STATUTORY INSTRUMENTS

2000 No. 128

The Pressure Systems Safety Regulations 2000

PART I

INTRODUCTION

Citation and commencement

1. These Regulations may be cited as the Pressure Systems Safety Regulations 2000 and shall come into force on 21st February 2000.

Interpretation

- 2.—(1) In these Regulations, unless the context otherwise requires—
 - "the 1974 Act" means the Health and Safety at Work etc. Act 1974;
 - "the CDGCPL Regulations" means the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996(1);
 - "competent person" means a competent individual person (other than an employee) or a competent body of persons corporate or unincorporate; and accordingly any reference in these Regulations to a competent person performing a function includes a reference to his performing it through his employees;
 - "danger" in relation to a pressure system means reasonably foreseeable danger to persons from system failure, but (except in the case of steam) it does not mean danger from the hazardous characteristics of the relevant fluid other than from its pressure;
 - "examination" means a careful and critical scrutiny of a pressure system or part of a pressure system, in or out of service as appropriate, using suitable techniques, including testing where appropriate, to assess—
 - (a) its actual condition; and
 - (b) whether, for the period up to the next examination, it will not cause danger when properly used if normal maintenance is carried out, and for this purpose "normal maintenance" means such maintenance as it is reasonable to expect the user (in the case of an installed system) or owner (in the case of a mobile system) to ensure is carried out independently of any advice from the competent person making the examination;

[&]quot;the Executive" means the Health and Safety Executive;

[&]quot;installed system" means a pressure system other than a mobile system;

[&]quot;maximum allowable pressure" and "minimum allowable pressure" mean the maximum pressure and minimum pressure respectively for which a pressure vessel is designed;

[&]quot;mobile system" means a pressure system which can be readily moved between and used in different locations but it does not include a pressure system of a locomotive;

"owner" in relation to a pressure system means the employer or self-employed person who owns the pressure system or, if he does not have a place of business in Great Britain, his agent in Great Britain or, if there is no such agent, the user;

"pipeline" means a pipe or system of pipes used for the conveyance of relevant fluid across the boundaries of premises, together with any apparatus for inducing or facilitating the flow of relevant fluid through, or through a part of, the pipe or system, and any valves, valve chambers, pumps, compressors and similar works which are annexed to, or incorporated in the course of, the pipe or system;

"pipework" means a pipe or system of pipes together with associated valves, pumps, compressors and other pressure containing components and includes a hose or bellows but does not include a pipeline or any protective devices;

"pressure system" means-

- (a) a system comprising one or more pressure vessels of rigid construction, any associated pipework and protective devices;
- (b) the pipework with its protective devices to which a transportable pressure receptacle is, or is intended to be, connected; or
- (c) a pipeline and its protective devices,

which contains or is liable to contain a relevant fluid, but does not include a transportable pressure receptacle;

"protective devices" means devices designed to protect the pressure system against system failure and devices designed to give warning that system failure might occur, and include bursting discs;

"relevant fluid" means—

- (a) steam;
- (b) any fluid or mixture of fluids which is at a pressure greater than 0.5 bar above atmospheric pressure, and which fluid or mixture of fluids is—
 - (i) a gas, or
 - (ii) a liquid which would have a vapour pressure greater than 0.5 bar above atmospheric pressure when in equilibrium with its vapour at either the actual temperature of the liquid or 17.5 degrees Celsius; or
- (c) a gas dissolved under pressure in a solvent contained in a porous substance at ambient temperature and which could be released from the solvent without the application of heat;

"safe operating limits" means the operating limits (incorporating a suitable margin of safety) beyond which system failure is liable to occur;

"scheme of examination" means the written scheme referred to in regulation 8;

"system failure" means the unintentional release of stored energy (other than from a pressure relief system) from a pressure system;

"transportable pressure receptacle" has the same meaning as in regulation 2(1) of the CDGCPL Regulations;

"user" in relation to a pressure system, or a vessel to which regulation 15 applies, means the employer or self-employed person who has control of the operation of the pressure system or such a vessel or, in the case of a pressure system or such a vessel at or in—

(a) a mine within the meaning of section 180 of the Mines and Quarries Act 1954(2) it means the manager for the time being of that mine;

- (b) a quarry within the meaning of regulation 3 of the Quarries Regulations 1999(3) it means the operator for the time being of that quarry.
- (2) Any reference in these Regulations to anything being in writing or written (including any reference to anything being kept in writing) shall include reference to its being in a form—
 - (a) in which it is capable of being reproduced as a written copy when required;
 - (b) which is secure from loss or unauthorised interference.
 - (3) In these Regulations, unless the context otherwise requires, any reference to-
 - (a) a numbered regulation or Schedule is a reference to the regulation or Schedule in these Regulations so numbered;
 - (b) a numbered paragraph is a reference to that paragraph so numbered in the regulation or Schedule in which that reference appears.

