diseases caused by cotton, flax, hemp or sisal dist (byssinosis)
- 2.1.4 Occupational asthma caused by recognised sensitising agents or irritants inherent to the work process
- 2.1.5 Extrinsic allergic alveolitis caused by the inhalation of organic dusts, as prescribed by national legislation
- 2.1.6 Siderosis
- 2.1.7 Chronic obstructive pulmonary diseases
- 2.1.8 Diseases of the lung caused by aluminium
- 2.1.9 Upper airways disorders caused by recognised sensitising agents or irritants inherent to the work process
- 2.1.10 Any other respiratory disease not mentioned in the preceding items 2.1 to 2.1.9, caused by an agent where a direct link between the exposure of a worker to this agent and the disease suffered is established
- 2.2 Occupational skin diseases
- 2.2.1 Skin diseases caused by physical, chemical or biological agents not included under other items
- 2.2.2 Occupational vitiligo
- 2.3 Occupational musculo-skeletal disorders
- 2.3.1 Musculo-skeletal diseases caused by specific work activities or work environment where particular risk factors are present

Examples of such activities or environment include:

- (a) rapid or repetitive motion
- (b) forceful exertion
- (c) excessive mechanical force concentration

#### DISEASES BY TARGET ORGAN SYSTEMS—Continued

- (d) awkward or non-neutral postures
- (e) vibration

Local or environmental cold may increase risk

#### 3. OCCUPATIONAL CANCER

- 3.1 Cancer caused by the following agents
- 3.1.1 Asbestos
- 3.1.2 Benzidine and its salts
- 3.1.3 Bis chloromethyl ether (BCME)
- 3.1.4 Chromium and chromium compounds
- 3.1.5 Coal tars, coal tar pitches or soot
- 3.1.6 Beta-napthylamine
- 3.1.7 Vinyl chloride
- 3.1.8 Benzene or its toxic homologues
- 3.1.9 Toxic nitro- and amino-derivatives of benzene or its homologues
- 3.1.10 Ionizing radiations
- 3.1.11 Tar, pitch, bitumen, mineral oil, anthracene, or the compounds, products or residues of these substances
- 3.1.12 Coke oven emissions
- 3.1.13 Compounds of nickel
- 3.1.14 Wood dust
- 3.1.15 Cancer caused by any other agents not mentioned in the preceding items 3.1.1 to 3.1.14, where a direct link between the exposure of a worker to this agent and the cancer suffered is established

# 4. OTHER DISEASES

4.1 Miners' nystagmus

[Section 64(2)].

# SCHEDULE 2

# THE OCCUPATIONAL SAFETY AND HEALTH AUTHORITY RULES

Citation.

1. These Rules may be cited as the Occupational Safety and Health Authority Rules.

- 2. The Ministry shall provide the Authority with an office and other Office of the facilities, secretarial staff and other support services as the Authority requires Authority. to efficiently perform its functions.
- 3. The appointment of a person, other than the Executive Director, as a Tenure of office. member of the Authority shall be for a term of three years, but outgoing members are eligible for reappointment.
- 4. (1) The Chairman or Deputy Chairman may resign at any time by Resignation. instrument in writing addressed to the Minister.
- (2) A member, other than the Chairman, Deputy Chairman and the Executive Director, may resign at any time by instrument in writing addressed to the Chairman, who shall cause it to be forwarded to the Minister.
- 5. The Minister may at any time revoke the appointment of a person, Revocation of other than the Executive Director, as Chairman or as a member of the Board and declare his office as a member to be vacant if satisfied that the person—

appointment.

- (a) has, without reasonable excuse, failed to attend the meetings of the Authority for a continuous period of three months;
- (b) is incapacitated physically or mentally to such an extent as to impair his ability to perform his duties, or is otherwise unable or unfit to perform his duties;
- (c) becomes bankrupt or suspends payments to his creditors;
- (d) is convicted and sentenced to a term of imprisonment; or
- (e) is convicted of an offence involving dishonesty.
- 6. The appointment of members of the Authority as first constituted and Gazetting. every subsequent appointment to the Authority or change of membership shall be published in the Gazette.
  - 7. The Authority shall meet—

Ordinary meetings.

- (a) at least once every month; and
- (b) at any other time as the Chairman may, in his discretion, deem necessary for the performance of the functions of the Authority.
- 8. (1) The Chairman—

Special meetings.

- (a) may at any time call a special meeting of the Authority;
- (b) shall call a special meeting within seven days of receiving a request, in writing, to do so signed by any three members of the Authority;
- (c) shall cause notices to be issued to all members in respect of every special meeting.
- (2) Every request for a special meeting shall include sufficient indication of the purpose of the requested meeting.

#### LAWS OF TRINIDAD AND TOBAGO

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Quorum.

9. At any meeting of the Authority, seven members of the Authority shall constitute a quorum.

Person to preside.

10. The Chairman, or in his absence, the Deputy Chairman, shall preside over all meetings, except that where both the Chairman and the Deputy Chairman are absent, the Authority may appoint one of the members present to preside at the meeting.

Minutes.

- 11. (1) Minutes of each meeting in proper form shall be kept under the direction of the Executive Director.
- (2) All decisions, resolutions and standing orders made by the Authority shall be recorded in the minutes.
- (3) The minutes shall be confirmed at the next meeting of the Authority and a copy of the minutes both when prepared and confirmed shall be forwarded to the Minister.

Voting.

12. The decisions of the Authority shall be by a majority of votes of the members present and voting and in the case of an equality of votes, the person presiding may exercise a casting vote.

Co-option.

13. The Authority may co-opt any person to attend any particular meeting of the Authority for the purpose of assisting or advising the Authority, but a co-opted person shall not have any right to vote.

Committees.

- 14. (1) The Authority may appoint a committee—
  - (a) to examine and report to it on any matter whatsoever arising out of or connected with any of its duties and powers; or
  - (b) to assist it in its business and may, for that purpose, delegate such duties and powers as it may consider necessary to that committee.
- (2) A committee appointed under subrule (1) shall consist of at least one member of the Authority.
- (3) Where persons not being members of the Authority are members of a committee, the Authority may, with the prior approval of the Minister, appoint them on such terms and at such remuneration as the Minister may approve.
- (4) The Authority may reject the report of a committee appointed under subrule (1)(a) or adopt it either wholly or with such modifications, additions or adaption as the Authority may think fit.

Remuneration of members.

15. The members of the Authority shall be entitled to such remuneration as the President may approve.

Standing orders.

16. The Authority may make its own standing orders for the regulation of its proceedings.

Occupational Safety and Health

### SUBSIDIARY LEGISLATION

# OCCUPATIONAL SAFETY AND HEALTH (PRESCRIBED FORMS) ORDER

GN 187-1948.

deemed to be made under section 99

- **1.** This Order may be cited as the Occupational Safety and Citation. Health (Prescribed Forms) Order.
- **2.** The forms contained in the Schedule hereto shall be used Forms. in the cases to which they respectively apply.

## **SCHEDULE**

Form 1.	Form 5.	Form 9.
Form 2.	Form 6.	Form 10.
Form 3.	Form 7.	Form 11.
Form 4.	Form 8.	Form 12.
		Form 13.

FORM 1

OFFICIAL EDITION

CONSECUTIVE NUMBER ASSIGNED TO THIS BOOK.

# OCCUPATIONAL SAFETY AND HEALTH ACT

FORM PRESCRIBED BY THE MINISTER

FOR THE

# **GENERAL REGISTER**

FOR FACTORIES, ELECTRICAL STATIONS, INSTITUTIONS, DOCKS, WHARVES, QUAYS, WAREHOUSES, SHIPS, BUILDING OPERATIONS AND WORKS OF ENGINEERING CONSTRUCTION.

This register must be kept available for inspection by any Inspector or the Examining Surgeon for two years (or other prescribed period) after the date of the last entry therein.

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#### INSTRUCTIONS

- 1. The occupier of every factory is required to keep a General Register in the factory or in such place outside the factory as may be approved by the Inspector. This requirement applies equally to—
  - (a) Electrical Stations;
  - (b) Premises forming part of an Institution carried on for charitable or reformatory purposes being premises in which manual labour is exercised in or incidental to the making, altering, repairing, ornamenting, finishing, washing, cleaning or adapting for sale of articles not intended for the use of the institution;
  - (c) Docks, Wharves and Quays (including any warehouse belonging to the owners, trustees or conservators of the dock, wharf or quay);
  - (d) Warehouses in or for the purpose of which mechanical power is used:
  - (e) Loading, unloading or coaling of any ship in a dock, harbour or canal and work carried out in a harbour or wet dock in constructing, reconstructing, repairing, refitting, painting, finishing or breaking up a ship or in scaling, scurfing or cleaning boilers (including combustion chambers and smoke boxes) in a ship, or in cleaning oil fuel tanks or bilges in a ship;
  - (f) Building Operations undertaken by way of trade or business or for the purpose of any industrial or commercial undertaking;
  - (g) Works of engineering construction undertaken by way of trade or business or for the purpose of any industrial or commercial undertaking;
  - (h) Lines or sidings which are used in connection with and for the purposes of a factory, or a dock, wharf or quay or building operations or works of engineering construction.
     (NOTE—A separate General Register is not required for lines or siding unless they are used in connection with more than one factory belonging to different occupiers).
  - 2. The occupier must enter in Part 1 all the particulars required therein.
- 3. The occupier must enter in Part 2A particulars of all young persons under 16 years employed, and must enter in Part 2B particulars of all young

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persons taken into employment when aged 16 years or over. "Young Person" means a person who has attained the age of fourteen and has not attained the age of eighteen years.

- 4. The occupier must enter in Part 3 the particulars of every accident of which notice is required to be sent to the Inspector as soon as it becomes reportable (*see* Notice of Accident, Form 3).
- 5. The occupier must enter in Part 4 the particulars of every case of lead phosphorus, arsenical, mercurial, benzene or aniline poisoning, or anthrax or epitheliomatous ulceration of the skin (*see* Notice of Poisoning or Disease, Form 4).
- 6. The occupier must enter in Part 5 particulars as to the whitewashing or colourwashing, painting, varnishing or washing required under the Act. NOTE—This requirement applies only to factories, electrical stations and institutions.

#### PART 1—GENERAL

Name of Occupier

(In the case of a firm which is not a registered Company the names of each partner should be entered.)

Full Postal Address of Factory

NOTE—In addition to factories as defined in Section 4 of the Act the following are deemed to be factories for the purposes of the Act, Electrical Stations, Institutions, Docks, Wharves, Quays, Warehouses, Ships (during loading, unloading, coaling or under construction, repair or breaking up) Building Operations and Works of Engineering Construction.

Address of Registered Office (if any)

Nature of work carried on

Name and address of examining Surgeon

Signature of Occupier or Agent

Date

Signature of Inspector

Date

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Occupational Safety and Health (Prescribed Forms) Order

# PART 2A—YOUNG PERSONS TAKEN INTO EMPLOYMENT WHEN UNDER 16

(For young persons taken into employment when aged 16 or over see Part 2B).

No.	Name in full	Residence	DATE (	Date of	
			First Employment at the Works	Leaving Employment	Birth
			at the Works	Linpidyment	

# PART 2B—YOUNG PERSONS TAKEN INTO EMPLOYMENT WHEN AGED 16 OR OVER

(For young persons taken into employment when under 16 see Part 2A.)

No.	. Name in full Resider		DATE (	DATE OF		
			First Employment at the Works	Leaving Employment	Birth	
			at the Works	Employment		

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# PART 3—ACCIDENTS INVOLVING MORE THAN THREE DAYS DISABLEMENT OR LOSS OF LIFE

Date of Acci- dent	Date of Notice on Form 3 to Inspector	How caused, e.g., whether by machinery in motion, and by what part of such machinery	Name of person injured	Sex	Age	Usual Employ- ment	Precise Occupa- tion at time of Acci- dent	Nature of injury and whether fatal or not	Period of disable- ment

## PART 4—CASES OF POISONING OR DISEASE

LEAD, PHOSPHORUS, ARSENICAL, MERCURIAL, BENZENE OR ANILINE POISONING, OR ANTHRAX, OR EPITHELIOMATOUS ULCERATION OF THE SKIN

	f Notice orm 4) to	Name of				Name of	D 1
Inspector	Examining Surgeon	person affected	Sex	Age	Precise Occupation	Disease (see above)	Remarks

# LAWS OF TRINIDAD AND TOBAGO

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# PART 5—PAINTING, WHITEWASHING, ETC.

This Part of the General Register does not apply to Docks, Wharves, Quays, Warehouses, Ships, Building Operations or works of Engineering Construction

	Dates		Parts Whitewas washed, Painte Washed on the	Name and address of the Person or Firm by whom the	
Month	Day	Year	Parts	Treatment	work was done

Industrial Court of Trinidad and Tobago

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#### FORM 2

OFFICIAL EDITION

## OCCUPATIONAL SAFETY AND HEALTH ACT

## Abstract of the Act in Form Prescribed by the Minister

(To be kept posted at the Principal Entrance to the premises or in such parts as an Inspector may direct.)

Senior Factory Inspector

**Examining Surgeon** 

Address

Address

Name of Occupier Address of Works

#### ABSTRACT

Part 1—Requirements		
	Part 2—Application	

# PART 1—REQUIREMENTS

#### **HEALTH**

1. Cleanliness—Every factory must be kept clean. In particular accumulations of dirt and refuse must be removed daily from floors and benches and, together with all waste organic matter, shall be placed in a covered pit or receptacle. Effective action shall be taken to prevent the breeding of flies, mosquitoes or other insects, or rats, mice or other vermin. The floor of every workroom shall be cleaned at least once a week.

All inside walls, partitions and ceilings must (a) if they have a smooth impervious surface be washed with soap and water or cleaned by other approved method every six months, or (b) if kept painted with oil paint or varnished, be repainted or revarnished every five years and washed with soap and water, etc., every six months, or (c) in other cases be whitewashed or colourwashed every twelve months. The prescribed particulars must be entered in the General Register.

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- 2. Overcrowding—A factory must not be overcrowded. There must be in each workroom at least 400 cubic feet of space for every person employed, or at least two hundred and fifty cubic feet if not less than twenty-five per cent, of all the sides of the room is open to the outer air. In calculating the cubic space in a workroom, no space more than twelve feet from the floor shall be taken into account.
- 3. *Ventilation*—Adequate ventilation of workrooms must be secured by the circulation of fresh air. All fumes, dust and other impurities that may be injurious to health, shall be rendered harmless and removed by mechanical means, if necessary.
- 4. *Lighting*—There must be sufficient and suitable lighting in every part of the factory in which persons are working or passing.
- 5. *Drainage of Floors*—Where wet processes are carried on, adequate means for draining the floor must be provided.
- 6. Sanitary Accommodation—Sufficient and suitable sanitary conveniences separate for each sex, must be provided, kept clean and adequately lighted.
- 7. *Lifting Excessive Weights*—A young person shall not be employed to lift, carry or move any load so heavy as to be likely to cause injury to him.
- 8. Notification of Industrial Poisoning or Disease—Cases of poisoning by lead, phosphorus, arsenic, mercury, benzene or aniline; anthrax or epitheliomatous ulceration, must forthwith be reported to the Inspector and to the Examining Surgeon on the prescribed form of report No. 4 and entered in the General Register.

#### **SAFETY**

- 9. Fencing—Every part of the transmission machinery and every dangerous part of other machinery, and all parts of electric generators, motors, rotary converters and flywheels directly connected to them, must be securely fenced unless in such a position or of such construction as to be as safe to every person employed or working on the premises as if securely fenced; and any part of a stock-bar which projects beyond the head-stock of a lathe must be securely fenced unless it is in such a position as to be as safe to every such person as if securely fenced.
- 10. Moving parts of other prime movers and flywheels directly connected to them, and the head and tail race of a water wheel or water turbine must be securely fenced irrespective of their positions.

Occupational Safety and Health (Prescribed Forms) Order

[Subsidiary]

- 11. All fencing must be of substantial construction and be maintained in an efficient state.
- 12. *Dangerous Ways, Works or Plant*—Every dangerous part of the ways, works or plant shall be so enclosed, covered, fenced or otherwise effectively guarded as to prevent danger.
- 13. Further Requirements in connection with Transmission Machinery—Devices or appliances for promptly cutting off the power from the transmission machinery, must be provided in every room or place where work is carried on. Efficient mechanical appliances must be provided to move driving belts to and from fast and loose pulleys. Driving belts must not rest or ride on revolving shafts when the belt is not in use.
- 14. *New Machines*—New power-driven machines must not be sold, let on hire, or used unless certain parts are effectively guarded.
- 15. Cleaning Machinery—No person shall clean (a) a prime mover or transmission machinery while it is in motion, or (b) any part of any machine if there is risk of injury from any moving part of that machine or of any adjacent machinery.
- 16. Construction of Floors, etc.—Floors, passages, gangways, steps, stairs and ladders must be soundly constructed and properly maintained and handrails must be provided for stairs.
- 17. *Precautions against Falls*—So far as is reasonably practicable, there must be provided (i) safe means of access to every place at which any person has at any time to work, and (ii) fencing or other means for ensuring the safety of any person who is to work at a place from which he would be liable to fall more than ten feet.
- 18. *Hoists or Lifts*—Every hoist or lift must be of good mechanical construction, sound material and adequate strength and be properly maintained. It must be thoroughly examined every twelve months, by a competent person whose report must be entered in or attached to the General Register.

Every hoistway must be efficiently protected by a substantial enclosure and landing gates. The safe working load must be marked conspicuously on each hoist.

Every doorway or similar opening used for hoisting or lowering goods must be fenced (except when the hoisting or lowering is going on at that opening) and be provided with a secure hand-hold on each side of the opening.

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19. Steam Boilers—Every part of every steam boiler, economiser and superheater must be of good construction, sound material, adequate strength and free from patent defect. Detailed requirements are laid down as to the valves and other fittings.

Steam boilers, economisers and superheaters and all fittings and attachments must be thoroughly examined by a competent person every twelve months and after extensive repairs. A report of each examination must be attached to the General Register. New or second-hand boilers, economisers or superheaters must be examined, hydraulically tested and certified before being taken into use.

20. Air Pressure Containers—Every air pressure container and its fittings must be of sound construction and properly maintained. Detailed requirements are laid down as to the fittings.

Air pressure containers must be thoroughly cleaned, examined and hydraulically tested every twelve months by a competent person and a report entered in or attached to the General Register. New or second-hand air pressure containers must be examined, hydraulically tested and certified before being taken into use.

- 21. Chains, Ropes, Lifting Tackle and Cranes—Any Regulations or Orders which may be made under the Act shall be observed.
- 22. *Fire*—Subject to certain exceptions for small works, a certificate (to be attached to the General Register) must be held from the fire authority that the means of escape in case of fire are such as may reasonably be required. The means of escape specified in the certificate must be properly maintained and kept free from obstruction.

While any person is in the factory for the purpose of employment or meals, doors must not be so locked or fastened that they cannot be easily and immediately opened from the inside. The doors of any room in which more than ten persons are employed, and in the case of newly constructed or converted factories all other doors affording a means of exit from the factory, must be sliding doors or open outwards. Fire exits must be marked by a notice printed in red letters of adequate size.

In certain factories provision for giving warning in case of fire must be made and effective steps taken to ensure that the workers are familiar with the means of escape and their use and the routine to be followed in case of fire.

23. *Notification of Accidents*—Accidents causing loss of life or disabling a worker for more than three days from earning full wages at the work at which he was employed must be reported forthwith on the prescribed Form No. 3 to the Inspector and entered in the General Register.

Occupational Safety and Health

Occupational Safety and Health (Prescribed Forms) Order [Subsidiary]

#### WELFARE

24. Drinking Water, Washing Facilities, Accommodation for Clothing, Facilities for Sitting and First Aid—Any Regulations or Orders which may be made under the Act shall be observed.

### EMPLOYMENT OF WOMEN AND YOUNG PERSONS

- 25. *Children*—A person under 14 years must not be employed in any factory, or in the business of a factory outside the factory or in any business, trade or process ancillary to the business of a factory.
- 26. Women and Young Persons—No woman or young person may be employed in a factory otherwise than in accordance with any Regulations or Orders which may be made under the Act. [Note—Certain restrictions as to working hours are in force under the Children Act (insofar as this Act affects Ch. 46:01. young persons)].

# OTHER REQUIREMENTS

- 27. *Notice of Occupation*—Within one month after beginning to occupy a factory or introducing mechanical power into a factory, the occupier must furnish the Inspector with certain particulars.
- 28. *Regulations or Orders*—Printed copies or prescribed abstracts of all Regulations or Orders for the time being in force in the factory under the Act must be kept posted in the factory or other approved place.
- 29. *General Register*—The occupier must keep a General Register in the prescribed form (Form No. 1).
- 30. Prohibition of Deductions from Wages—The occupier must not make a deduction from wages in respect of anything he has to do or provide in pursuance of the Act, or permit any person in his employment to receive payment from other employees for such services. (Note—The Truck Act requires the payment of Ch. 88:07. wages in money, except as otherwise provided in that Act).
- 31. Duties of Persons Employed—Any person employed must not wilfully interfere with or misuse any means, appliance, convenience or other thing provided in pursuance of the Act for securing health, safety or welfare and he must use any means or appliance for securing health or safety provided for his use under the Act. He must not wilfully and without reasonable cause do anything likely to endanger himself or others and he must not neglect his duty to the extent of endangering himself or others.

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32. *Inspection*—Inspectors have power to inspect every part of a factory by day or by night, they may require the production of registers, certificates and other papers. They may examine any person found in the factory, either alone or in the presence of any other person as they think fit and may require him to sign a declaration of the truth of the matters about which he is examined. They may also exercise such other powers as may be necessary for carrying the Act into effect, including certain powers of taking samples for analysis. Every person obstructing an Inspector is liable to a penalty.

#### PART 2—APPLICATION

# FACTORIES, ELECTRICAL STATIONS AND INSTITUTIONS

All the foregoing requirements apply to Factories (as defined in Section 4 of the Act), Electrical Stations, and Institutions carried on for charitable or reformatory purposes being premises in which manual labour is exercised in or incidental to the making, altering, repairing, ornamenting, finishing, washing, cleaning or adapting for sale of articles not intended for the use of the institution.

## DOCKS, WHARVES AND QUAYS

The following of the foregoing requirements apply to Docks, Wharves and Quays (including any warehouse belonging to the owners, trustees or conservators of a dock, wharf or quay and any line or siding used in connection with or for the purposes of a dock, wharf or quay):

- 6. Sanitary Accommodation.
- 8. Notification of Industrial Poisoning or Disease.
- 9. Fencing.
- 10.
- 11.
- 13. Further requirements in connection with transmission machinery.
- 14. New Machines.
- 15. Cleaning Machinery.
- 18. Hoists or Lifts.
- 19. Steam Boilers.
- 20. Air Pressure Containers.
- 23. Notification of Accidents.
- 25. Children.
- 26. Women and Young Persons.
- 28. Regulations or Orders.
- 29. General Register.
- 30. Prohibition of Deductions from Wages.
- 31. Duties of Persons employed.
- 32. Inspection.

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#### WAREHOUSES

Any warehouse belonging to the owners, trustees or conservators of a dock, wharf or quay and every other warehouse (not forming part of a factory) where mechanical power is used, is subject to the following requirements in addition to those enumerated under Docks, Wharves and Quays:

- 12. Dangerous ways, works or plant.
- 16. Construction of floors, etc.
- 17. Precautions against falls.
- 22. Fire.

#### **SHIPS**

The following requirements apply to:

- (a) The processes of loading, unloading or coaling of any ship in any dock, harbour or canal and to all machinery or plant used in those processes.
- (b) Any work carried out in a harbour or wet dock in constructing, reconstructing, repairing, refitting, painting, finishing or breaking up a ship or in scaling, scurfing or cleaning boilers (including combustion chambers and smoke boxes) in a ship, or in cleaning oil fuel tanks or bilges in a ship, but not any such work done by the master or crew of a ship or done on board ship during a trial run.
  - 8. Notification of poisoning or disease.
  - 15. Cleaning Machinery [paragraph (b) above].
  - 23. Notification of accidents.
  - 25. Children.
  - 26. Women and Young Persons.
  - 28. Regulations or Orders [paragraph (a) above].
  - 29. General Register.
  - 30. Prohibition of Deductions from wages.
  - 31. Duties of persons employed.
  - 32. Inspection.

The following further requirements apply, but not to any machinery or plant which is on board a ship and is the property of the ship owner (unless the ship is owned or worked by or on behalf of the Government or any owner or

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hirer resident in Trinidad and Tobago, and is ordinarily used within the territorial waters of Trinidad and Tobago):

- 9. Fencing.
- 10.
- 11.
- 13. Further requirements in connection with transmission machinery.
- 15. Cleaning Machinery [paragraph (a) above].
- 18. Hoists or Lifts.
- 19. Steam boilers.
- 20. Air Pressure Containers.

# BUILDING OPERATIONS AND WORKS OF ENGINEERING CONSTRUCTION

1. Copies of the prescribed abstract of the Act and of Regulations or Orders must be kept posted, either at the site of the operations or at each office, yard or shop at which the persons employed attend.

NOTE— Any yard or dry dock, including the precincts thereof, in which ships or vessels are constructed, reconstructed, repaired, refitted, finished or broken up, is a factory within the meaning of Section 4 of the Act and all the requirements in Part I of the abstract must be observed.

- 2. A General Register must be kept either at the office of the person undertaking the operations or (in the case of a register for a particular site) on that site.
- 3. Within seven days after the beginning of any operations or works which are not expected to be completed within six weeks, the person undertaking them must serve written particulars on the Inspector.
  - 4. The following requirements also apply:
    - 6. Sanitary Accommodation.
    - 8. Notification of Industrial poisoning or disease.
    - 9. Fencing.
    - 10.
    - 11.
    - 13. Further requirements in connection with transmission machinery.
    - 14. New machines.
    - 15. Cleaning machinery.
    - 19. Steam Boilers.
    - 20. Air Pressure Containers.

# LAWS OF TRINIDAD AND TOBAGO

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- 23. Notification of Accidents.
- 25. Children.
- 26. Women and Young Persons.
- 30. Prohibition of deductions from wages.
- 31. Duties of Persons employed.
- 32. Inspection.

#### OTHER PLACES

Where part of a building is let off as a separate factory, the following requirements apply to any part of the building used for the purposes of the factory but not comprised therein:

- 1. Cleanliness.
- 4. Lighting.
- 9. Fencing (in relation to prime movers and transmission machinery).
- 10. " " " " " "
- 11. " " " " " "
- 16. Construction of floors, etc.
- 22. Fire.

The provisions of the Act in respect of (i) Hoists or Lifts (ii) Steam Boilers (iii) Air Pressure Containers, must be observed whether the hoist or lift, steam boiler or air pressure container is situated in premises to which the Act applies or not.

## LAWS OF TRINIDAD AND TOBAGO

104 Chap. 88:08 Occupational Safety and Health [Subsidiary] Occupational Safety and Health (Prescribed Forms) Order This space to be FORM 3 OFFICIAL EDITION filled in by the Inspector OCCUPATIONAL SAFETY AND HEALTH ACT Form prescribed by the Minister for **Notice of Accident** to be sent (immediately on the accident becoming reportable) to the Inspector. 1. Name of Occupier Address of works where accident happened 2. 3. Nature of Industry Branch of Department and exact place where the accident happened Injured persons name (in full) Address (a) Sex (b) Age (last birthday), and(c) Occupation. 6. (a) (c) Date and hour of accident Hour at which (s)he started work on day of accident 9. (a) Cause or nature of accident (b) If caused by machinery (i) Give name of the machine and part causing accident (ii) State whether it was moved by mechanical power at the time (ii) (c) State exactly what injured person was doing at the time 10. Describe briefly nature and extent of injuries (e.g. fatal, loss of finger, fracture of leg, scald, etc.) 11. If the accident is not fatal, state whether injured person was disabled for more than three days from earning full wages at the work at which (s)he was employed Has the accident been entered in the General Register Signature of Occupier Manager or Agent Date

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#### **INSTRUCTIONS**

- 1. Where there occurs in a Factory (see also para. 4 below)—
  - (a) an accident causing loss of life to a person employed therein, or
  - (b) an accident which disables any person employed therein for more than three days from earning full wages at the work at which he or she was employed,

the occupier must forthwith send notice thereof on this Form to the Inspector.

- 2. If an accident notified as above as causing disablement results in the death of the person disabled, the occupier must send to the Inspector notice of the death as soon as it comes to his knowledge.
- 3. If the occupier is not the actual employer of the person killed or injured by an accident as above, the actual employer must immediately report the accident to the occupier.
  - 4. The above requirements apply equally to accidents of the same class in—
    - (a) Electrical Stations;
    - (b) Premises forming part of an Institution carried on for charitable or reformatory purposes being premises in which manual labour is exercised in or incidental to the making, altering, repairing, ornamenting, finishing, washing, cleaning or adapting for sale of articles not intended for the use of the institution:
    - (c) Docks, wharves and quays (including any warehouse belonging to the owners, trustees or conservators of the dock, wharf, or quay);
    - (d) Warehouses in or for the purposes of which mechanical power is used;
    - (e) Loading, unloading or coaling of any ship in any dock, harbour or canal and work carried out in a harbour or wet dock in constructing, reconstructing, repairing, refitting, painting, finishing, or breaking up a ship or in scaling, scurfing, or cleaning boilers (including combustion chambers and smoke boxes) in a ship, or in cleaning oil fuel tanks or bilges in a ship;
    - (f) Building operations undertaken by way of trade or business, or for the purpose of any industrial or commercial undertaking;
    - (g) Works of engineering construction undertaken by way of trade or business, or for the purposes of any industrial or commercial undertaking;
    - (h) Lines or sidings which are used in connection with or for the purposes of a factory, or a dock, wharf or quay, or building operations or works of engineering construction.

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#### FORM 4

## OCCUPATIONAL SAFETY AND HEALTH ACT

#### OBSERVATIONS OF INSPECTOR

#### Notice of Case of Poisoning or Disease

occurring in a factory or other premises to which the provisions of the Occupational Safety and Health Act as to the notification of industrial diseases apply. [See footnote (a)].

A notice in this form should be sent forthwith, both to the Senior Factory Inspector and to the Examining Surgeon, by the occupier of the factory or premises [see footnote (b)] if there occurs a case of lead, phosphorus, arsenical, mercurial, benzene or aniline poisoning, or anthrax or epitholiomatous ulceration.

#### WORKS-

- 1. Name of Occupier or Employer.
- 2. Address of Factory or premises.
- 3. Address of Office
  - (if the work on the premises is only temporary).
- 4. Nature of Industry.

## PERSON AFFECTED—

- 5. Nature of poisoning or Disease (*see* above).
- 6. Name.
- 7. Address (permanent).
- 8. Temporary Address (if any).
- 9. Sex and age last birthday.
- 10. Precise Occupation

(avoid the term "labourer" where possible).

- 11. Has the case been reported to the Examining Surgeon?
- 12. Has the case been entered in the General Register?

Signature of Occupier or Agent

Date

## FOOTNOTES—

- (a) Such premises include certain electrical stations; the sites of building operations or works of engineering construction; docks, wharves, quays and warehouses; and ships in a harbour or wet dock, as respects work in constructing, reconstructing, repairing, refitting, painting, finishing or breaking up a ship or in scaling, scurfing or cleaning boilers (including combustion chambers and smoke boxes) in a ship, or in cleaning oil-fuel tanks or bilges in a ship, and the loading, unloading or coaling of a ship in a dock, harbour or canal.
- (b) In the case of building operations, works of engineering construction, docks, etc., the notice should be sent by the employer of the person affected.

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#### FORM 5

### OCCUPATIONAL SAFETY AND HEALTH ACT

Abstract of the Boilers Regulations, including a Summary of the Principal Requirements of the Occupational Safety and Health Act, Relating to Steam Boilers.

## Application

The requirements of the Boilers Regulations apply to every steam boiler, whether situated in a factory or not except—

- (1) A boiler used solely for domestic purposes at a pressure not exceeding one atmosphere.
- (2) The boiler of any ship (other than a ship owned or worked by or on behalf of the Government or any owner or hirer resident in Trinidad and Tobago and ordinarily used within the territorial waters of Trinidad and Tobago).

# Definition

The expression "steam boiler" means any closed vessel in which for any purpose steam is generated under pressure greater than atmospheric pressure and includes any economiser used to heat the water being fed into any such vessel and any superheater used for heating steam.

## Construction and Maintenance

Every part of every steam boiler shall be of good construction, sound material, adequate strength and free from patent defect. Every steam boiler and all its fittings and attachments shall be properly maintained.

## Fittings and Attachments

Detailed requirements as to fittings and attachments include the following: Every steam boiler shall have attached to it—

- (1) A properly adjusted safety valve of suitable type, which can be safely operated by hand while under steam pressure, and where practicable, is provided with means for securing the adjustment with a seal so that the adjustment cannot be altered unless the seal is broken.
  - (2) A suitable stop valve.
- (3) A correct steam pressure gauge, easily visible to the boiler attendant and having the maximum permissible working pressure marked upon it in a distinctive colour.
- (4) Two water gauges or one water gauge and not less than two water level test cocks.
  - (5) Means for attaching a test pressure gauge.

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(6) A fusible plug or efficient low water alarm device (unless externally fired).

Of the above requirements, those numbered 2, 3, 4, 5 and 6 do not apply to an economiser and those numbered 3, 4, 5 and 6 do not apply to a superheater.

If the boiler is in a ship the following are also required:

- (7) A second safety valve, both valves to be of direct spring loaded type.
- (8) A blow off cock or valve so as to permit the pressure to be reduced within a reasonable time in an emergency.
  - (9) A salinometer cock or valve.

### New Boilers

A new steam boiler shall not be taken into use until—

- (1) There has been obtained from the manufacturer or from a boiler examiner a certificate specifying the maximum permissible working pressure and the tests to which the boiler and fittings have been subjected; and
- (2) It has been hydraulically tested on the site where it is going to be used by a boiler examiner to at least one and a half times the maximum permissible working pressure.

### Second-hand Boilers

A steam boiler which has previously been used shall not be taken into use by a new owner or hirer until—

- (1) It has been thoroughly examined by a boiler examiner; and
- (2) It has been hydraulically tested by a boiler examiner on the site where it is going to be used to at least one and a half times the maximum permissible working pressure.

### Annual and other Examinations

Every steam boiler and all its fittings and attachments shall be thoroughly examined by a boiler examiner at least once in every period of twelve months and also after any extensive repairs.

The examination shall consist, firstly of an examination of the boilers when it is cold and the interior and exterior have been prepared to the satisfaction of the boiler examiner and secondly (except in the case of an economiser or superheater) of an examination under normal steam pressure. The examination under steam pressure shall be made on the first occasion when steam is raised after the examination of the boiler when cold, or as soon as possible thereafter.

The period of twelve months shall start from the date of examination under normal steam pressure. In certain emergencies the boiler examiner may extend the period by one month.

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Where the boiler is situated in a factory or other place to which the Occupational Safety and Health Act applies the report of the boiler examiner shall, within 21 days or sooner if practicable be entered in or attached to the General Register.

In other cases the report of the boiler examiner shall be sent to the factory inspector within twenty-one days and on its return to the owner or hirer of the boiler shall be kept available for inspection.

#### **Boiler Examiners**

A boiler examiner shall hold a licence from the Minister authorising him to examine and test steam boilers. He shall neither be in the employ of the occupier of the premises in which the steam boiler is situated nor of the owner or hirer of the boiler. The issue, suspension or cancellation of a boiler examiner's licence shall be published in the *Gazette* and a list of persons who are boiler examiners shall be published in the *Gazette* on the first of January or as soon as possible thereafter each year.

### Fee for Examination of Boiler

The fees payable for examinations and the allowances to be paid in respect of expenses incurred by boiler examiners shall be determined by the Minister and shall be published in the *Gazette* on the first of January or as soon as possible thereafter each year.

### Safety Precautions

Every boiler safety valve which is under steam pressure shall be operated by hand at least once a week. A record of such operation shall be entered in a book which shall be kept for the purpose and every entry shall be signed by the person who operated the valve.

The outlet of the blow down cock, valve or pipe on every boiler shall be in such a position or so arranged as to prevent danger.

No person shall be in any steam boiler which is one of a range of two or more unless—

- (a) All inlets through which steam or hot water may enter the boiler from any other part of the range are disconnected; or
- (b) All valves, taps or cocks controlling such entry are closed and securely locked and where the boiler has a blow-off pipe in common with one or more other boilers or delivering into a common blow-off vessel or sump, the blow-off valve, tap or cock on each such boiler is so constructed that it can only be opened by a key, which cannot be removed until the valve, tap or cock is closed and is the only key in use for that set of blow-off valves, taps or cocks.

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Interference with Safety Valve Adjustment

Any person other than the boiler examiner or person working under his direct control and supervision who breaks the seal which secures the adjustment of a safety valve or causes it to be broken shall be liable to a fine of forty-eight dollars.

If a steam boiler is worked at a higher pressure than the maximum permissible working pressure specified in the manufacturer's certificate or in the report of the last examination made by a boiler examiner, the occupier of the factory or the owner or hirer of the boiler shall be liable to a fine of two hundred and fifty dollars for the first offence and to higher penalties for any subsequent offence.

Notice of Boiler Explosion

Written notice of any boiler explosion shall forthwith be sent to the senior factory inspector by the occupier of the factory or the owner or hirer of the boiler.

### **EXPLANATORY NOTE**

This abstract is not part of the Boilers Regulations, nor of the Act, but is intended to serve as an indication of the principal requirements as to steam boilers contained therein. In accordance with the provisions of section 61 of the Act, it should be posted in any factory in which a steam boiler is used, either at the principal entrance to the factory or in a conspicuous position in the immediate vicinity of the steam boiler or boilers.

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### FORM 6

### OCCUPATIONAL SAFETY AND HEALTH ACT

Abstract of the Air Pressure Containers Regulations including a Summary of the Principal Requirements of the Act relating to Air Pressure Containers.

### Application

The requirements of the Air Pressure Containers Regulations apply to every air pressure container whether situated in a factory or not except—

- (1) An air pressure container used solely for domestic purposes at a pressure not exceeding one atmosphere.
- (2) An air pressure container into which air is pumped by hand and in which the pressure does not exceed one atmosphere.
- (3) An air pressure container on a ship (other than a ship owned or worked by or on behalf of the Government or any owner or hirer resident in Trinidad and Tobago and ordinarily used within the territorial waters of Trinidad and Tobago).

### Definition

The expression "air pressure container" means—

- (a) any vessel (other than a pipe or coil or an accessory, fitting or part of a compressor) for containing compressed air; or
- (b) any vessel for containing compressed exhaust gases and used for the purpose of starting an internal combustion engine; or
- (c) any vessel (not being part of a grease gun or spraying pistol) in which grease, oil, paint, varnish, lacquer or any liquid is stored and from which such material or liquid is forced by compressed air.

### Construction and Maintenance

Every air pressure container and all its fittings shall be of sound construction and properly maintained.

## Distinguishing Marks and Fittings

Detailed requirements include the following:

- (1) The safe working pressure shall be plainly marked on the container.
- (2) Wherever more than one container is in use, each container shall bear a distinguishing mark which shall be easily visible.
- (3) Each container shall be provided with a suitable manhole, handhole or other means which will allow the interior to be properly cleaned.

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- (4) A suitable safety valve shall be fitted, and where practicable shall be provided with means for securing the adjustment with a seal.
  - (5) A correct pressure gauge shall be fitted.
- (6) If the container is not so constructed as to withstand safely the maximum pressure which can be obtained in the compressor it shall be fitted with a suitable reducing valve or other suitable appliance to prevent the safe working pressure of the container being exceeded.
- (7) With the exception of those containers mentioned in paragraph (c)of the definition every container shall be fitted with a suitable appliance for draining the container so as to enable all liquid to be drained from the lowest point in the container.