Application and duties

- 3.—(1) These Regulations shall apply–
 - (a) in Great Britain; and
 - (b) outside Great Britain as sections 1 to 59 and 80 to 82 of the 1974 Act apply by virtue of articles 7 and 8(a) of the Health and Safety at Work etc. Act 1974 (Application outside Great Britain) Order 1995(4) save in relation to anything to which articles 4 to 6 of that Order apply.
- (2) Subject to Schedule 1 (which sets out exceptions to the Regulations), these Regulations shall apply to or in relation to pressure systems which are used or intended to be used at work.
- (3) Any requirement or prohibition imposed by these Regulations on an employer in respect of the activities of his employees shall also extend to a self-employed person in respect of his own activities at work.
 - (4) Any requirement or prohibition imposed by these Regulations on a person—
 - (a) who designs, manufactures, imports or supplies any pressure system, or any article which is intended to be a component part of any pressure system, shall extend only to such a system or article designed, manufactured, imported or supplied in the course of a trade, business or other undertaking carried on by him (whether for profit or not);
 - (b) who designs or manufactures such a system or article shall extend only to matters within his control.
- (5) The provisions of Schedule 2 (which relate to the modification of duties in cases where pressure systems are supplied by way of lease, hire or other arrangements) shall have effect.

PART II

GENERAL

Design and construction

4.—(1) Any person who designs, manufactures, imports or supplies any pressure system or any article which is intended to be a component part of any pressure system shall ensure that paragraphs (2) to (5) are complied with.

⁽³⁾ S.I. 1999/2024.

⁽⁴⁾ S.I. 1995/263.

- (2) The pressure system or article, as the case may be, shall be properly designed and properly constructed from suitable material, so as to prevent danger.
- (3) The pressure system or article, as the case may be, shall be so designed and constructed that all necessary examinations for preventing danger can be carried out.
- (4) Where the pressure system has any means of access to its interior, it shall be so designed and constructed as to ensure, so far as practicable, that access can be gained without danger.
- (5) The pressure system shall be provided with such protective devices as may be necessary for preventing danger; and any such device designed to release contents shall do so safely, so far as is practicable.

Provision of information and marking

- **5.**—(1) Any person who–
 - (a) designs for another any pressure system or any article which is intended to be a component part thereof; or
 - (b) supplies (whether as manufacturer, importer or in any other capacity) any pressure system or any such article, shall provide sufficient written information concerning its design, construction, examination, operation and maintenance as may reasonably foreseeably be needed to enable the provisions of these Regulations to be complied with.
- (2) The employer of a person who modifies or repairs any pressure system shall provide sufficient written information concerning the modification or repair as may reasonably foreseeably be needed to enable the provisions of these Regulations to be complied with.
 - (3) The information referred to in paragraph (1) shall—
 - (a) in the case of paragraph (1)(a), be provided with the design;
 - (b) in the case of paragraph (1)(b), be provided with the pressure system or article when it is supplied by that person;
 - (c) in the case of paragraph (2), be provided to the user of the system immediately after the modification or repair.
- (4) Any person who manufactures a pressure vessel shall ensure that before it is supplied by him the information specified in Schedule 3 is marked on the vessel, or on a plate attached to it, in a visible, legible and indelible form; and no person shall import a pressure vessel unless it is so marked.
- (5) No person shall remove from a pressure vessel any mark or plate containing any of the information specified in Schedule 3.
- (6) No person shall falsify any mark on a pressure system, or on a plate attached to it, relating to its design, construction, test or operation.

Installation

6. The employer of a person who installs a pressure system at work shall ensure that nothing about the way in which it is installed gives rise to danger or otherwise impairs the operation of any protective device or inspection facility.