### New Air Pressure Containers

A new air pressure container shall not be taken into use until—

- (1) There has been obtained from the manufacturer or from a boiler examiner a certificate specifying the safe working pressure and the test to which the container and fittings have been submitted; and
- (2) It has been hydraulically tested on the site by a boiler examiner to at least one and a half times the safe working pressure.

### Second-hand Air Pressure Containers

An air pressure container which has previously been used shall not be taken into use by a new owner or hirer until-

- (1) It has been thoroughly examined by a boiler examiner; and
- (2) It has been hydraulically tested by a boiler examiner to at least one and a half times the safe working pressure.

### Annual and other Examinations

Every air pressure container shall be thoroughly cleaned and examined and hydraulically tested by a boiler examiner at least once in every period of twelve months and also before it is again brought into use after any alteration or substantial repair.

Where the boiler examiner is satisfied by internal examination that an hydraulic test is not necessary, an hydraulic test need not be applied.

Where the air pressure container is situated in a factory or other place to which the Act applies the report of the boiler examiner shall within twenty-one days or sooner, if practicable, be entered in or attached to the General Register. In other cases the report of the boiler examiner shall be sent to the factory inspector within twenty-one days and on its return to the owner or hirer of the container shall be kept available for inspection.

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### Competent Person to Examine Air Pressure Container

A person shall not be deemed competent to examine or test an air pressure container unless he holds a licence from the Minister authorising him to examine and test boilers. He shall neither be in the employ of the occupier of the premises in which the air pressure container is situated nor of the owner or hirer of the container. The issue, suspension or cancellation of a boiler examiner's licence shall be published in the *Gazette* and a list of persons who are boiler examiners shall be published in the *Gazette* on the first of January or as soon as possible thereafter each year.

### Fee for Examination

The fee payable for examinations and the allowances to be paid in respect of expenses incurred by boiler examiners shall be determined by the Minister and shall be published in the *Gazette* on the first of January or as soon as possible thereafter each year.

### Safety Precautions

During the forenoon of every day on which an air pressure container is subjected to air pressure—

- (a) the safety valve shall be operated by hand;
- (b) accumulations of oil and water shall be drained off (except in the case of those containers mentioned in paragraph (c) of the definition).

A record of the performance of the operations aforesaid shall be entered daily in a book to be kept for that purpose.

### Interference with Safety Valve Adjustment

Any person other than a boiler examiner or a person working under his direct control and supervision who breaks the seal which secures the adjustment of a safety valve or causes it to be broken shall be liable to a fine of forty-eight dollars.

If an air pressure container is worked at a higher pressure than the safe working pressure specified in the manufacturer's certificate or in the report of the last examination made by a boiler examiner, the occupier of the factory or the owner or hirer of the air pressure container shall be liable to a fine of two hundred and fifty dollars.

### **EXPLANATORY NOTE**

This abstract is not part of the Air Pressure Containers Regulations, nor of the Act, but is intended to serve as an indication of the principal requirements as to Air Pressure Containers contained therein.

In accordance with the provisions of section 61 of the Act, it should be posted in any factory in which an air pressure container is used.

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### FORM 7

## OCCUPATIONAL SAFETY AND HEALTH ACT

## Form prescribed by the Minister for Report of Examination of Steam Boiler when Cold

For report of examination under normal steam pressure *see* Form 8. For economisers *see* Forms 9 and 8. For superheaters *see* Forms 10 and 8.

Name of Occupier	
Address of—	
(a) Factory	
(b) Head Office of Occupier	
NOTE—Address (b) is required only in the case of a boiler used in a temporary location, e.g., on a building operation, work of engineering construction	
Description and distinctive number of Boiler and type	
Date of Construction	
The history should be briefly given, and the examiner should state whether he has seen the last previous report	
Date of last hydraulic test (if any) and pressure applied	
Quality and source of water	
Is the boiler in the open or otherwise exposed to the weather or to damp?	

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1. BOILER—	
(a) What parts of seams, drums or headers are covered by brickwork?	
(b) Date of last exposure of such parts for the purpose of examination	
(c) What parts (if any) other than parts covered by brickwork and mentioned above were inaccessible?	
(d) What examination and tests were made? (If there was any removal of brickwork, particulars should be given here)	
(e) Condition of boiler— (State any defects materially affecting the maximum permissible working pressure)  [External—  Internal—	
2. Fittings and Attachments—	
(a) Are there proper fittings and	
attachments?  (b) Are all fittings and attachments in satisfactory condition (so far as ascertainable when not under pressure)?	
3. Repairs (if any) required, and period within which they should be executed, and any other conditions which the person making the examination thinks it necessary to specify for securing safe working.	
4. Maximum permissible working pres from dimensions and from the thicl data ascertained by the present ex allowance being made for condition unusual or exceptionally severe.	kness and other camination; due
Where repairs affecting the working press	*
(a) Before the expiration of the in (3).	
(b) After the expiration of such required repairs have not been	completed.
(c) After the completion of the req	uired repairs. (c)
5. Other observations	

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Subject to the reservation (noted above) of certain points for examination under steam pressure, I certify that on the boiler above described was sufficiently scaled, prepared, and (so far as its construction permits) made accessible for thorough examination and for such tests as were necessary for thorough examination, and that on the said date I thoroughly examined this boiler, including its fittings and attachments, and that the above is a true report of the result. (The words in italics should be deleted if not required).

Signature

Qualification

Address

To be inserted in the General Register (see notes hereunder).

### SPACE FOR CONTINUATION OF ENTRIES

## NOTES AS TO EXAMINATIONS

- 1. Every steam boiler and all its fittings and attachments shall be thoroughly examined by a competent person at least once in every period of twelve months and also after any extensive repairs.
- 2. The examination of the boiler shall consist, in the first place of an examination of the boiler when it is cold and the interior and exterior have been prepared to the satisfaction of the competent person, and secondly when it is under normal steam pressure.
- 3. The report of the examination of the boiler when cold shall be made on the prescribed Form No. 7 and shall be signed by the person making the examination. The completed report shall be entered in or attached to the General Register within twenty-one days of the examination.
- 4. The examination of the boiler under normal steam pressure shall be made on the first occasion when steam is raised after the examination of the boiler when it is cold, or as soon as possbile thereafter. The report of the examination shall be made on the prescribed Form No. 8 and shall be signed by the person making the examination. The completed report shall be entered in or attached to the General Register within twenty-one days of the examination.

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- 5. The period of twelve months from one examination to the next shall start from the completion of the examination of the boiler under normal steam pressure.
- 6. The competent person may extend the period between any two examinations of the steam boiler by not more than one month in the event of an emergency when serious loss or damage would be caused if the boiler was shut down for examination at the prescribed time. After any such extension the boiler shall be next examined within the succeeding eleven months.
- 7. A new steam boiler shall not be taken into use until it has been hydraulically tested on the site by a competent person and a certificate signed by the manufacturers of the boiler or the competent person specifying the maximum permissible working pressure and the tests applied to the boiler and fittings has been obtained and is kept available for inspection.
- 8. A steam boiler which has previously been used shall not be taken into use again until it has been examined, hydraulically tested and reported on by a competent person. This requirement does not apply to intermittent use by the same owner or hirer except on the first occasion when he takes the boiler into use.
- 9. The expression "competent person" means the holder of an uncancelled or unsuspended licence to examine and test steam boilers, issued under the Boilers Regulations.
- 10. In the case of a steam boiler situated in premises to which the Act does not apply, the report of examination is not required to be entered in a General Register. Instead, it shall be sent within twenty-one days to the Inspector and on its return to the owner or hirer of the boiler shall be kept available for inspection.

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### FORM 8

## OCCUPATIONAL SAFETY AND HEALTH ACT

## Form prescribed by the Minister for Report of Examination of Steam Boiler under Normal Steam Pressure

This form may be used (as far as applicable) for supplementary reports on Economisers and Superheaters

Name of Occupier	
Address of—	
(a) Factory	
(b) Head Office of Occupier	
NOTE—Address (b) is required only in the case of a superheater used in a temporary location.	boiler or
1. Condition (External)	
2. Fittings and Attachments	
(a) (i) Is the safety valve so adjusted as to prevent being worked at a pressure greater than the repermissible working pressure specified in the l (Form 7) on the examination when cold?	maximum
(ii) If a lever safety valve, is the weight secur lever in the correct position?	red on the
(b) Is the pressure gauge working correctly?	
(c) Are the water gauges in proper working order	?
3. Repairs (if any) required, and period within which they executed and any other conditions which the person mexamination thinks it necessary to specify for securing safe v	naking the
4. Other observations	
I certify that on I examined the above-mention that the above is a true report of the result.	oned boiler under normal steam pressure and
Si	ignature
Q	Qualification
A	ddress
D	Date (
To be inserted in the General Regist	er (see notes overleaf).
SPACE FOR CONTINUATION	ON OF ENTRIES

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Occupational Safety and Health (Prescribed Forms) Order

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### NOTES AS TO EXAMINATIONS

- 1. Every steam boiler and all its fittings and attachments shall be thoroughly examined by a competent person at least once in every period of twelve months and also after any extensive repairs.
- 2. The examination of the boiler shall consist, in the first place of an examination of the boiler when it is cold and the interior and exterior have been prepared to the satisfaction of the competent person, and secondly when it is under normal steam pressure.
- 3. The report of the examination of the boiler when cold shall be made on the prescribed form No. 7 and shall be signed by the person making the examination. The completed report shall be entered in or attached to the General Register within twenty-one days of the examination.
- 4. The examination of the boiler under normal steam pressure shall be made on the first occasion when steam is raised after the examination of the boiler when it is cold, or as soon as possible thereafter. The report of the examination shall be made on the prescribed form No. 8 and shall be signed by the person making the examination. The completed report shall be entered in or attached to the General Register within twenty-one days of the examination.
- 5. The period of twelve months from one examination to the next shall start from the completion of the examination of the boiler under normal steam pressure.
- 6. The competent person may extend the period between any two examinations of a steam boiler by not more than one month in the event of an emergency when serious loss or damage would be caused if the boiler was shut down for examination at the prescribed time. After any such extension the boiler shall be next examined within the succeeding eleven months.
- 7. A new steam boiler shall not be taken into use until it has been hydraulically tested on the site by a competent person and a certificate signed by the manufacturers of the boiler or the competent person specifying the maximum permissible working pressure and the tests applied to the boiler and fittings has been obtained and is kept available for inspection.
- 8. A steam boiler which has previously been used shall not be taken into use again until it has been examined, hydraulically tested and reported on by

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a competent person. This requirement does not apply to intermittent use by the same owner or hirer except on the first occasion when he takes the boiler into use.

- 9. The expression "competent person" means the holder of an uncancelled or unsuspended licence to examine and test steam boilers, issued under the Boilers Regulations.
- 10. In the case of a steam boiler situated in premises to which the Act does not apply, the report of examination is not required to be entered in a General Register. Instead, it shall be sent within twenty-one days to the Inspector and on its return to the owner or hirer of the boiler shall be kept available for inspection.

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## FORM 9

### OCCUPATIONAL SAFETY AND HEALTH ACT

## Form prescribed by the Minister for Report of Examination of Economiser when Cold

For Report of examination under normal pressure see Form 8.

Tor report of examination under normal pressure see Torin 6.		
Name of Occupier		
Address of Factory		
Description and distinctive number of economiser, type, and number of pipes		
Date of Construction  The history should be briefly given, and the examiner should state whether he has seen the last previous report.		
Date of last hydraulic test (if any) and pressure applied.		
Quality and source of feed water.		
Is the economiser exposed to the weather?		
Are the dampers in proper working order?		
1. Economiser:		
(a) What parts, if any, are inaccessible?		
(b) State number of top caps removed at examination		
(c) State number of bottom caps removed at examination		
(d) What examinations and tests were made? (see Note A overleaf)		
(e) Condition of economiser.		
(State any defects materially affecting the maximum permissible working pressure.  [External—]		
2. Fittings and Attachments—		
(a) Are there proper fittings and attachments?		
(b) Are all fittings and attachments in		
satisfactory condition (so far as ascertainable when not under pressure)?		
when not under pressure):		

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- Repairs (if any) required, and period within which they should be executed, and any other conditions which the person making the examination thinks it necessary to specify for securing safe working.
- 4. Maximum permissible working pressure calculated from dimensions and from the thickness and other data ascertained by the present examination; due allowance being made for conditions of working if unusual or exceptionally severe.

Where repairs affecting the working pressure are required, state the maximum permissible working pressure:—

- (a) Before the expiration of the period specified in (3).
- (b) After the expiration of such period if the required repairs have not been completed.
- (c) After the completion of the required repairs.

### 5. Other observations

Subject to the reservation (noted above) of certain points for examination under pressure, I certify that on the economiser above described was sufficiently scaled, prepared, and (so far as its construction permits) made accessible for thorough examination and for such tests as were necessary for thorough examination, and that on the said date I thoroughly examined this economiser, including its fittings and attachments, and that the above is a true report of the result.

Signature

Qualification

(a)

(b)

(c)

Address

Date

The words in italics should be deleted if not required (see Note B overleaf)

To be inserted in the General Register (see Note C overleaf)

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## NOTES ON REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AS REGARDS ECONOMISERS

(The expression "steam boiler" includes any economiser used to heat water being fed to any closed vessel in which steam is generated under pressure greater than atmospheric pressure.)

Sub-secs. (1) and (3)—

Every economiser shall have attached to it a suitable safety valve, so adjusted as to prevent the economiser being worked at a pressure greater than the maximum permissible working pressure and (if of the lever type) with the weight secured in the correct position.

Sub-secs. (6) and (7)—

Every economiser and all its fittings and attachments shall be properly maintained, and shall be thoroughly examined by a competent person at least once in every twelve months and also after extensive repairs.

Sub-sec. (8)—

A report of the result of every such examination in the prescribed form shall within twenty-one days of the completion of the examination, be entered in or attached to the General Register.

Sub-sec. (9)—

A new or second-hand economiser must not be taken into use unless a certificate or a report of an examination has been obtained for it, and it has been hydraulically tested.

### NOTES

A—According to the type of economiser, facilities must be given by the occupier for such examination (internal and external) hammer testing, hydraulic testing, drilling, pipe withdrawal or other means of testing as may be necessary for the thorough examination. Connections should be opened up. Brickwork must be removed for the purpose of the examination to the extent required by the person making the examination.

B—Where the person making the examination considers this necessary, he may insert, in his report on any of the items, an entry "subject to further report after examination under normal pressure".

C—In the case of an economiser situated in premises to which the Act does not apply, the report of examination is not required to be entered in the General Register. Instead, it shall be sent within twenty-one days to the Inspector and on its return to the owner or hirer of the boiler it shall be kept available for inspection.

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## FORM 10

## OCCUPATIONAL SAFETY AND HEALTH ACT

# Form prescribed by the Minister for Report of Examination of Superheater

For report of examination under normal steam pressure see Form 8.

Name of Occupier				
Address of—  (a) Factory  (b) Head Office of Occupier  NOTE—Address (b) is required only in the case of a superheater used with a boiler in a temporary location.				
Description and distinctive number of superheater and type				
Date of Construction  The history should be briefly given, and the examiner should state whether he has seen the last previous report				
Date of last hydraulic test (if any), and pressure applied.				
1. Superheater.  (a) What parts are covered by brickwork?  (b) Date of last exposure of such parts for the purpose of examination.  (c) What parts (if any) other than parts covered by brickwork, were inaccessible?  (d) What examination and tests were made?—  (See Note A overleaf).  (e) Condition of superheater—  (State any defects materially affecting the maximum permissible working pressure.)  External  Internal				
Fittings and Attachments:     (a) Are there proper fittings and attachments?     (b) Are all fittings and attachments in satisfactory condition (so far as ascertainable when not under pressure)?				

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3. Repairs (if any) required, and period within which they should be executed and any other conditions which the person making the examination thinks it necessary to specify for securing safe working.		
4. Maximum permissible working pressure calculated from dimensions and from the thickness and other data ascertained by the present examination; due allowance being made for conditions of working if unusual or exceptionally severe.		
Where repairs affecting the working pressure are required, state maximum permissible working pressure—		
(a) Before the expiration of the period specified	(a)	
<ul><li>in (3).</li><li>(b) After the expiration of such period if the required repairs have not been completed.</li></ul>	(b)	
(c) After the completion of the required repairs.	(c)	
5. Other observations		
Subject to the reservation (noted above) of certain pasteam pressure, I certify that on the superheater sufficiently scaled, prepared, and (so far as its construction thorough examination and for such tests as were necessary for that on the said date I thoroughly examined this superheat attachments, and that the above is a true report of the result	above described was permits) made accessible for or thorough examination, and iter, including its fittings and	
	ignature	
	Qualification .ddress	
	Date	
The words in italics should be deleted if not required	d (see Note B overleaf).	
To be inserted in the General Register (see N	Note C overleaf)	
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## NOTE ON REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AS REGARDS SUPERHEATERS

(The expression "steam boiler" includes any Superheater used for heating steam). Sub-secs. (1) and (3)—

Every superheater shall have attached to it-

- (a) a suitable safety valve, so adjusted as to prevent the superheater being worked at a pressure greater than the maximum permissible working pressure and (if of the lever type) with the weight secured in the correct position;
- (b) a suitable stop-valve connecting the superheater to the steam pipe.

Sub-secs. (6) and (7)—

Every superheater and all its fittings and attachments shall be properly maintained, and shall be thoroughly examined by a competent person at least once in every twelve months and also after extensive repairs.

Sub-sec. (8)—

A report of the result of every such examination in the prescribed form shall within twenty-one days of the completion of the examination, be entered in or attached to the General Register.

Sub-sec. (9)—

A new or second-hand superheater must not be taken into use unless a certificate or a report of an examination has been obtained for it, and it has been hydraulically tested.

### NOTES

A—According to the type of superheater, facilities must be given by the occupier for such examination (internal and external) hammer testing, drilling, lifting, hydraulic testing or other means of testing as may be necessary for the thorough examination. Connections should be opened out. Brickwork must be removed for the purpose of thorough examination to the extent required by the person making the examination.

B—Where the person making the examination considers this necessary, he may insert, in his report on any of the items, an entry "subject to further report after examination under steam pressure".

C—In the case of a superheater situated in premises to which the Act does not apply, the report of examination is not required to be entered in a General Register. Instead it shall be sent within twenty-one days to the Inspector and on its return to the owner or hirer of the boiler, shall be kept available for inspection.

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## FORM 11

## OCCUPATIONAL SAFETY AND HEALTH ACT

## Form prescribed by the Minister for Report of Examination of Air Pressure Container

Name of Occupier	
Address of—  (a) Factory.  (b) Head Office of occupier.  NOTE—Address (b) is only required in the air pressure container used in a temporary loc building operation, work of engineering constru	cation, e.g.,
Description and distinguishing mark of ai container and type.	r pressure
Date of Construction (if ascertainable).  The history should be briefly given, and th should state whether he has seen the last previous	
Date of last hydraulic test (if any), and pressure	e applied.
1. Air Pressure Container.  (a) What parts if any were inaccessib.  (b) What examination and tests were  (c) Condition of Air Pressure  Container  (State any defect materially affecting the safe working pressure).	
Fittings     (a) Are the required fittings and provided in accordance with the A     (b) Are the fittings and appliances maintained and in good condition.	s properly
3. Repairs (if any) required, and period with they should be executed and any other which the person making the examination necessary to specify for securing safe we	condition on thinks it
4. Safe working pressure, calculated from and from the thickness and other data by the present examination; due allows made for conditions of working if a exceptionally severe.	ascertained ance being

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	Where repairs affecting the working pressure are			
	required, state the safe working pressure—			
	<ul><li>(a) Before the expiration of the period specified in (3).</li></ul>	(a)		
	(b) After the expiration of such period if the required repairs have not been completed.	(b)		
	(c) After the completion of the required repairs.	(c)		
	5. Other observations.			

I certify that on the air pressure container was thoroughly cleaned and (so far as its construction permits) made accessible for thorough examination and for such tests as were necessary for thorough examination and that on the said date I thoroughly examined this air pressure container, including its fittings, and that the above is a true report of my examination.

Signature
Qualification
Address
Date

To be inserted in the General Register (see Notes Overleaf).

SPACE FOR CONTINUATION OF ENTRIES

### NOTES AS TO EXAMINATION OF CONTAINER

- 1. Every air pressure container shall be thoroughly cleaned, examined and subjected to a suitable hydraulic test at least once in every period of twelve months.
- 2. Every such examination and test shall be carried out by a competent person.
- 3. The expression "competent person" means the holder of an uncancelled or unsuspended licence to examine and test steam boilers issued under the Boilers Regulations.

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- 4. A report of the result of every such examination and test shall be made on the prescribed Form No. 11 and shall within twenty-one days be entered in or attached to the General Register.
- 5. No new air pressure container shall be taken into use unless there has been obtained from the manufacturer of the container, or from a competent person a certificate specifying the safe working pressure thereof and stating the nature of the tests to which the container and fittings have been submitted; and no new air pressure container shall be put into use until it has been hydraulically tested on the site by a competent person.
- 6. No air pressure container which has previously been used shall be taken into use again until it has been examined and tested and reported on by a competent person. This requirement does not apply to intermittent use by the same owner or hirer except on the first occasion when he takes the container into use.
- 7. According to the type of air pressure container, facilities should be given by the occupier for such examination (internal and external), hammer testing, drilling, lifting, hydraulic testing or other means of testing as may be necessary.
  - 8. The expression "air pressure container" means—
    - (a) any vessel (other than a pipe or coil, or an accessory, fitting or part of a compressor) for containing compressed air; or
    - (b) any vessel for containing compressed exhaust gases and used for the purpose of starting an internal combustion engine;
    - (c) any vessel (not being part of a grease gun or spraying pistol) in which grease, oil, paint, varnish, lacquer or any liquid is stored and from which such material or liquid is forced by compressed air.
- 9. In the case of an air pressure container situated in premises to which the Act does not apply, the report of examination and test is not required to be entered in a General Register. Instead it shall be sent within twenty-one days to the Inspector and on its return to the owner or hirer of the container shall be kept available for inspection.

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## FORM 12

## OCCUPATIONAL SAFETY AND HEALTH ACT

## Form prescribed by the Minister for Report of Examination of Hoist or Lift

Occupier (or Owner) of Premises	
Address	
(a) Type of Hoist or Lift and Identification     Number or Description     (b) Date of Construction or Reconstruction (if ascertainable)	
2. Design and Construction  Are all parts of the hoist or lift of good mechanical construction, sound material and adequate strength (so far as ascertainable).  NOTE—Details of any renewals or alterations required should be given in (5) below	
3. Maintenance  Are the following parts of the hoist or lift properly maintained and in good working order? If not state what defects have been found—  (a) Enclosure of hoistway or liftway (b) Landing gates and cage gate(s) (c) Interlocks on the landing gates and cage gate(s) (d) Other gate fastenings (e) Cage or platform and fittings, cage guides, buffers, interior of the hoistway or liftway (f) Over-running devices (g) Suspension ropes or chains, and their attachments (h) Safety gear, i.e., arrangements for preventing fall of platform or cage (i) Brakes (j) Worm or spur gearing (k) Other electrical equipment (l) Other parts	

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5. Repairs, renewals, or alterations (if any) required, and the period within which they should be executed		
6. Maximum safe working load subject to repairs, renewals or alterations (if any) specified in (5)		
7. Other observations		
I certify that on I thoroughly examined this hoist or lift is a correct report of the result.	and that the above	

Signature

Qualification

Address

Date

### NOTES AS TO EXAMINATION

- 1. Every hoist or lift shall be thoroughly examined by a competent person at least once in every period of twelve months and a report of the result of every such examination in the prescribed Form No. 12 and containing the prescribed particulars shall be signed by the person making the examination and shall within fourteen days be entered in or attached to the General Register.
- 2. No hoist or lift shall be taken into use until it has been examined and reported on by a competent person.
- 3. The expression "competent person" means a qualified engineer recognised as such by the the Institution of Mechanical Engineers, with experience in the construction, maintenance or repair of electrically or mechanically driven hoists and lifts.
- 4. Where the hoist or lift is situated wholly or partly in premises to which the Occupational Safety and Health Act does not apply, the report of examination on the prescribed Form No. 12 shall not be required to be entered in or attached to the General Register but shall within fourteen days be sent to the Inspector and on its return to the owner or hirer of the hoist or lift be kept available for inspection.

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### FORM 13

## OCCUPATIONAL SAFETY AND HEALTH ACT

# CERTIFICATE OF APPOINTMENT OF FACTORY INSPECTOR

(issued under section 79 of the Act)
I HEREBY CERTIFY that
The above named is further authorised pursuant to section 80 of the said Act to prosecute, conduct or defend before a Court of summary jurisdiction any information, complaint or other proceeding arising in discharge of his duties as Factory Inspector or under or by virtue of the said Act.
Dated this day of
Minister of Labour

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## DISTILLERY (SAFETY) REGULATIONS

### ARRANGEMENT OF REGULATIONS

### REGULATION

- 1. Citation.
- 2. Interpretation.
- 3. Prohibition against smoking.
- 4. Electric apparatus to be certified as flame proof.
- 5. Safety measures to be provided.
- 6. No alteration or repair to receptacle unless cleared of spirit vapour.
- 7. Vent pipe to have outlet above roof.
- 8. Precautions to prevent escape of spirit from store.

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[Subsidiary]

Distillery (Safety) Regulations

GN 213-1946.

### DISTILLERY (SAFETY) REGULATIONS

deemed to be made under section 99

Citation.

1. These Regulations may be cited as the Distillery (Safety) Regulations, and shall apply to every distillery and store.

Interpretation.

- **2.** In these Regulations the following expressions have the meanings hereby assigned to them respectively, that is to say:
- "distillery" means any factory in which spirit is distilled and includes any room or building on the same premises in which spirit produced in the distillery is manipulated, used or stored;
- "Senior Inspector" means the Senior Inspector of Factories;
- "spirit" means alcohol, or other spirit distilled from vegetable matter, and having a flashpoint of not more than 95°F;
- "store" means any factory or warehouse or any other premises to which the Act applies where spirit of a strength greater than proof is stored.

Prohibition against smoking.

- **3.** (1) No person shall smoke or ignite any fire or flame in any distillery or store and no person shall, without the permission of the occupier, have in his possession while he is in any distillery or store any matches or mechanical lighter or similar device or any lamp or light or any ignited matter.
- (2) There shall be exhibited in a conspicuous place at the entrance to the distillery or store and so as to be clearly legible to persons entering the distillery or store a copy of the preceding paragraph of this regulation.
- (3) Any Customs and Excise Officer or any member of the Police Force or any estate or rural constable may search or cause to be searched any person who is in any distillery or store or anything in the possession of any such person for the purpose of detecting any breach of any of the provisions of this regulation: Provided that a female shall not be searched except by a female.

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Distillery (Safety) Regulations

[Subsidiary]

**4.** All electric apparatus in a distillery or store shall be of Electric certified flame proof construction and all electric wiring shall be enclosed in suitable conduit: Provided that the Senior Inspector may, if he is satisfied that the risk of fire will not be increased thereby, give permission in writing to substitute other types of electric apparatus or other methods of wiring subject to such conditions or requirements as he thinks necessary to ensure the safety of the persons employed.

certified as flame proof.

5. Efficient means of extinguishing fire and of escape from Safety measures fire approved by the Senior Inspector shall be provided in every distillery or store.

6. (1) No alteration or repair shall be made to any still, No alteration tank, pipe, or receptacle which contains or has contained spirit receptacle unless it has been thoroughly cleared of all traces of spirit or of spirit vapour. spirituous vapour.

- (2) No alteration or repair work in connection with a distillery or store shall be carried out except under the direction of a responsible person employed by the occupier.
- 7. Every vent pipe which carries spirituous vapours shall Vent pipe to have the outlet above the roof of the building.

**8.** Every store shall be so constructed, or surrounded with a Precautions to wall inside or immediately on the outside of the store, as to of spirit prevent the escape of spirit therefrom except through a pipe with from store. valve, the outlet of which shall be not less than twenty feet from the store.

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[Subsidiary]

### **BOILERS REGULATIONS**

### ARRANGEMENT OF REGULATIONS

### REGULATION

- 1. Short title and application.
- 2. Interpretation.
- 3. Appointment of Boiler Examiners Board.
- 4. Appointment of boiler examiners.
- 5. Rules for guidance of boiler examiners.
- 6. Fee for examination of boiler.
- 7. Board may suspend or cancel licence.
- 8. Board may recommend cancellation of licence.
- 9. Publication in Gazette.
- 10. Examination of boiler.
- 11. Period between examinations.
- 12. Power of competent person to extend period.
- 13. Boiler examiner to report to Inspector on essential repairs or reduction in working pressure.
- 14. Examination of boiler previously used.
- 15. Safety valve to be operated every week.
- 16. Safety valve adjustment to be sealed.
  - Penalty for breaking seal.
- 17. Boiler blow down attachments.
- 18. Notice to Senior Inspector of explosion and power of Minister to direct formal investigation.

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### **BOILERS REGULATIONS**

GN 2-1949. [31 of 1969 128/1969].

deemed to be made under section 99

1. These Regulations may be cited as the Boilers Short title and Regulations, and shall apply, subject to the provisions of the Act, to every steam boiler to which the Act applies and to every factory premises or other place where any such steam boiler is situated:

Provided that if the Senior Inspector is satisfied as respects any steam boiler, that any of the requirements of these Regulations can be suspended or relaxed without risk of danger to persons employed on the premises on which such steam boiler is situate, or that the application of these Regulations or any provision thereof is for any reason impracticable, he may by certificate in writing authorise such suspension or relaxation for such period and subject to such conditions as he may think fit: Provided further that any such certificate may at any time be varied or revoked by the Senior Inspector in his discretion.

2. In these Regulations the expression "Act" means the Interpretation. Occupational Safety and Health Act, and any other expression used which is defined in section 4 or any section of the Act relating to boilers which has the same meaning as that assigned to it in the Act.

3. (1) There shall be established a Boiler Examiners Appointment Board (hereinafter called "the Board") consisting of a Chairman Examiners and four other members all of whom shall have special Board. [128/1969]. qualifications in and have had experience of matters relating to, mechanical engineering.

- (2) The Minister shall appoint members of the Board and may in making any such appointment consult with any appropriate professional organisations or institutions.
- **4.** (a) The Minister shall, on the recommendations of the Appointment of Board, appoint persons on a panel of boiler examiners for a examiners. period of three years and shall issue to every person so appointed a licence authorising him to examine and test steam boilers under the provisions of the Act.

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**Boilers Regulations** 

- (b) For the purposes of the Act and of these Regulations no person shall be deemed a competent person who does not hold an uncancelled or unsuspended licence as aforesaid.
- (c) No member of the Board shall be appointed on the panel of boiler examiners.

Rules for guidance of boiler examiners. **5.** Every boiler examiner shall, when making an examination of a boiler in accordance with the requirements of the Act or these Regulations, take note of and observe any rules or notes for the guidance of boiler examiners made by the Board.

Fee for examination of boiler.

- **6.** (a) The Minister shall, with the advice of the Board, determine the fees which shall be paid for examinations carried out under the Act or these Regulations and the amount and nature of the allowance to be paid in respect of the expenses necessarily incurred by boiler examiners in the performance of their duties.
- (b) A list of all such fees and allowances together with a list of the competent persons on the panel of boiler examiners shall be published in the *Gazette* on the 1st January or as soon as possible thereafter in each year.
- (c) No person shall be paid or receive any amount other than any such fee or allowance and any actual expenses incurred in excess of any such fee or allowance for any such examination.

Board may suspend or cancel licence.

- 7. (a) In the event of a dereliction of duty by a competent person for which no proceedings are taken under the Act or under these Regulations the Board may suspend the licence of such person for such period not exceeding three years and not less than six months as it thinks fit.
- (b) In the event of a conviction of a competent person of an offence under the Act or under these Regulations, or of any offence which involves infamous conduct in a professional respect, in addition to any penalty which the Court may inflict such person shall be removed from the panel of boiler examiners and his licence shall be cancelled by the Board.

Boilers Regulations

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8. The Board may, if it thinks fit, for adequate reasons Board may stated in writing, recommend to the Minister the removal of any cancellation of person from the panel of boiler examiners and the cancellation of licence. his licence.

9. Every such nomination, appointment, issue of licence, Publication in suspension, removal and cancellation as aforesaid shall be published in the Gazette.

10. Any examination of a steam boiler in accordance with Examination of the requirements of the Act shall consist, in the first place, of an examination of the boiler when it is cold and the interior and exterior have been prepared to the satisfaction of the competent person, and secondly, except in the case of an economiser or superheater, of an examination when it is under normal steam pressure; the examination under steam pressure shall be made on the first occasion when steam is raised after the examination of the boiler when it is cold or as soon as possible thereafter, and the person making the examination shall see that the safety valve is so adjusted as to prevent the boiler being worked at a pressure greater than the maximum permissible working pressure.

11. For the purpose of the Act the period of twelve months Period between from one examination to the next shall start from the date of completion of the examination of the boiler under normal steam pressure.

12. A competent person may extend the period between any Power of two examinations of a steam boiler by not more than one month person to extend the person to extend competent person to extend in the event of an emergency when serious loss or damage would period. be caused if the boiler was shut down for examination at the prescribed time. After any such extension the boiler shall be next examined within the succeeding eleven months.

13. The person making the report of any examination under Boiler examiner the Act or these Regulations shall, within twenty-eight days of the Inspector on completion of the examination, send to the Inspector for the district essential repairs or reduction in a copy of the report in every case where the maximum permissible working working pressure is reduced or the examination shows that the

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Boilers Regulations

boiler cannot continue to be used with safety unless certain repairs are carried out immediately or within a specified time.

Examination of boiler previously used.

**14.** For the purpose of the Act the examination of a boiler which has previously been used, on being taken into use again, shall include an hydraulic test on the site where it is going to be used to at least one and a half times the maximum permissible working pressure.

Safety valve to be operated every week. 15. Every boiler safety valve shall be provided with means by which it can be safely operated by hand while it is under steam pressure and every such valve shall be so operated at least once in every week in which the boiler is used. A record of every such hand operation of a safety valve shall be entered in a book to be provided and kept for the purpose and every such entry shall be signed by the person who operated the valve.

Safety valve adjustment to be sealed.

**16.** (a) On every safety valve means shall be provided where practicable for securing the adjustment with a seal in such a manner that the adjustment cannot be altered unless the seal is broken.

Penalty for breaking seal.

(b) Every boiler examiner shall, on each occasion that he adjusts a safety valve provided with such means, secure the adjustment with a seal and if any person other than a boiler examiner, or a person working under his direct control and supervision, breaks the seal or causes it to be broken he shall be guilty of an offence and liable to a fine of forty-eight dollars.

Boiler blow down attachments.

17. The outlet of the blow down cock, valve or pipe on every boiler shall be in such a position or so arranged as to prevent as far as possible danger to any person.

Notice to Senior Inspector of explosion and power of Minister to direct formal investigation. **18.** (a) In the event of an explosion of a boiler written notice thereof shall forthwith be sent to the Senior Inspector, and if such notice is not so sent the occupier of the factory in which the boiler is situated or the owner or hirer of the boiler, as the case may be, shall be guilty of an offence and liable to a fine of forty-eight dollars.

Boilers Regulations

[Subsidiary]

(b) The Senior Inspector on receipt of any such notice shall make an enquiry into the causes and results of the explosion and shall forward a report of his findings to the Minister and if, upon consideration of the Senior Inspector's report, the Minister thinks fit he may direct that a formal investigation into the explosion be held in the same manner as provided under Part VII of the Act for the formal investigation of accidents and cases of disease, and for the purpose of the investigation the provisions of the said section shall apply as if the explosion were an accident or case of disease.

## FEES AND ALLOWANCES PAYABLE TO BOILER EXAMINERS

RG 5.1.50.

The following list of fees and allowances payable to Boiler Examiners is published for general information in accordance with regulation No. 6(b) of the Boilers Regulations:

#### **FEES**

					\$ ¢
Examination of steam boiler when cold—					
Up to and including 5 N.H.P.					7 50
Between 5 and 120 N.H.P.					10 00
120 N.H.P. and over					20 00
Examination of steam boiler under no	ormal s	team pi	ressure—		
Up to and including 5 N.H.P.					5 00
Between 5 and 120 N.H.P.					7 50
120 N.H.P. and over					10 00
Examination of superheater when col	d				5 00
Examination of Economiser when co	ld				10 00
Examination of Air Pressure Contained	er				7 50
Adjustment of safety valve if carried out on an occasion separate					
from the above	•••				5 00

### ALLOWANCES

In Trinidad—Mileage allowance at the rate of 15 cents per mile for each journey made to the premises in which the steam boiler or other plant is situated, the mileage to be reckoned for the return journey from the boiler examiner's residence or business address whichever is nearer the premises visited.

Occupational Safety and Health

[Subsidiary]

Boilers Regulations

Where the boiler examiner visits two or more premises on the same day the aggregate of mileage allowances charged by him shall not exceed an amount equal to the total distance necessarily travelled multiplied by fifteen cents and shall be apportioned as far as possible in the same proportion as the fees charged, so however that the allowance charged in respect of any one visit shall not exceed the allowance chargeable if no other visit had been made on that day.

In Tobago—The actual expenses necessarily incurred by the boiler examiner in connection with subsistence and travelling for the return journey from his residence to the premises visited. Where the subsistence and travelling expenses relate to visits paid to more than one premises they shall be apportioned so far as possible in the same proportion as the fees charged.

### **BOILER EXAMINERS**

RG 5.1.50.

The following list of competent persons on the panel of Boiler Examiners is published for general information in accordance with regulation No. 6 (b) of the Boilers Regulations.

### LIST OF BOILER EXAMINERS

Messrs.:

W. BOYD, M.I.Mech.E., A.M.I., Struct.E.

J. BUCHANAN.

F. B. CARMICHAEL, M.I.Mech.E., M.I.Loco.E.

W. J. CONOLLY, M.I.Mar.E. J. C. CUBITT, M.I.Mar.E. W. M. DICKSON, A.M.I.Mech.E.

ROBERT DICK. T. DUNCANSON.

D. D. GIBSON.

L. C. HENZELL, A.M.I.Mech.E.

W. J. HIPWELL, M.I.Mar.E.

GEO. MCKAY.

J. MACAULEY, M.I.Mech.E.

T. A. MOLYNEAUX, M.I.Mar.E.

J. L. C. ROGERS, M.I.Mar.E.

R. M. Torry.

J. Turnbull.

C. T. WATTS, M.I.Mech.E.

F. K. Worlsey, A.M.I.Mech.E.

Industrial Court of Trinidad and Tobago

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## SPECIAL PROVISIONS FOR SAFETY IN THE CASE OF AIR PRESSURE CONTAINERS REGULATIONS

### ARRANGEMENT OF SECTIONS

### SECTION

- 1. Short title and application.
- 2. Interpretation.
- 3. Competent person.
- 4. Rules for guidance of competent persons.
- 5. Fee for examination of air pressure container.
- 6. Suspension or cancellation of licence.
- 7. Safety valve directly to container.
- 8. Safety valve adjustment to be sealed. Penalty for breaking seal.
- 9. Hydraulic test.
- 10. Daily test of safety valve and draining of container.
- 11. Examination and test after alteration or repair.

[Subsidiary]

GN 3-1949.

# SPECIAL PROVISIONS FOR SAFETY IN THE CASE OF AIR PRESSURE CONTAINERS REGULATIONS

deemed to be made under section 99

Short title and application.

1. These Regulations may be cited as the Air Pressure Containers Regulations, and shall apply, subject to the provisions of the Act, to every air pressure container to which the Act applies:

Provided that if the Senior Inspector is satisfied, as respects any air pressure container, that any of the requirements of these Regulations can be suspended or relaxed without risk of danger to the persons employed on the premises on which such air pressure container is situate, or that the application of these Regulations or any provision thereof is for any reason impracticable, he may by certificate in writing authorise such suspension or relaxation for such period and subject to such conditions as he may think fit: Provided further that any such certificate may at any time be varied or revoked by the Senior Inspector in his discretion.

Interpretation.

2. In these Regulations the expression "Act" means the Occupational Safety and Health Act, and the expressions "air pressure container" and "safe working pressure" have the same meanings respectively as those assigned to them in the Act, and any other expression used which is defined in the Act has the same meaning as that assigned to it in the Act.

Competent person.

3. For the purposes of the Act and of these Regulations, the expression "competent person" means the holder of an uncancelled or unsuspended licence to examine and test steam boilers issued under the Boilers Regulations.

Rules for guidance of competent persons.

**4.** The Boiler Examiners Board may, in any rules or notes for the guidance of boiler examiners made under the Boilers Regulations, include rules or notes for the guidance of competent persons in the examination of air pressure containers and the provisions of regulation 5 of the said Regulations shall apply to every competent person when making any examination of an air pressure container required by the Act or these Regulations as if they were included in these Regulations.

Special Provisions for Safety in the case of Air Pressure Containers Regulations

[Subsidiary]

5. The provisions of regulation 6 of the Boilers Fee for Regulations, shall apply with respect to examinations of air air pressure pressure containers carried out under the Act or these Regulations as if they were included in these Regulations.

**6.** The provisions of regulation 7 of the Boilers Suspension or Regulations, shall apply to competent persons with respect to cancellation of their duties under the Act and these Regulations as if they were included in these Regulations.

7. The safety valve of every air pressure container shall be Safety valve directly connected to the container with no stop valve or cut off container. between the safety valve and the container:

Provided that where the safety valve is fitted to the pipe connecting the compressor to the container, a stop valve may be fitted between the safety valve and the container if the container is fitted with a safety bursting disc which will burst at a pressure not exceeding ten per cent more than the safe working pressure of the container. Every such disc shall be so designed and constructed as to prevent the scattering of fragments when it bursts.

**8.** (a) On every safety valve means shall be provided where Safety valve practicable for securing the adjustment with a seal in such a manner be sealed. that the adjustment cannot be altered unless the seal is broken.

(b) Every competent person shall, on each occasion that Penalty for he adjusts a safety valve provided with such means, secure the adjustment with a seal and if any person other than a competent person, or a person working under his direct control and supervision, breaks the seal or causes it to be broken he shall be guilty of an offence and liable to a fine of forty-eight dollars.

breaking seal.

**9.** (a) The hydraulic test pressure applied to an air Hydraulic test. pressure container in accordance with subsection (4) of section 24 of the Act shall be at least one and a half times the safe working pressure.

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Special Provisions for Safety in the case of Air Pressure Containers Regulations

(b) Where an air pressure container is provided with means whereby it can be examined internally and the competent person who makes the examination required by subsection (4) of section 24 of the Act is satisfied by internal examination that an hydraulic test is not necessary, such hydraulic test need not be applied.

Daily test of safety valve and draining of container.

- **10.** On every air pressure container during the forenoon of every day on which the container is subjected to air pressure the following operations shall be carried out:
  - (a) the safety valve shall be operated by hand to ensure that it is working freely; and
  - (b) accumulations of oil and water in the container shall be thoroughly drained off:

Provided that the operation of draining off oil and water shall not be required on an air pressure container of the type defined in paragraph (c) of subsection (6) of section 24 of the Act.

A record of the performance of the operations aforesaid and the results obtained shall be entered daily in a book to be provided and kept for this purpose.

Examination and test after alteration or repair.

11. When any alteration or substantial repair of an air pressure container has been made the container shall, before it is again brought into use, be examined and tested in accordance with subsection (4) of section 24 of the Act whether it has been so examined and tested within the previous twelve months or not.

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# OCCUPATIONAL SAFETY AND HEALTH—CLEANING OF MACHINERY IN MOTION ORDER

GN 109-1949.

deemed to be made under section 99

- **1.** This Order may be cited as the Occupational Safety and Health (Cleaning of Machinery in Motion) Order.
- 2. The provisions of section 25J of the Act shall not apply to any male person of twenty-one years or over in respect of any prime mover, transmission machinery or other machine which is required to be kept in motion for a continuous period of not less than seven days and seven nights during any such time when such prime mover, transmission machinery or other machine is in motion and it is the duty of such male person to maintain the prime mover, transmission machinery or other machine in a clean condition.

[Subsidiary]

#### WOODWORKING MACHINERY REGULATIONS

#### ARRANGEMENT OF REGULATIONS

#### REGULATION

- 1. Citation and application.
- 2. Interpretation.
- 3. Duty to observe regulations.
- 4. Machine to be provided with stopping and starting appliance.
- 5. Adequate space to be maintained while machine is in motion.
- 6. Floor of machine to be maintained in good condition.
- 7. Adequate natural light to be provided for machine.
- 8. Artificial lighting for machine to be adequate.
- 9. Employees to be sufficiently trained to operate machines.
- 10. Circular saw to be fenced.
- 11. Push-stick to be provided for use of circular saw.
- 12. Plain band saw to be guarded.
- 13. Restriction of use of planing machine.
- 14. Planing machine to be provided with "bridge" guard.
- 15. Feed roller of planing machine to be provided with guard.
- 16. Cutter of vertical spindle to be provided with guard.
- 17. Precaution to avoid risk of accident.
- 18. Provision of "spike" or push-stick at bench of machine.
- 19. Chain mortising machine to be provided with guard.
- 20. Guards, etc., to be maintained in efficient order.
- 21. Exemption of the applications of certain regulations.
- 22. Employees operating machine to comply with these Regulations.

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[Subsidiary]

### WOODWORKING MACHINERY REGULATIONS

GN 152-1949.

deemed to be made under section 99

1. These Regulations may be cited as the Woodworking Citation and Machinery Regulations, and shall apply to all factories or parts thereof and to any other premises or places to which the Act applies and in which any woodworking machine is used:

application.

Provided that if the Senior Inspector of Factories is satisfied in respect of any factory or other place to which these Regulations apply that, owing to the special conditions of the work or otherwise, any of the requirements of the Regulations can be suspended or relaxed without danger to the persons employed therein he may by certificate in writing authorise such suspension or relaxation for such period and on such conditions as he may think fit. Any such certificate may be revoked at any time.

# **2.** In these Regulations—

Interpretation.

- "woodworking machine" means a circular saw, plain band saw, planing machine, vertical spindle moulding machine or chain mortising machine operating on wood;
- "circular saw" means a circular saw working in a bench (including a rack bench) for the purpose of ripping, deepcutting or cross-cutting, but does not include a swing saw or other saw which is moved towards the wood;
- "plain band saw" means a band saw, other than a log saw or band re-sawing machine, the cutting portion of which runs in a vertical direction:
- "planing machine" includes a machine for overhand planing or for thicknessing or for both operations;
- "gauge" means the Imperial Standard Wire Gauge.
- 3. It shall be the duty of the occupier to observe Duty to observe regulations 4 to 21 of these Regulations.

It shall be the duty of all persons employed to observe regulation 22 of these Regulations.

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Woodworking Machinery Regulations

Machine to be provided with stopping and starting appliance. **4.** Every woodworking machine shall be provided with an efficient stopping and starting appliance, and the control of this appliance shall be in such a position as to be readily and conveniently operated by the person in charge of the machine.

Adequate space to be maintained while machine is in motion. **5.** Sufficient clear and unobstructed space shall be maintained at every woodworking machine while in motion to enable the work to be carried on without unnecessary risk.

Floor of machine to be maintained in good condition.

**6.** The floor surrounding every woodworking machine shall be maintained in good and level condition, and as far as practicable free from chips or other loose material, and shall not be allowed to become slippery.

Adequate natural light to be provided for machine.

7. Where the natural light at a woodworking machine is inadequate and can be improved by the provisions of additional or better windows not involving serious structural alteration, or by whitening the walls or tops of the factory, or by any other reasonable means, the occupier shall take steps as aforesaid to improve the natural light at the said machine.

Artificial lighting for machine to be adequate.

**8.** The means of artificial lighting for every woodworking machine shall be adequate, and shall be so placed or shaded as to prevent direct rays of light from impinging on the eyes of the operator while he is operating such machine.

Employees to be sufficiently trained to operate machines.

- **9.** (a) Every person while being trained to work a woodworking machine shall be fully and carefully instructed as to the dangers arising in connection with such machine and the precautions to be observed.
- (b) No person shall be employed at a woodworking machine unless he has been sufficiently trained to work that class of machine or unless he works under the adequate supervision of a person who has a thorough knowledge of the working of the machine.

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Woodworking Machinery Regulations

[Subsidiary]

## 10. Every circular saw shall be fenced as follows:

Circular saw to be fenced.

- (a) the part of the saw below the bench table shall be protected by two plates of metal or other suitable material, one on each side of the saw; such plates shall not be more than six inches apart, and shall extend from the axis of the saw outwards to a distance of not less than two inches beyond the teeth of the saw. Metal plates, if not beaded, shall be of a thickness at least equal to 14 gauge, or, if beaded, be of a thickness at least equal to 20 gauge;
- (b) behind and in a direct line with the saw there shall be a riving knife, which shall have a smooth surface, shall be strong, rigid, and easily adjustable, and shall also conform to the following conditions:
  - (i) the edge of the knife nearer the saw shall form an arc of a circle having a radius not exceeding the radius of the largest saw used on the bench;
  - (ii) the knife shall be maintained as close as practicable to the saw, having regard to the nature of the work being done at the time, and at the level of the bench table the distance between the front edge of the knife and teeth of the saw shall not exceed half an inch:
  - (iii) for a saw of a diameter of less than 24 inches, the knife shall extend upwards from the bench table to within one inch of the top of the saw, and for a saw of a diameter of 24 inches or over shall extend upwards from the bench table to a height of at least nine inches;
- (c) the top of the saw shall be covered by a strong and easily adjustable guard, with a flange at the side of the saw farthest from the fence. The guard

[Subsidiary]

Woodworking Machinery Regulations

shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw. The guard shall extend from the top of the riving knife to a point as low as practicable at the cutting edge of the saw.

Push-stick to be provided for use of circular saw. 11. A suitable push-stick shall be kept available for use at the bench of every circular saw which is fed by hand, to enable the work to be carried on without unnecessary risk.

Plain band saw to be guarded.

- **12.** Every plain band saw shall be guarded as follows:
  - (a) both sides of the bottom pulley shall be completely encased by sheet metal or other suitable material;
  - (b) the front of the top pulley shall be covered with sheet metal or other suitable material;
  - (c) all portions of the blade shall be enclosed or otherwise securely guarded, except the portion of the blade between the bench table and the top guide.

Restriction of use of planing machine.

13. No planing machine, which is not mechanically fed, shall be used for overhand planing unless it is fitted with a cylindrical cutter block.

Planing machine to be provided with "bridge" guard. 14. Every planing machine used for overhand planing shall be provided with a "bridge" guard capable of covering the full length and breadth of the cutting slot in the bench, and so constructed as to be easily adjusted both in a vertical and horizontal direction.

Feed roller of planing machine to be provided with guard. **15.** The feed roller of every planing machine used for thicknessing, except the combined machine for overhand planing and thicknessing, shall be provided with an efficient guard.

Cutter of vertical spindle to be provided with guard.

**16.** The cutter of every vertical spindle moulding machine shall when practicable be provided with the most efficient guard having regard to the nature of the work which is being performed.

Woodworking Machinery Regulations

[Subsidiary]

17. For such work as cannot be performed with an efficient Precaution to guard for the cutter, the wood being moulded at a vertical spindle accident. moulding machine shall, if practicable, be held in a jig or holder of such construction as to reduce as far as possible the risk of accident to the worker.

18. A suitable "spike" or push-stick shall be kept available Provision of spike" or push-stick shall be kept available "spike" or push-stick shall be kept avail for use at the bench of every vertical spindle moulding machine. "spike" or push-stick at bench of

19. The chain of every chain mortising machine shall be Chain mortising provided with a guard which shall enclose the cutters as far provided with as practicable.

20. The guards and other appliances required by these Guards, etc., to Regulations shall be maintained in an efficient state and shall be efficient order. constantly kept in position while the machinery is in motion, except when, owing to the nature of the work being done, the use of the guards or appliances is rendered impracticable. The guards shall be so adjusted as to enable the work to be carried on without unnecessary risk.

21. Regulations 10, 12, 14 and 15 shall not apply to any Exemption of woodworking machine in respect of which it can be shown that of certain other safeguards are provided and maintained which render the regulations. machine equally safe as it would be if guarded in the manner prescribed by these Regulations.

**22.** Every person employed woodworking Employees machine shall—

- (i) use and maintain in proper adjustment the comply with these guards provided in accordance with these Regulations. Regulations;
- (ii) use the spikes or push-sticks and holders provided in compliance with regulations 11, 17 and 18.

except when owing to the nature of the work being done, the use of the guards or appliances is rendered impracticable.

[Subsidiary]

GN 61-1951.

# OCCUPATIONAL SAFETY AND HEALTH (ELECTRICITY) REGULATIONS

deemed to be made under section 99 of this Act

### SHORT TITLE, COMMENCEMENT AND APPLICATION

These Regulations may be cited as the Occupational Safety and Health (Electricity) Regulations, and shall come into operation on the 26th day of April 1951, and shall apply to the generation, transformation, conversion, switching, controlling, regulating, distribution and use of electrical energy in any factory and in any other premises, place, process, operation or work to which the provisions of the Occupational Safety and Health Act with respect to the power to make Regulations and Orders, are applied by that Act.

#### **DUTIES**

It shall be the duty of the occupier to comply with these Regulations and it shall be the duty of all agents, workmen and persons employed to conduct their work in accordance with these Regulations.

### **DEFINITIONS**

In these Regulations, the following expressions shall have the meanings hereby assigned to them respectively, that is to say:

- "pressure" means the difference of electrical potential between any two conductors, or between a conductor and earth as read by a hot wire or electrostatic volt-meter;
- "low pressure" means a pressure in a system normally not exceeding 250 volts where the electrical energy is used;
- "medium pressure" means a pressure in a system normally above 250 volts, but not exceeding 650 volts, where the electrical energy is used;
- "high pressure" means a pressure in a system normally above 650 volts but not exceeding 3,000 volts, where the electrical energy is used or supplied;

Occupational Safety and Health (Electricity) Regulations

[Subsidiary]

- "extra-high pressure" means a pressure in a system normally exceeding 3,000 volts, where the electrical energy is used or supplied;
- "system" means an electrical system in which all the conductors and apparatus are electrically connected to a common source of electro-motive force;
- "conductor" means an electrical conductor arranged to be electrically connected to a system;
- "apparatus" means electrical apparatus, and includes all apparatus, machines, and fittings in which conductors are used, or of which they form a part;
- "circuit" means an electrical circuit forming a system or branch of a system;
- "insulating stand" means a floor, platform, stand, or mat of such size, quality, and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger;
- "insulating screen" means a screen of such size, quality, and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger;
- "insulating boots" means boots of such size, quality and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger;
- "insulating gloves" means gloves of such size, quality, and construction according to the circumstances of the use thereof, that a person is thereby adequately protected from danger;
- "covered with insulating materials" means adequately covered with insulating material of such quality and thickness that there is no danger;
- "bare" means not covered with insulating material;
- "live" means electrically charged;

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Occupational Safety and Health (Electricity) Regulations

- "dead" means at, or about, zero potential, and disconnected from any live system;
- "earthed" means connected to the general mass of earth in such manner as will ensure at all times an immediate discharge of electrical energy without danger;
- "substation" means any premises, or that part of any premises, in which electrical energy is transformed or converted to or from pressure above medium pressure, except for the purpose of working instruments, relays, or similar auxiliary apparatus; if such premises or part of premises are large enough for a person to enter after the apparatus is in position;
- "switchboard" means the collection of switches or fuses, conductors, and other apparatus in connection therewith, used for the purpose of controlling the current or pressure in any system or part of a system;
- "switchboard passageway" means any passageway compartment large enough for a person to enter, and used in connection with a switchboard when live;
- "authorised person" means (a) the occupier, or (b) a contractor for the time being under contract with the occupier or (c) a person employed, appointed, or selected by the occupier, or by a contractor as aforesaid, to carry out certain duties incidental to the generation, transformation, distribution, or use of electrical energy, such occupier, contractor, or person being a person who is competent for the purposes of the regulation in which the term is used;
- "danger" means danger to health or danger to life or limb from shock, burn, or other injury to persons employed, or from fire, attendant upon the generation, transformation, distribution, or use of electrical energy;
- "public supply" means the supply of electrical energy by any local authority, company, or person authorised by law to distribute and sell electrical energy to any other person;
- "Chief Electric Inspector" means the Chief Electric Inspector appointed under the Electricity (Inspection) Act;

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#### **EXEMPTIONS**

- 1. Nothing in regulations 2, 3, 4, 7, 9, 10, 11, 15, 16, 17, 22, 23, 24, 25, 26, 28, 29, 30 and 31 shall apply, unless on account of special circumstances the Senior Inspector of Factories in consultation with the Chief Electric Inspector shall give notice to the occupier that this exemption does not apply—
  - (a) to any system in which the pressure does not exceed low pressure direct or 125 volts alternating;
  - (b) in any public supply generating station to any system in which the pressure between it and the earth does not exceed low pressure;
  - (c) in any above-ground substation for public supply, to any system not exceeding low pressure.
- 2. Nothing in these Regulations shall apply to any service lines or apparatus on the supply side of the occupier's terminals where the supply is taken from a public supply, provided always that no live metal is exposed so that it may be touched.
- **3.** Nothing in these Regulations shall apply to any process or apparatus used exclusively for electro-chemical or electro-thermal or testing or research purposes; provided such process be so worked and such apparatus so constructed and protected and such special precautions taken as may be necessary to prevent danger.
- **4.** Nothing in these Regulations shall apply to apparatus, other than portable apparatus, forming part of the permanent electrical installation of a building, structure, ship or place by reason only that the apparatus, or the installation of which it forms part, is used for the lighting of any building operation or work of engineering construction or work in a ship to which the provisions of the Occupational Safety and Health Act, apply or, for the supply of electrical energy for the purposes of any such operation or work.
- **5.** Where the Senior Inspector of Factories in consultation with the Chief Electric Inspector is satisfied in respect of any

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Occupational Safety and Health (Electricity) Regulations

factory or other place to which these Regulations apply that, owing to the special conditions of the work or otherwise, any of the requirements of the Regulations can be suspended or relaxed without danger to the persons employed therein, he may by certificate in writing authorise such suspension or relaxation for such period and on such conditions as he may think fit. Any such certificate may be revoked at any time.

#### REGULATIONS

- 1. All apparatus and conductors shall be sufficient in size and power for the work they are called upon to do, and so constructed, installed, protected, worked and maintained as to prevent danger so far as is reasonably practicable.
- **2.** All conductors shall either be covered with insulating material and further efficiently protected where necessary to prevent danger, or they shall be so placed and safeguarded as to prevent danger so far as is reasonably practicable.
- **3.** Every switch, switch fuse, circuit-breaker, and isolating link shall be—
  - (a) so constructed, placed, or protected as to prevent danger;
  - (b) so constructed and adjusted as accurately to make and to maintain good contact;
  - (c) provided with an efficient handle or other means of working, insulated from the system, and so arranged that the hand cannot inadvertently touch live metal:
  - (d) so constructed or arranged that it cannot accidentally fall or move into contact when left out of contact.
- **4.** Every switch intended to be used for breaking a circuit and every circuit-breaker shall be so constructed that it cannot with proper care be left in partial contact. This applies to each pole of double-pole or multipole switches or circuit-breakers.

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[Subsidiary]

Every switch intended to be used for breaking a circuit and every circuit-breaker shall be so constructed that an arc cannot accidentally be maintained.

- **5.** Every fuse and every automatic circuit-breaker used instead thereof, shall be so constructed and arranged as effectively to interrupt the current before it so exceeds the working rate as to involve danger. It shall be of such construction or be so guarded or placed as to prevent danger from overheating, or from arcing or the scattering of hot metal or other substance when it comes into operation. Every fuse shall be either of such construction or so protected by a switch that the fusible metal may be readily renewed without danger.
- **6.** Every electrical joint and connection shall be of proper construction as regards conductivity, insulation, mechanical strength and protection.
- **7.** Efficient means suitably located shall be provided for cutting off all pressure from every part of a system, as may be necessary to prevent danger.
- **8.** Efficient means suitably located shall be provided for protecting from excess of current every part of a system, as may be necessary to prevent danger.
- **9.** Where one of the conductors of a system is connected to earth, no single pole switch, other than a link for testing purposes or a switch for use in controlling a generator, shall be placed in such conductor or any branch thereof.

A switch, or automatic or other cut-out may, however, be placed in the connection between the conductor and earth at the generating station, for use in testing and emergencies only.

10. Where one of the main conductors of a system is bare and uninsulated, such as a bare return of a concentric system, no switch, fuse, or circuit-breaker shall be placed in that conductor, or in any conductor connected thereto, and the said conductor shall be earthed.

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Nevertheless, switches, fuses, or circuit-breakers may be used to break the connection with the generators or transformers supplying the power; provided that in no case of bare conductor the connection of the conductor with earth is thereby broken.

- 11. Every motor, converter and transformer shall be protected by efficient means suitably placed, and so connected that all pressure may thereby be cut off from the motor, converter or transformer as the case may be, and from all apparatus in connection therewith; provided, however, that where one point of the system is connected to earth, there shall be no obligation to disconnect on that side of the system which is connected to earth.
- 12. Every electrical motor shall be controlled by an efficient switch or switches for starting and stopping, so placed as to be easily worked by the person in charge of the motor.

In every place in which machines are being driven by any electric motor, there shall be means at hand for either switching off the motor or stopping the machines if necessary to prevent danger.

13. Every flexible wire for portable apparatus, for alternating currents or for pressures above 150 volts direct current, shall be connected to the system either by efficient permanent joints or connections, or by a properly constructed connector.

In all cases where the person handling portable apparatus or pendant lamps with switches, for alternating current or pressures above 150 volts direct current, would be liable to get a shock through a conducting floor or conducting work or otherwise, if the metal work of the portable apparatus became charged, the metal work must be efficiently earthed; and any flexible metallic covering of the conductors shall be itself efficiently earthed and shall not itself be the only earth connection for the metal of the apparatus. And a lamp-holder shall not be in metallic connection with the guard or other metal work of a portable lamp.

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In such places and in any place where the pressure exceeds low pressure, the portable apparatus and its flexible wire shall be controlled by efficient means suitably located, and capable of cutting off the pressure, and the metal work shall be efficiently earthed independently of any flexible metallic cover of the conductors, and any such flexible covering shall itself be independently earthed.

- **14.** The general arrangement of switchboards shall, so far as reasonably practicable, be such that—
  - (a) all parts which may have to be adjusted or handled are readily accessible;
  - (b) the course of every conductor may where necessary be readily traced;
  - (c) conductors not arranged for connection to the same system are kept well apart, and can where necessary be readily distinguished;
  - (d) all bare conductors are so placed or protected as to prevent danger from accidental short circuit.
- 15. Every switchboard having bare conductors normally so exposed that they may be touched, shall, if not located in an area or areas set apart for the purposes thereof, where necessary be suitably fenced or enclosed.

No person except an authorised person, or a person acting under his immediate supervision, shall for the purpose of carrying out his duties have access to any part of an area so set apart.

**16.** All apparatus appertaining to a switchboard and requiring handling, shall so far as practicable be so placed or arranged as to be operated from the working platform of the switchboard, and all measuring instruments and indicators connected therewith shall, so far as practicable, be so placed as to be observed from the working platform. If such apparatus be worked or observed from any other place, adequate precautions shall be taken to prevent danger.

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17. At the working platform of every switchboard and in every switchboard passageway, if there be bare conductors exposed or arranged to be exposed when live so that they may be touched, there shall be a clear and unobstructed passage of ample width and height, with a firm and even floor, adequate means of access, free from danger, shall be provided for every switchboard passageway.

The following provisions shall apply to all such switchboards working platforms and passageways constructed after 1st January 1950, unless the bare conductors, whether overhead or at the sides of the passageways are otherwise adequately protected against danger by divisions or screens or other suitable means:

- (a) those constructed for low-pressure and mediumpressure switchboards shall have a clear height of not less than 7 feet, and a clear width measured from bare conductor of not less than 3 feet;
- (b) those constructed for high-pressure and extrahigh pressure switchboards other than operating desks or panels working solely at low pressure, shall have a clear height of not less than 8 feet, and a clear width measured from bare conductor of not less than 3 feet 6 inches;
- (c) bare conductors shall not be exposed on both sides of the switchboard passageway unless either (i) the clear width of the passage is in the case of low pressure and medium pressure not less than 4 feet 6 inches, and in the case of high pressure and extra-high pressure not less than 8 feet, in each case measured between bare conductors, or (ii) the conductors on one side are so guarded that they cannot be accidentally touched.
- **18.** In every switchboard for high-pressure or extrahigh pressure—
  - (a) every high-pressure and extra-high pressure conductor within reach from the working platform or in any switchboard passageway

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- shall be so placed or protected as adequately to prevent danger;
- (b) the metal cases of all instruments working at high pressure or extra-high pressure shall be either earthed or completely enclosed with insulating covers;
- (c) all metal handles of high-pressure and extrahigh pressure switches, and, where necessary to prevent danger, all metal gear for working the switches, shall be earthed;
- (d) when any work is done on any switchboard for high pressure or extra-high pressure the switchboard shall be made dead unless—
  - (1) the section of the switchboard on which the work is done (hereinafter referred to as "the relevant section") is made dead and every other section which is live is either (i) so separated from the relevant section by permanent or removable divisions or screens as not to be a source of danger to persons working on the relevant section or (ii) in such a position or of such construction as to be as safe as if so separated as aforesaid; or
  - (2) the switchboard itself is so arranged as to secure that the work is done without danger, without taking any of the precautions aforesaid.
- 19. All parts of generators, motors, transformers, or other similar apparatus, at high pressure or extra-high pressure, and within reach from any position in which any person employed may require to be, shall be, so far as reasonably practicable, so protected as to prevent danger.

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- **20.** Where a high-pressure or extra-high pressure supply is transformed for use at a lower pressure, or energy is transformed up to above low pressure, suitable provision shall be made to guard against danger by reason of the lower-pressure system becoming accidentally charged above its normal pressure by leaking or contact from the higher-pressure system.
- 21. Where necessary to prevent danger, adequate precautions shall be taken either by earthing or by other suitable means to prevent any metal other than the conductor from becoming electrically charged.
- **22.** Adequate precautions shall be taken to prevent any conductor or apparatus from being accidentally or inadvertently electrically charged when persons are working thereon.
- 23. Where necessary adequately to prevent danger, insulating stands or screens shall be provided and kept permanently in position, and shall be maintained in sound condition.
- **24.** Portable insulating stands, screens, boots, gloves, or other suitable means shall be provided and used when necessary adequately to prevent danger, and shall be periodically examined by an authorised person.
- **25.** Adequate working space and means of access, free from danger, shall be provided for all apparatus that has to be worked or attended to by any person.
- **26.** All those parts of premises in which apparatus is placed shall be adequately lighted to prevent danger.
- **27.** All conductors and apparatus exposed to the weather, wet, corrosion, inflammable surroundings or explosive atmosphere, or used in any process or for any special purpose other than for lighting or power, shall be so constructed or protected, and such special precautions shall be taken, as may be necessary adequately to prevent danger in view of such exposure or use.

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28. No person except an authorised person or a competent person acting under his immediate supervision shall undertake any work where technical knowledge or experience is required in order to adequately avoid danger; and no person shall work alone in any case in which the Senior Inspector of Factories directs that he shall not. No person except an authorised person, or a competent person over 21 years of age acting under his immediate supervision, shall undertake any repair, alteration, extension, cleaning, or such work where technical knowledge or experience is required in order to avoid danger, and no one shall do such work unaccompanied.

Where a contractor is employed, and the danger to be avoided is under his control, the contractor shall appoint the authorised person, but if the danger to be avoided is under the control of the occupier, the occupier shall appoint the authorised person.

- **29.** Instructions as to the treatment of persons suffering from electric shock shall be affixed in all premises or places where electrical energy is generated, transformed or used at a pressure normally exceeding 125 volts alternating or 250 volts direct.
- **30.** Every substation shall be substantially constructed, and shall be so arranged that no person other than an authorised person can obtain access thereto otherwise than by the proper entrance, or can interfere with the apparatus or conductors therein from outside; and shall be provided with efficient means of ventilation and be kept dry.
- **31.** Every substation shall be under the control of an authorised person, and none but an authorised person or a person acting under his immediate supervision shall enter any part thereof where there may be danger.
- **32.** Every underground substation not otherwise easily and safely accessible shall be provided with adequate means of access by a door or trapdoor with a staircase or ladder securely fixed and so placed that no live part of any switchboard or any bare conductor

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shall be within reach of a person thereon: Provided however that the means of access to such substation shall be by a doorway and staircase (a) if any person is regularly employed therein, otherwise than for inspection or cleaning, or (b) if the substation is not of ample dimensions and there is therein either moving machinery other than ventilating fans, or extra-high pressure.

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# OCCUPATIONAL SAFETY AND HEALTH (WELFARE) REGULATIONS

# ARRANGEMENT OF REGULATIONS

### REGULATION

- 1. Short title and application.
- 2. Supply of drinking water.
- 3. Washing facilities.
- 4. Accommodation for clothing.
- 5. Facilities for sitting.
- 6. First aid.
- 7. Temperature.
- 8. Removal of dust or fumes.
- 9. Protection of eyes in certain processes.

# SCHEDULE.

[Subsidiary]

GN 62-1951.

# OCCUPATIONAL SAFETY AND HEALTH (WELFARE) REGULATIONS

deemed to be made by the Minister under section 99

Short title and application.

- **1.** These Regulations may be cited as the Occupational Safety and Health (Welfare) Regulations, and shall apply—
  - (a) to all factories as defined in section 4 of the Act;
  - (b) to building operations and works of engineering construction as defined in the Act,
  - (c) to electrical stations to which the Act applies; and
  - (d) to docks, wharves, quays and warehouses to which the Act applies:

Provided that, if the Senior Inspector of Factories is satisfied in respect of any factory or other place to which these Regulations apply, that, owing to the special conditions of the work or otherwise, any of the requirements of the Regulations are unnecessary or inappropriate, he may by certificate in writing authorise the suspension or relaxation of such requirement for such period and on such conditions as he may think fit. Any such certificate maybe revoke at any time.

Supply of drinking water.

- **2.** (1) There shall be provided and maintained at suitable points conveniently accessible to all persons employed, an adequate supply of drinking water which shall be clean and wholesome.
- (2) A supply of drinking water which is not laid on, shall be renewed at least daily and shall be contained in suitable vessels and all practicable steps shall be taken to preserve the water and vessels clean and free from contamination.
- (3) A drinking water supply (whether laid on or not) shall in such cases as an inspector may direct be clearly marked "drinking water".

Washing facilities.

**3.** There shall be provided and maintained for the use of employed persons adequate and suitable facilities for washing (including an adequate supply of soap) and the facilities shall be conveniently accessible and shall be kept in a clean and orderly condition.

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**4.** (1) There shall be provided and maintained for the use Accommodation of employed persons, adequate and suitable accommodation for clothing not worn during working hours.

- (2) The accommodation for clothing shall be separate from any workroom or store where such separation is necessary to prevent the clothing from coming into contact with—
  - (a) lead, arsenic or other poisonous substance; or
  - (b) any substance liable to cause ulceration, dermatitis or other affection of the skin; or
  - (c) any substantial quantity of dust or moisture of any kind.
- **5.** (1) Where any employed persons have in the course of Facilities for their employment reasonable opportunities for sitting without detriment to their work, there shall be provided and maintained for their use, suitable facilities for sitting sufficient to enable them to take advantage of those opportunities.

- (2) Where a substantial proportion of any work can properly be done sitting, there shall be provided and maintained for any employed person doing that work a seat suitable for him and the work.
- **6.** (1) There shall be provided and maintained so as to be First aid. readily accessible a first-aid box or cupboard of the standard prescribed by the Schedule to these Regulations and where more Schedule. than one hundred and fifty persons are employed an additional box or cupboard for every additional one hundred and fifty persons.

For the purpose of this provision the number of persons employed in a factory shall be taken to be the largest number of persons employed therein at any one time, and any fraction of one hundred and fifty shall be reckoned as one hundred and fifty.

(2) Nothing except appliances or requisites for first aid shall be kept in a first-aid box or cupboard, and every first-aid box or cupboard shall be plainly marked "First Aid".

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- (3) Each first-aid box or cupboard shall be placed under the charge of a responsible person who shall be readily available during working hours and in the case of a factory where more than fifty persons are employed shall be sufficiently trained in first-aid treatment.
- (4) If an ambulance room is provided at the factory and such arrangements are made as to ensure the immediate treatment there of all injuries occurring in the factory, the Senior Inspector of Factories may by certificate exempt the factory from the requirements of this section to such extent and subject to such conditions as he may specify in the certificate.

Temperature.

**7.** Effective provision shall be made for securing and maintaining a reasonable temperature in each workroom.

Removal of dust or fumes.

**8.** In every factory in which, in connection with any process carried on, there is given off any dust or fume or other impurity of such a character or to such extent as to be likely to be injurious or offensive to the persons employed, or any substantial quantity of dust of any kind, all practicable measures shall be taken to protect the persons employed against inhalation of the dust or fume or other impurity and to prevent its accumulating in any workroom, and in particular where the nature of the process makes it practicable, exhaust appliances shall be provided and maintained as near as possible to the point of origin of the dust or fume or other impurity so as to prevent it entering the air of any workroom.

Protection of eyes in certain processes.

- **9.** (1) In any process which involves a special risk of injury to the eyes from particles or fragments thrown off in the course of the process, suitable goggles or effective screens shall be provided to protect the eyes of persons employed in the process.
- (2) Suitable goggles or effective screens shall be provided to protect the eyes of persons employed at welding or cutting of metals by means of an electrical, oxyacetylene or similar process,

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and effective arrangements shall be made by the provision of screens or otherwise to protect the eyes of other persons working near to such process.

#### **SCHEDULE**

(Regulation 6).

#### A.

For factories or other premises or places to which these Regulations apply, in which the number of persons employed does not exceed ten, or (where mechanical power is not used) does not exceed fifty persons, each first-aid box or cupboard shall contain at least—

- (i) A copy of the first-aid leaflet (Form 923).
- (ii) A sufficient number (not less than six) of small sterilised dressings for injured fingers.
- (iii) A sufficient number (not less than three) of medium size sterilised dressings for injured hands or feet.
- (iv) A sufficient number (not less than three) of large sterilised dressings for other injured parts.
- (v) A sufficient number of sterilised burn dressings (small and large).
- (vi) A two per cent alcoholic solution of iodine or a one per cent aqueous solution of gentian violet.
- (vii) A bottle of sal volatile, having the dose and mode of administration indicated on the label.

#### В.

For factories or other premises or places to which these Regulations apply, where mechanical power is used and the number of persons employed exceeds ten but does not exceed fifty, each first-aid box or cupboard shall contain at least—

- (i) A copy of the first-aid leaflet (Form 923).
- (ii) A sufficient number (not less than a dozen) of small sterilised dressings for injured fingers.
- (iii) A sufficient number (not less than six) of medium size sterilised dressings for injured hands or feet.

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- (iv) A sufficient number (not less than six) of large sterilised dressings for other injured parts.
- (v) A sufficient number of sterilised burn dressings (large and small).
- (vi) A sufficient supply of sterilised cotton wool, in half ounce packets.
- (vii) A two per cent alcoholic solution of iodine or a one per cent aqueous solution of gentian violet.
- (viii) A bottle of sal volatile, having the dose and mode of administration indicated on the label.
- (ix) Eye drops, prepared as described in the first-aid leaflet (Form 923).

C.

For factories or other premises or places to which these Regulations apply, where the number of persons employed exceeds fifty, each first-aid box or cupboard shall contain at least—

- (i) A copy of the first-aid leaflet (Form 923).
- (ii) A sufficient number (not less than two dozen) of small sterilised dressings for injured fingers.
- (iii) A sufficient number (not less than one dozen) of medium size sterilised dressings for injured hands or feet.
- (iv) A sufficient number (not less than one dozen) of large sterilised dressings for other injured parts.
- (v) A sufficient number of sterilised burn dressings (large and small).
- (vi) A sufficient supply of sterilised cotton wool in half ounce packets.
- (vii) A two per cent alcoholic solution of iodine or a one per cent aqueous solution of gentian violet.
- (viii) A bottle of sal volatile, having the dose and mode of administration indicated on the label.
- (ix) Eye drops prepared as described in the first-aid leaflet (Form 923).
- (x) A supply of suitable splints and cotton wool or other material for padding.
- (xi) A supply of adhesive plaster.
- (xii) A tourniquet.
- (xiii) One dozen roller bandages.

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- (xiv) Half a dozen triangular bandages.
- (xv) Safety pins.

#### D.

In lieu of the dressings required under items (ii) and (iii) there may be substituted adhesive wound dressings of suitable quantity.

#### E.

In all cases, all materials for dressings contained in the first-aid boxes or cupboards shall be those designated in and of a grade or quality not lower than the standards prescribed by the British Pharmaceutical Codex or any supplement thereto.

#### FIRST AID

Form 923.

#### TREATMENT OF MINOR INJURIES

#### Scratches or Slight Wounds

Treat every scratch or slight wound immediately. The longer the delay the greater the risk of septic infection.

Do not attempt to wash the wound. Cleaning of surrounding parts, if necessary, should be done with ether or other suitable solvent.

To sterilise the wound, apply the iodine or gentian violet solution\* carefully over the broken surface once and allow a short interval of time to elapse.

Apply a "Sterilised Dressing"† or "Adhesive Wound Dressing".‡ Additional packing (e.g., cotton wool) and a bandage can be applied over this dressing if necessary.

Septic infection of a wound is caused by introducing germs into it. A sterilised dressing or adhesive wound dressing should therefore always be used. Ordinarily medicated lint does not remain sterile after handling.

Hands are never free from germs and should never touch the wound or the part of the dressing to be applied to the wound.

#### Burns or Scalds

Cover the injured part with a "Sterilised Burn Dressing" § or other suitable burn dressing. Note— Carron oil should not be used for a first-aid dressing, for Carron oil is not sterile, and its use will also interfere with any subsequent treatment by a doctor.

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Do not prick a blister, except under medical advice; it is no part of the First-Aid treatment.

#### Acid or Alkali Burns

Flood the burn with cold water. After flooding, sprinkle it—

- (i) if due to acid, with powdered Bicarbonate of Soda;
- (ii) if due to alkali, with powdered Boracic Acid.

Apply a "Sterilised Dressing" of suitable size.

Iodine should never be used for Burns or Dermatitis.

#### EYE INJURIES

A Foreign Body in the Eye

Apply two or three Eye Drops || by means of the camel hair brush. Cover with an eye-shade.

Do not try to remove any particle which cannot be brushed away. In such a case a doctor's advice should be sought at once.

Note— First-Aid treatment is not intended to replace any subsequent treatment which may be necessary by a doctor.

- \* A 2 per cent alcoholic solution of iodine, or a 1 per cent aqueous solution of gentian violet.
- $\dagger$  "Sterilised Dressing" a complete dressing put up in an individual packet and rendered free from germs.
- ‡ "Adhesive Wound Dressing" a special type of elastic dressing.
- § "Sterilised Burn Dressing" a dressing as above, prepared specially for burns by the addition of picric acid or other substance such as will not interfere with the sterilised property of the dressing.

II Eye	Drops—
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Cocaine ... ... ... ... 0.5 per cent. Hyd. Perchlor. in castor oil... ... 1 in 3,000

Instructions to chemist for making eye drops:—Weight 95 grammes of castor oil into a flask capable of holding twice the quantity. Add 0.5 gramme of powdered cocaine. Warm in a water bath till dissolved. While the solution is still warm (but not hot) add one cubic centimetre of a solution containing 3.3 grammes of mercuric chloride in 100 cubic centimetres of absolute alcohol. Mix the solutions by rotating the flask.

About half an ounce, or 15 cc., of this solution be supplied in a bottle from the cork of which a camel hair brush is pendent in the fluid.

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# ELECTRIC ACCUMULATOR (MANUFACTURE AND REPAIR) ORDER

#### ARRANGEMENT OF CLAUSES

#### CLAUSE

- 1. Citation.
- 2. Definitions.
- 3. Application.
- 4. Employment of women or young person in lead process prohibited.
- 5. Separation of processes.
- 6. Air space.
- 7. Ventilation.
- 8. Workers in pasting room.
- 9. Floor of rooms.
- 10. Workbenches.
- 11. Exhaust draught.
- 12. Fumes and gases.
- 13. Container for dross.
- 14. Racks and shelves.
- 15. Protective clothing.
- 16. Mess room.
- 17. Cloak room.
- 18. Washing facilities.
- 19. Time to be allowed for washing.
- 20. Facilities for bathing.
- 21. Food and drinks prohibited in workrooms.
- 22. Bags containing oxides.
- 23. Re-use of paper or cloth.
- 24. Medical examinations.
- 25. Health register.
- 26. Employment in lead process after suspensions.

# SCHEDULE.

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Electric Accumulator (Manufacture and Repair) Order

184/1974.

# ELECTRIC ACCUMULATOR (MANUFACTURE AND REPAIR) ORDER

deemed to be made by the Minister of Labour under section 99

Citation.

**1.** This Order may be cited as the Electric Accumulator (Manufacture and Repair) Order.

Definitions.

#### 2. In this Order—

"lead process" means the melting of lead or any material containing lead, casting, pasting, lead burning or any other work, including trimming, or any other abrading or cutting of pasted plates, involving the use, movement or manipulation of, or contact with, any oxide of lead;

- "manipulation of raw oxide of lead" means any lead process involving any manipulation or movement of raw oxide of lead other than its conveyance in a receptacle or by means of an implement from one operation to another;
- "suspension" means suspension from employment in any lead process by written certificate of a medical practitioner approved under paragraph 24, and entered in the health register and signed by such medical practitioner, who shall have power of suspension as regards all persons employed in any lead process.

Application.

**3.** This Order shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead, or to the repair at any factory, of any accumulator forming part of a stationary battery.

Employment of women or young person in lead process prohibited. **4.** No woman or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on.

Separation of processes.

- **5.** Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another, and from any other process:
  - (a) manipulation of raw oxide of lead;

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- (b) pasting;
- (c) drying of pasted plates;
- (d) formation with lead burning ("tacking") necessarily carried on in connection therewith;
- (e) melting down of pasted plates;
- (f) the grid-casting shop.
- **6.** In every room in which a lead process is carried on, there Air space. shall be at least 500 cubic feet of air space for each person employed therein, and in computing this air space no height over 12 feet shall be taken into account.
- 7. Every workroom shall be provided with inlets and outlets Ventilation. of adequate size so as to secure and maintain efficient ventilation in all parts of the room.
- **8.** In every pasting room the distance between the centre of Workers in the working position of any paster and that of the paster working nearest to him shall not be less than five feet.

- **9.** (1) The floor of every room in which a lead process is Floor of rooms. carried on shall be-
  - (a) of cement or similar material so as to be smooth and impervious to water;
  - (b) maintained in sound condition;
  - (c) kept free from materials, plant, or other obstruction not required for, or produced in, the process carried on in the room.
- (2) In all such rooms other than grid-casting shops, the floor shall be cleansed daily after having been thoroughly sprayed with water at a time when no other work is being carried on in the room.
  - (3) In grid-casting shops the floor shall be cleansed daily.
  - (4) In addition to the requirements of subparagraphs (1),

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- (2) and (3), where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be—
  - (a) kept constantly moist while work is being done;
  - (b) provided with suitable and adequate arrangements for drainage;
  - (c) thoroughly washed daily by means of a hose pipe.

Workbenches.

- **10.** (1) The workbenches at which any lead process is carried on shall—
  - (a) have a smooth surface and be maintained in sound condition:
  - (b) be kept free from all materials or plant not required for, or produced in, the process carried on thereat; and
  - (c) except in the case of workbenches in gridcasting shops, be cleansed daily either after being thoroughly damped or by means of a suction-cleaning apparatus at a time when no other work is being carried on thereat.
- (2) In grid-casting shops, the workbenches shall be cleansed daily.
  - (3) Every workbench used for pasting shall—
    - (a) be covered throughout with sheet lead or other impervious material;
    - (b) be provided with raised edges; and
    - (c) be kept constantly moist while pasting is being carried on.
- (4) Every workbench used for trimming, brushing, filing or any other abrading or cutting of pasted plates shall be fitted with a top paving, openings, or grill to allow any chippings, filings, or dust produced to fall into a collecting trough containing water.

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- 11. (1) The following processes shall not be carried on Exhaust without the use of an efficient exhaust draught:
  - (a) melting of lead or materials containing lead;
  - (b) manipulation of raw oxide of lead, unless done in an enclosed apparatus so as to prevent the escape of dust into the workroom;
  - (c) pasting;
  - (d) trimming, brushing, filing or any other abrading or cutting of pasted plates giving rise to dust;
  - (e) lead burning, other than—
    - (i) tacking in the formation room;
    - (ii) chemical burning for the making of lead lining for cell cases necessarily carried on in such a manner that the application of efficient exhaust is impracticable.
- (2) The exhaust draught shall be effected by mechanical means and shall operate on the dust or fume given off as nearly as may be at its point of origin, so as to prevent it from entering the air of any room in which persons work.
- 12. The products of combustion produced in the heating of Fumes and any melting pot shall not be allowed to escape into a room in which persons work.
- 13. Suitable receptacles with self-closing lids shall be Container for provided in every workroom and old plates and waste material which may give rise to dust shall be deposited therein.

14. (1) The racks or shelves provided in any drying room Racks and shall not be more than 8 feet from the floor nor more than 2 feet in width; except that as regards racks or shelves set or drawn from both sides the total width shall not exceed 4 feet.

(2) The racks or shelves shall be cleaned only after being thoroughly damped unless an efficient suction-cleaning apparatus is used for this purpose.

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Protective clothing.

- **15.** (1) Protective clothing shall be provided and maintained in good repair for all persons employed in—
  - (a) the manipulation of raw oxide of lead;
  - (b) pasting and handling of pasted plates on drying racks; and
  - (c) the formation room,

and such clothing shall be worn by the persons employed in those processes.

- (2) The protective clothing shall consist of a waterproof apron and waterproof footwear; and, also, in the case of persons employed in the manipulation of raw oxide of lead or in pasting, head coverings.
  - (3) The head coverings shall be washed daily.

Mess room.

- **16.** (1) There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals, a suitable mess room, which shall be furnished with—
  - (a) sufficient tables and benches; and
  - (b) adequate means for warming food.
- (2) The mess room shall be placed under the charge of a responsible person, and shall be kept clean.

Cloak room.

- **17.** There shall be provided and maintained for the use of all persons employed in a lead process—
  - (a) a cloak room for clothing not worn during working hours with adequate arrangements for drying the clothing if wet. Such accommodation shall be separate from any mess room and from any workroom in which a lead process or the manipulation of raw oxide of lead is carried on;
  - (b) separate and suitable arrangements for the storage of protective clothing provided under paragraph 15.

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**18.** (1) There shall be provided and maintained in a clean Washing state and in good repair for the use of all persons employed in a lead process-

- (a) a place under cover, with either—
  - (i) a trough with a smooth impervious surface fitted with a water pipe, without plug, and of sufficient length to allow at least 2 feet for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 2 feet; or
  - (ii) at least one washbasin for every five such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water laid on; and
  - (iii) a sufficient supply of clean towels made of suitable materials renewed daily; which supply, in the case of pasters and persons employed in the manipulation of raw oxide of lead, shall include a separate marked towel for each such worker; and
  - (iv) a sufficient supply of soap or other suitable cleansing material and of nail brushes;
- (b) means of washing in close proximity to the rooms in which manipulation of raw oxide of lead or pasting is carried on if required by notice in writing from the Industrial Inspection Supervisor.

19. Before each meal and before the end of the day's work at Time to be least ten minutes, in addition to the regular meal times shall be washing. allowed for washing to each person employed in the manipulation of raw oxide of lead or in pasting, so however that if there is one washbasin or two feet of trough for each such person this paragraph shall not apply.

20. Sufficient bathing accommodation shall be provided for Facilities for all persons engaged in the manipulation of raw oxide of lead

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and in pasting, with a sufficient supply of soap, clean towels, and nail brushes.

Food and drinks prohibited in workrooms.

**21.** No drinks, food or other eatables shall be consumed or brought by any person into any workroom in which any lead process is carried on.

Bags containing oxides.

**22.** All bags containing oxides of lead or in which oxides of lead were contained shall be kept in a closed room which shall be used only for this purpose.

Re-use of paper or cloth.

- **23.** (1) Paper once used for backing or drying pasted plates shall not be used again in the factory.
- (2) Cloth once used for backing or drying pasted plates shall not be stored or handled unless it is moist so as not to give rise to dust.

Medical examinations.

- 24. (1) Every person who is to be employed or is employed in a lead process shall, within the seven days preceding or following the date of his first appointment, and thereafter, once in every month, be examined by a qualified medical practitioner who is a member of the Medical Board of Trinidad and Tobago and who has been approved in writing by the Chief Medical Officer of Health as being competent to carry out examinations required under this paragraph.
- (2) At least once in every three months a blood and urine examination of every person employed in the manipulation of raw oxide of lead, pasting, and drying, shall be carried out to ascertain the content of lead in the blood and urine of such person, and the results of each examination shall be kept available at the factory.
- (3) The fees for all examinations carried out pursuant to this paragraph shall be paid by the occupier of the factory.
- (4) In subparagraph (1) "first employment" means first employment in lead process in the factory and also reemployment therein in a lead process following any cessation of employment in such process for a period exceeding three months.

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25. A health register in the form set out in the Schedule Health register. hereto, containing the names of all persons employed in a lead process shall be kept at the factory.

**26.** No person, after suspension, shall be employed in a lead Employment in process without the written sanction of a medical practitioner after referred to in paragraph 24(1).

suspensions.

## **SCHEDULE**

**FORM** 

(Paragraph 25).

## **HEALTH REGISTER**

1.	Name of Medical Practitioner
2.	Name of Factory
3.	Address
4.	Name of Occupier
5.	Serial No.
6.	Name of Person Employed
7.	Sex 8. Age (last birthday)
9.	Date of employment of present work
10.	Reasons for leaving, transfer or discharge
11.	Nature of job or occupation
12.	Raw materials or by-products handled
13.	Date of medical examination
14.	Result of medical examination. Fit/unfit/suspended
15.	If suspended from work, state period of suspension with detailed reasons
16.	Certified fit to resume duty on
	with signature of Medical Practitioner
17.	If certificate of unfitness or suspension issued to person employed
18.	Signature with date of the Medical Practitioner
19.	Remarks

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# OCCUPATIONAL SAFETY AND HEALTH (PROTECTIVE MEASURES) ORDER

#### ARRANGEMENT OF CLAUSES

#### CLAUSE

- 1. Citation.
- 2. Definitions.

## EXCAVATIONS, TRENCHING AND SHORING GENERAL PROTECTIVE REQUIREMENTS

- 3. Protective equipment for employees.
- 4. Walkways, etc., to be kept clear of excavated material.
- 5. Use of planks.
- 6. Handling of loads.
- 7. Daily inspections of excavations.

## SPECIFIC EXCAVATION REQUIREMENTS

- 8. Precautions to be taken for minimising risks of damage to sewer, lines, etc.
- 9. Factory Inspectorates, etc., to be advised of intended excavation work.
- 10. Removal of encumbrances.
- 11. Shoring of walls of excavation.
- 12. Inspection of excavation after rainstorm, etc.
- 13. Determination of angle of repose.
- 14. Supporting systems to conform to accepted standards.
- 15. Slopes to be excavated.
- 16. Angle of repose to be flattened.
- 17. Excavated materials to be stored.
- 18. Slides, slopes, etc., to conform to accepted engineering requirements.
- 19. Condition of materials used for sheeting, etc.
- 20. Special precautions to be taken when the sides of an excavation are being sloped or shored.
- 21. Certain excavations to be underpinned.
- 22. Shoring, bracing or underpinning to be provided in certain cases.
- 23. Diversion ditches and dikes.
- 24. Precautions where heavy objects are to be operated on a level above and near an excavation.

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#### CLAUSE

- 25. Stop logs or barricades to be used.
- 26. Dust conditions.

#### BLASTING AND USE OF EXPLOSIVES

- 27. Blasting and use of explosives.
- 28. Authority to carry out blasting operations.
- 29. Special precautions necessary where blasting is carried out in a built-up area, etc.
- 30. Blasting operations to be carried out between sunrise and sunset.
- 31. Precautions to prevent accidental discharge of electric blasting caps.
- 32. Empty boxes, etc., to be destroyed by burning.
- 33. Use of damaged explosives, etc., prohibited.
- 34. Delivery and issue of explosives.
- 35. Prohibition on carrying out blasting operations.
- 36. Black powder prohibited.
- 37. Loading and firing to be directed and supervised by competent persons.
- 38. Blasts to be fired with electric blasting machine.
- 39. Protection for excavations remotely located.
- 40. Confined spaces to be tested to ensure that there is no oxygen deficiency.
- 41. Measures to ensure atmospheric conditions.
- 42. Ventilation to be provided.
- 43. Rescue equipment to be readily available in certain cases.
- 44. Standard guard rails to be provided in certain cases.
- 45. Design and construction of ramps.
- 46. Ladders to conform to requirements of Bureau of Standards.

## SPECIFIC TRENCHING REQUIREMENTS

- 47. Shoring of banks and sides.
- 48. Shoring sides of trenches in unstable or soft material.
- 49. Shoring of sides of trenches in hard or compact soil.
- 50. Outside diameter.
- 51. Condition of materials for shoring, etc.
- 52. Precaution to prevent slides or cave-ins.

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## ARRANGEMENT OF CLAUSES—Continued

#### **CLAUSE**

- 53. Protective measures for employees entering bell-bottom pier holes.
- 54. Lifelines to be worn by employees entering shaft.
- 55. Trench shoring.
- 56. Means of exit to be provided in certain cases.
- 57. Bracing of trenches.
- 58. Cross braces or trench jacks.
- 59. Use of portable trench boxes in lieu of shoring or sloping.
- 60. Backfilling and removal of trench supports.
- 61. Offence and penalty.

SCHEDULE 1.

SCHEDULE 2.

SCHEDULE 3.

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## OCCUPATIONAL SAFETY AND HEALTH (PROTECTIVE MEASURES) ORDER

210/1977.

deemed to be made under section 99

- **1.** This Order may be cited as the Occupational Safety and Citation. Health (Protective Measures) Order.
  - **2.** In this Order—

Definitions.

- "accepted engineering requirements or practices" means the requirements or practices which are compatible with standards required of a person qualified in architecture or engineering;
- "angle of repose" means the greatest angle above the horizontal plane at which loosely fitted material will remain without sliding;
- "approved" means approved by the Trinidad and Tobago Bureau of Standards;
- "bank" means a mass of soil rising above a digging level;
- "belled excavation" means that part of a shaft or footing excavation usually near the bottom and bell-shaped, such as an enlargement of the cross-section as shown in the shaded portion of the diagram attached as Schedule I;

Schedule I.

- "braces" in relation to a trench means the horizontal members of a shoring system whose ends bear against the uprights or stringers;
- "excavation" means any man-made cavity or depression in the earth's surface, including the sides, walls or faces of such cavity or depression, formed by the removal of earth and producing unsupported conditions by reason of such removal;
- "hard compact soil" means all earth materials which are not running or unstable;
- "kickouts" means an accidental release or failure of a shore or brace:
- "shore" means any engineering device designed to prevent slipping of earthworks by means of bracing;

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- "sheet pile" means a pile or sheeting which is likely to form one of a continuous interlocking line or a row of timber, concrete or steel piles driven in close contact so as to provide a tight wall for the purpose of resisting the lateral pressure of water, adjacent earth or other materials;
- "sides", "walls" or "faces" means the vertical or inclined earth surfaces which are formed as a result of the carrying out of excavation work;
- "slope" means the angle with the horizontal at which a particular earth material will stand indefinitely without movement;
- "stringers" or "wales" means the horizontal members of a shoring system whose sides bear against the uprights or the earth;
- "trench" means a narrow excavation made below the surface of the ground, the depth of which is invariably greater than the width which does not exceed fifteen feet;
- "trench jack" means a screw or a hydraulic type jack which is used as cross bracing in a trench shoring system;
- "trench shield" means a shoring system composed of steel plates and bracing welded or bolted together, which supports the walls of a trench from the ground level to the trench bottom and which can easily be moved;
- "unstable soil" means earth material other than running earth material, which because of its nature or the influence of related conditions cannot remain in place without such support as would be furnished by a system of shoring;
- "uprights" means the vertical members of a shoring system.

## EXCAVATIONS, TRENCHING AND SHORING GENERAL PROTECTIVE REQUIREMENTS

Protective equipment for employees.

**3.** (1) A person who is required to work in an area or in the vicinity of an area where excavation, trenching, demolition, under-ground operation or other related operations are being carried out (hereinafter referred to as an "excavated area") shall be provided with approved protective equipment for the protection of the head, eyes, respiratory organs, hands, feet and such other parts of the body as may be necessary.

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- (2) In addition to the approved protective equipment with which they are required to be provided under subparagraph (1)—
  - (a) persons required to work by night in an excavated area who are exposed to vehicular traffic shall be provided with—
    - (i) adequate lighting facilities for working; and
    - (ii) warning vests marked with or made of reflectorized or high visibility material;
  - (b) persons working in an excavated area who are subjected to hazardous dusts, gases, fumes, mists or atmospheres deficient in oxygen shall be provided with such means of protection as may be approved;
  - (c) persons working in an excavated area who are subjected to noise exposures exceeding those specified in Schedule 2 shall be provided with Schedule 2. approved protective equipment.
- 4. All walkways, runways and sidewalks in an excavated Walkways, etc., area shall be kept clear of excavated material or other forms of of excavated of excavated obstruction and a sidewalk shall not be undermined unless it is shored to carry a minimum live load of one hundred and twentyfive pounds per square foot.

- 5. (1) Where planks are used for raised walkways, Use of planks. runways or sidewalks—
  - (a) they shall be laid parallel to the length thereof and fastened together against displacement; and
  - (b) guard rails shall be installed in close proximity thereto.
- (2) The planks used for the purposes referred to in subparagraph (1) shall be uniform in thickness and all exposed ends thereof shall be provided with bevelled cleats so as to prevent tripping.

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- (3) Raised walkways, runways or sidewalks shall be provided with plank steps on stringers and where ramps are used in place of steps the ramps shall be provided with cleats in order to ensure a safe surface for walking.
  - (4) In this paragraph—
- "runway" means that part of an excavated area which is designated for use by locomotive machines;
- "sidewalk" means the area adjacent to an excavation or a trench which is designated for use by pedestrians and includes pavements;
- "walkway" means that part of an excavated area which is designated for use by pedestrians.

Handling of loads.

- **6.** (1) Any part of an excavated area where loads are being handled by power-cranes, shovels, derricks, hoists or any other machinery used for lifting or hoisting shall be designated a "hazard area".
- (2) No person, other than the operator of the machinery referred to in subparagraph (1), shall be allowed in a hazard area while loads are being handled in the manner specified in that subparagraph.

Daily inspections of excavations.

- 7. (1) A qualified engineer or a person authorised by him in writing shall inspect all excavations daily.
- (2) Where on an inspection there is evidence of possible cave-ins or slides the engineer or the person authorised by him pursuant to subparagraph (1) shall direct the stoppage of work in the excavation until such precautions as are necessary and applicable for the purpose of safeguarding the employees are taken.

## SPECIFIC EXCAVATION REQUIREMENTS

Precautions to be taken for of damage to sewer, lines, etc.

**8.** (1) Before an excavation is opened, efforts shall be minimising risks made to determine whether underground installations, such as sewer, telephone, water, fuel, electric lines or other underground installations will be encountered, and if so, where they are likely to be located.

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- (2) Where the excavation approaches the estimated location of an installation referred to in subparagraph (1), the exact location thereof shall be determined and when it is uncovered adequate means of support shall be provided for the existing installations.
- 9. (1) A person who intends to carry out an excavation Factory shall, at least seven days before the date on which the excavation etc., to be is to begin, submit to the Factory Inspectorate and to the Utility advised of intended Companies, such as the Water and Sewerage Authority, the excavation Telephone Company and Electricity Commission such information as may be requested by the Factory Inspectorate.

- (2) The information referred to in subparagraph (1) shall be supplied on the form approved by the Factory Inspectorate.
- **10.** Trees, boulders and other surface encumbrances growing Removal of or located in such a place as to create a hazard to persons working in an excavation area shall be cut or removed or other safety precautions taken before excavation begins.

11. The walls of all excavations in which employees are Shoring of walls exposed to danger as a result of moving ground shall be guarded by a shoring system, sloping of the ground or any other similar and effective means of protection.

12. Excavations shall be inspected by a qualified engineer or a Inspection of person authorised by him in writing after every rainstorm or any rainstorm, etc. other occurrence which is likely to increase hazards and, where necessary, protection against slides and cave-ins shall be increased.

13. The determination of the angle of repose and the design Determination of the supporting system shall be based on a careful evaluation of repose. pertinent factors such as, depth of cut, possible variation in the water content of the material while the excavation is open, anticipated changes in materials as a result of exposure to air, sun, water or sudden changes in temperature, loading imposed by structures, equipment, overlying or stored material and vibration from equipment, blasting, traffic or any other source.

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Supporting systems to conform to accepted standards.

- **14.** (1) Supporting systems such as piling, cribbing, shoring or other similar systems shall be designed by an engineer and shall conform to accepted engineering requirements; such systems shall also be planned by an engineer where an excavation—
  - (a) is likely to exceed twenty feet in depth;
  - (b) is adjacent to structures or improvements; or
  - (c) is subject to vibration or ground water.
- (2) Where tie rods are used to restrain the top of sheeting or other retaining systems, the rods shall be securely anchored to the back of the angle of repose.
- (3) Where tight sheeting or sheet piling is used in excavations full loading shall be imposed because of ground water table unless the loading is prevented by weep holes, drains or other means.
- (4) Additional stringers, ties and bracing shall be provided to allow for any temporary removal of individual supports which may become necessary.

Slopes to be excavated.

**15.** All slopes shall be excavated to at least the angle of repose except in areas where solid rock allows for line drilling or presplitting.

Angle of repose to be flattened.

- **16.** The angle of repose shall be flattened where—
  - (a) there is water in an excavation or where it has silty materials or loose boulders;
  - (b) there are slide planes and erosion; or
  - (c) there is a sudden change in temperature.

Excavated materials to be stored.

- 17. Where a worker is required to enter an excavation—
  - (a) excavated or other material shall be effectively stored and retained at least two feet from the edge of the excavation; or
  - (b) the worker shall use effective barriers or other effective retaining devices in order to prevent excavated or other material from falling in the excavation.

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18. The slides, slopes and faces of all excavations shall Slides, slopes, conform to accepted engineering requirements by scaling, to accepted benching, barricading, rock belting, wire meshing or any other engineering requirements. means which are equally effective and special attention shall be given to slopes which may be adversely affected by weather or moisture content.

19. Materials which are used for sheeting, sheet piling, Condition of cribbing, bracing, shoring or underpinning shall be in good for sheeting, etc. serviceable condition and timber shall be sound, free from large or loose knots and of such dimensions as are adequate for the work to be undertaken.

20. Special precautions shall be taken when sloping or Special shoring the sides of excavations which are adjacent to a be taken when previously backfilled excavation or a fill; when the separation is excavation are less than the depth of the excavation particular attention shall being sloped or shored. also be paid to joints and seams of materials comprising a face and the slope of such seams and joints.

21. Except where an excavation is carried out in hard rock, Certain excavations below the level of the base or footing of any be underpinned. foundation or retaining wall shall not be permitted, unless the wall is underpinned and all other precautions taken to protect persons working in an excavated area by ensuring the stability of the adjacent walls.

**22.** (1) Where the stability of adjoining buildings or walls is Shoring, bracing endangered as a result of excavation, shoring, bracing or to be provided underpinning shall be provided in order to ensure the safety of the building or walls.

or underpinning in certain cases.

- (2) The shoring, bracing or underpinning required to be provided under subparagraph (1) shall be—
  - (a) inspected daily by an engineer or a person authorised in writing by him so to do; and
  - (b) effectively maintained until the engineer directs otherwise.

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Diversion ditches and dikes.

- 23. (1) Diversion ditches, dikes or other suitable means shall be used to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavation.
- (2) Water shall not be allowed to accumulate in an excavation.

Precautions where heavy objects are to be operated on a level above and near an excavation. **24.** Where it is necessary to place or operate power-shovels, derricks, trucks, materials or other heavy objects on a level above and near an excavation, the side of the excavation shall be sheetpiled, shored or braced in order to resist the extra pressure resulting from such super-imposed loads.

Stop logs or barricades to be used.

**25.** Where mobile equipment is utilised or allowed adjacent to excavations, substantial stop logs or barricades shall be installed; where it is possible so to do, the grade shall be away from the excavation.

Dust conditions.

**26.** In an excavated area dust conditions shall be kept to a minimum by the use of water, salt, calcium chloride or any other means.

#### BLASTING AND USE OF EXPLOSIVES

Blasting and use of explosives.

**27.** The carrying out of blasting operations and the use of explosives shall be subject to paragraphs 28 to 38.

Authority to carry out blasting operations.

- **28.** (1) No person may carry out blasting operations unless he is authorised in writing so to do.
- (2) The authority referred to in subparagraph (1) shall be given by the Commissioner of Police acting on the advice of the Chief Factory Inspector.
- (3) No person may be given authority to carry out blasting operations unless the Chief Factory Inspector is satisfied that he has considerable knowledge and experience in methods of blasting.
- (4) A person who is authorised to carry out blasting operations shall take all reasonable precautions, such as making

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use of visual and audible warning signals, flags or barricades, in order to ensure the safety of employees.

29. Where blasting operations are carried out in a built-up Special area or in close proximity to a structure, locomotive route or precautions necessary where highway or any other installation which may be damaged, the blasting is carried out in a person carrying out the blast shall take special precautions in the built-up area, loading, delaying, initiation and confinement of each blast by means of such methods as would control the throw of fragments and consequently prevent bodily injury to employees.

30. Blasting operations which are carried out above ground Blasting shall, as far as practicable, be carried out during the hours when the sun rises and sets.

operations to be carried out between sunrise and sunset

**31.** (1) Precautions shall be taken to prevent the accidental Precautions to discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent powerlines or any other discharge of electric blasting source of extraneous electricity.

- (2) The precautions referred to in subparagraph (1) shall include the following:
  - (a) detonators shall be short-circuited in holes which have been primed and shunted until wired into the blasting circuit;
  - (b) the suspension of all blasting operations and the removal of all persons from the area where the blasting operations are carried out during the approach and progress of a blasting storm;
  - (c) the display in a prominent place of adequate signs approved by the Chief Factory Inspector, warning against the use of mobile radio transmitters on all roads within one thousand feet or such other distance as the Chief Factory Inspector may consider necessary, of an area where blasting operations are carried out;
  - (d) mobile radio transmitters which are less than one hundred feet from an electric blasting cap,

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- in containers, shall be de-energised and effectively locked;
- (e) compliance with such standard as may be recognised by the Trinidad and Tobago Bureau of Standards where blasting operations are carried out in the vicinity of radio transmitters; and
- (f) such other precautions as the Chief Factory Inspector may consider necessary.

Empty boxes, etc., to be destroyed by burning.

**32.** Empty boxes and packing material made of paper and fibre which previously contained explosives shall not be used again for any purpose but shall be destroyed by burning at a place designated by the Chief Factory Inspector for such a purpose.

Use of damaged explosives, etc., prohibited.

**33.** Explosives, blasting agents or blasting supplies which are damaged or which have deteriorated shall not be used.

Delivery and issue of explosives.

- **34.** (1) Delivery and issue of explosives shall be made only by and to authorised persons and in authorised magazines or approved temporary storage areas.
- (2) The Commissioner of Police may, acting on the advice of the Chief Factory Inspector, in writing authorise persons and magazines or approve temporary storage areas, for the purposes of subparagraph (1).

Prohibition on carrying out blasting operations.

**35.** Blasting operations shall not be carried out in the proximity of overhead power lines, communication lines, utility services or other structures or services until the appropriate authority or body is notified in writing of the proposed operations and measures taken to ensure the safe control thereof.

Black powder prohibited.

**36.** Black powder shall not be used in blasting operations.

Loading and firing to be directed and supervised by competent persons.

**37.** All loading and firing shall be directed and supervised by persons who have considerable knowledge and experience in loading and firing.

Blasts to be fired with electric blasting machine. **38.** All blasts shall be fired electrically with an electric blasting machine or by an electric power source of an approved design.

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**39.** (1) Adequate protection such as barricades shall be Protection for provided at all excavations which are remotely located and all wells, pits, shafts or other holes and related earthworks shall be barricaded or covered.

- (2) Where exploration and similar operations are completed temporary wells, pits, shafts or other holes and related earthworks shall be backfilled.
- **40.** (1) In all confined spaces where persons are required to Confined spaces work such as in shafts, ducts, tunnels and similar earth structures, ensure that there the air in such spaces shall be tested daily in order to ensure that deficiency. there is no oxygen deficiency and no toxic and flammable gases in the atmosphere.

- (2) The contractor shall ensure that frequent tests are carried out on the atmosphere in order to ascertain—
  - (a) the flammability or otherwise of gases in the atmosphere;
  - (b) the toxicity or otherwise of gases in the atmosphere; and
  - (c) whether or not there is an oxygen deficiency in the atmosphere.
- (3) In addition to the tests required to be carried out under subparagraph (2), the Chief Factory Inspector may direct the contractor to carry out such further tests as the Chief Factory Inspector may consider necessary.
- 41. The Contractor shall take such measures as the Chief Measures to Factory Inspector may approve for the purpose of ensuring atmospheric acceptable atmospheric conditions.

42. Where flammable gases are present in the atmosphere Ventilation to adequate ventilation and lighting of an approved flameproof standard shall be provided or sources of ignition shall be eliminated.

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Rescue equipment to be readily available in certain cases. **43.** Where there are adverse atmospheric conditions or where such conditions are likely to develop, emergency rescue equipment, such as apparatus used for breathing, a safety harness and line, a basket stretcher or any other rescue equipment which can be used in an emergency shall be readily available.

Standard guard rails to be provided in certain cases.

- **44.** (1) Where an employee or any equipment is required or permitted to cross over an excavation, walkways or bridges with standard guard rails shall be provided for such purpose.
- (2) In this paragraph "walkway" has the same meaning assigned to it in subparagraph (4) of paragraph 5.

Design and construction of ramps.

**45.** Ramps shall be designed and constructed by an engineer in accordance with accepted engineering requirements.

Ladders to conform to requirements of Bureau of Standards. **46.** Ladders which are used in the carrying out of excavation operations shall be made in accordance with such requirements as may be approved.

## SPECIFIC TRENCHING REQUIREMENTS

Shoring of banks and sides.

- **47.** (1) Where an employee is likely to be exposed to unstable earth or cave-ins in an area where there are banks more than five feet high, such banks shall be shored, laid back to a stable slope or provided with any other adequate means of protection.
- (2) The sloping referred to in subparagraph (1) shall conform as far as possible with the sloping shown in the diagram in Schedule 3.

Schedule 3.

(3) Where an examination of the ground indicates the likelihood of hazardous ground movement, trenches which are less than five feet in depth shall also be effectively protected.

Shoring sides of trenches in unstable or soft material.

**48.** (1) The sides of trenches in unstable or soft material which is at least five feet in depth shall be shored, sheeted, braced, sloped or otherwise adequately supported in order to protect the persons who are working in them.

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(2) The shoring referred to in subparagraph (1) shall, as far as possible, conform with the shoring shown in the diagram in Schedule 3.

Schedule 3.

**49.** (1) The sides of trenches in hard or compact soil, including embankment, shall be shored or otherwise supported where such hard or trenches are at least five feet in depth and eight feet in length.

Shoring of sides of trenches in compact soil.

- (2) Notwithstanding the provisions of subparagraph (1) the sides of trenches which are more than five feet in depth may be sloped to prevent them from collapsing, but the slope shall not be steeper than a rise of one foot to each half-foot horizontal.
- **50.** Where the outside diameter of a pipe is greater than six Outside feet a bench not less than four feet shall be provided at the toe of the sloped portion of the sides of a trench.

51. Materials used for sheeting and sheet piling, bracing, Condition of shoring and underpinning shall be in good serviceable condition shoring, etc. and timbers used for such purposes shall be sound and free from large or loose knots and shall be designed and installed so as to be effective to the bottom of the excavation.

**52.** In order to prevent slides or cave-ins additional precautions Precaution to by way of shoring and bracing shall be taken where excavations or or cave-ins. trenches are made in locations adjacent to backfilled excavations or where excavations are subjected to vibrations from traffic, the machinery of operation or any other cause.

53. Employees who are required to enter bell-bottom pier Protective holes shall be protected by means of the installation of a removaltype casing which is sufficiently strong to resist shifting of the surrounding earth and temporary protection shall be provided for the full depth of that part of each pier hole which is above the bell.

employees entering bellbottom pier

**54.** A lifeline, suitable for instant rescue and securely Lifelines to be fastened to a shoulder harness, shall be worn by each employee employees who is required to enter a shaft; the lifeline shall be individually

entering shaft.

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manned and shall be separated from any line used to remove materials excavated from the bell footing.

Trench shoring. Schedule 3.

- **55.** (1) The minimum requirements for trench shoring shall be those set out in the diagram in Schedule 3.
- (2) Braces and diagonal shores in a wood shoring system shall not be subjected to compressive stress in excess of the value given by the following formula:

$$S=1300 - 20L \over D$$
Maximum ratio L=50:
D

Where—

D= Least side of the timber in inches;

L= Length, unsupported in inches;

S = Allowable stress in pounds per square inch of crosssection.

Means of exit to be provided in certain cases. **56.** Where employees are required to be in trenches at least four feet deep, adequate means of exit such as a ladder or steps, shall be provided; the ladder or steps shall be located so as to require no more than twenty-five feet of lateral travel.

Bracing of trenches.

**57.** Bracing or shoring of trenches shall be carried along with the excavation.

Cross braces or trench jacks.

**58.** Cross braces or trench jacks shall be placed in a horizontal position, be spaced vertically and be secured in order to prevent sliding, falling or kickouts.

Use of portable trench boxes in lieu of shoring or sloping.

**59.** (1) Portable trench boxes or sliding trench shields may be used, in lieu of a shoring system or sloping, for the protection of employees.

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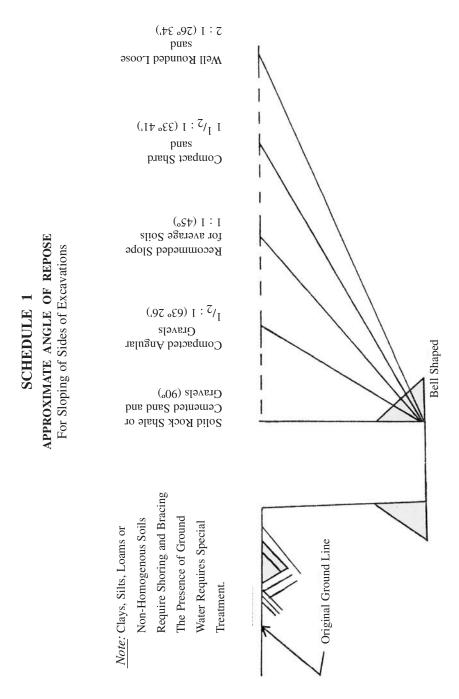
- (2) Where the trench boxes or the trench shields referred to in subparagraph (1) are used, they shall be designed, constructed and maintained so as to provide protection equal to or greater than the shoring required for the trench.
- 60. Backfilling and the removal of trench supports shall Backfilling and removal of progress together from the bottom of the trench. Jacks or braces trench supports. shall be used, released slowly and, where the soil is unstable, ropes shall be used to pull out the jacks or braces from above after the employees clear the trench.

**61.** A person who contravenes the provisions of this Order is Offence and guilty of an offence and liable on summary conviction to a fine of one thousand dollars or to imprisonment for six months or to both such fine and imprisonment.

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#### **SCHEDULE 2**

Regulation 3(2)(c).

## PERMISSIBLE NOISE EXPOSURES

Duration per day, hours Sound level d BA res							
8						90	
6						92	
4						95	
3						97	
2						100	
$1^{1}/_{2}$						102	
1						105	
1/2						110	
$\frac{1}{4}$ or less						115	

Where the daily noise exposure is made up of two or more periods of noise exposure of different levels, their combined effect should be taken into consideration. Exposure to different levels for various periods of time shall be computed in accordance with the formula—

$$F_{6} = -\frac{T1}{L1} + \frac{T2}{L2} + \frac{L}{Ln}$$

Where—

 $F_6$  = the equivalent noise exposure factor;

T = the period of noise exposure at any essentially constant level;

L = the duration of the permissible noise exposure at the constant

Where the value of  $F_6$  exceeds 1 the exposure exceeds permissible levels. Exposure to impulsive or impact noise should not exceed 140 dB peak sound

pressure level.

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TRENCH SHORING, MINIMUM REQUIREMENTS

SCHEDULE 3

SIZE AND SPACING OF MEMBERS	mum spa		Hori- zontal	Feet	9	9	9	9	9	9	9	9	9	9
			Verti- cal	Feet	4	4	4	4	4		4	4	4	4
			12 to 15 feet	Inches	8 x 9	8 x 9	8 x 8	8 x 8	8 x 8	8 x 8	8 x 10	8 x 10	10 x 10	10 x 12
	Cross braces <sup>1</sup>	Cross braces Width of trench	9 to 12 feet	Inches	9 x 9	9 x 9	6 x 8	6 x 8	6 x 8	8 x 9	8 x 8	8 x 8	8 x 10	10 x 10 10 x 12
			6 to 9 feet	Inches	4 x 6	4 x 6	9 x 9	9 x 9	9 x 9	9 x 9	8 x 9	6 x 8	8 x 8	8 x 10
			3 to 6 feet	Inches	4 x 4	4 x 4	4 x 6	4 x 6	4 x 6	4 x 6	9 x 9	9 x 9	6 x 8	8 x 8
			Up to 3 feet	Inches	2 x 6	2 x 6	4 x 4	4 x 4	4 x 4	4 x 4	4 x 6	4 x 6	4 x 12	4 x 12
ZE AND	Stringers	Maxi-	spacing	Feet	_	4	4	4	4	4	4	4	4	4
SI		Minimum Maxi-		Inches		4 x 6	4 x 6	6 x 8	4 x 6	4 x 6	4 x 6	8 x 10	4 x 12	8 x 9
	ıts	Maxi-	spacing	Feet	9	3	Close Sheeting	Close Sheeting	4	2	Close Sheeting	Close Sheeting	Close Sheeting	Close Sheeting
	Uprights	Minimum		Inches	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 4 or 2 x 6	3 x 6	3 x 6	3 x 6
Kind or condition of earth					Hard, compact	Likely to crack	Soft, sandy, or filled	Hydrostatic pressure	Hard	Likely to crack	Soft, sandy, or filled	Hydrostatic pressure	All kinds or conditions	All kinds or conditions
		Depth of trench		Feet	5 to 10				10 to 15				15 to 20	Over 20