Safe operating limits

- 7.—(1) The user of an installed system and owner of a mobile system shall not operate the system or allow it to be operated unless he has established the safe operating limits of that system.
 - (2) The owner of a mobile system shall, if he is not also the user of it—

- (a) supply the user with a written statement specifying the safe operating limits of that system established pursuant to paragraph (1); or
- (b) ensure that the system is legibly and durably marked with such safe operating limits and that the mark is clearly visible.

Written scheme of examination

- **8.**—(1) The user of an installed system and owner of a mobile system shall not operate the system or allow it to be operated unless he has a written scheme for the periodic examination, by a competent person, of the following parts of the system, that is to say—
 - (a) all protective devices;
 - (b) every pressure vessel and every pipeline in which (in either case) a defect may give rise to danger; and
- (c) those parts of the pipework in which a defect may give rise to danger, and such parts of the system shall be identified in the scheme.
 - (2) The said user or owner shall-
 - (a) ensure that the scheme has been drawn up, or certified as being suitable, by a competent person;
 - (b) ensure that-
 - (i) the content of the scheme is reviewed at appropriate intervals by a competent person for the purpose of determining whether it is suitable in current conditions of use of the system; and
 - (ii) the content of the scheme is modified in accordance with any recommendations made by that competent person arising out of that review.
- (3) No person shall draw up or certify a scheme of examination under paragraph (2)(a) unless the scheme is suitable and—
 - (a) specifies the nature and frequency of examination;
 - (b) specifies any measures necessary to prepare the pressure system for safe examination other than those it would be reasonable to expect the user (in the case of an installed system) or owner (in the case of a mobile system) to take without specialist advice; and
 - (c) where appropriate, provides for an examination to be carried out before the pressure system is used for the first time.
- (4) References in paragraphs (2) and (3) to the suitability of the scheme are references to its suitability for the purposes of preventing danger from those parts of the pressure system included in the scheme.

Examination in accordance with the written scheme

- **9.**—(1) Subject to paragraph (7), the user of an installed system and the owner of a mobile system shall–
 - (a) ensure that those parts of the pressure system included in the scheme of examination are examined by a competent person within the intervals specified in the scheme and, where the scheme so provides, before the system is used for the first time; and
 - (b) before each examination take all appropriate safety measures to prepare the system for examination, including any such measures as are specified in the scheme of examination pursuant to regulation 8(3)(b).

- (2) Where a competent person undertakes an examination for the purposes of paragraph (1) he shall carry out that examination properly and in accordance with the scheme of examination.
- (3) Where a competent person has carried out an examination for the purposes of paragraph (1) he shall, subject to paragraph (4) and regulation 14(4), make a written report of the examination, sign it or add his name to it, date it and send it to the user (in the case of an installed system) or owner (in the case of a mobile system); and the said report shall be so sent as soon as is practicable after completing the examination (or, in the case of integrated installed systems where the examination is part of a series, as soon as is practicable after completing the last examination in that series), and in any event to arrive—
 - (a) within 28 days of the completion of the examination (or, in the case of integrated installed systems where the examination is part of a series, within 28 days of the completion of the last examination in that series); or
- (b) before the date specified in the report under paragraph (5)(b), whichever is sooner.
- (4) Where the competent person referred to in paragraph (3) is the user (in the case of an installed system) or owner (in the case of a mobile system) the requirement in that paragraph to send the report to the user or owner shall not apply, but he shall make the report by the time it would have been required to have been sent to him under that paragraph if he had not been the competent person.
 - (5) The report required by paragraph (3) shall-
 - (a) state which parts of the pressure system have been examined, the condition of those parts and the results of the examination;
 - (b) specify any repairs or modifications to, or changes in the established safe operating limits of, the parts examined which, in the opinion of the competent person, are necessary to prevent danger or to ensure the continued effective working of the protective devices, and specify the date by which any such repairs or modifications must be completed or any such changes to the safe operating limits must be made;
 - (c) specify the date within the limits set by the scheme of examination after which the pressure system may not be operated without a further examination under the scheme of examination; and
 - (d) state whether in the opinion of the competent person the scheme of examination is suitable (for the purpose of preventing danger from those parts of the pressure system included in it) or should be modified, and if the latter state the reasons.
- (6) The user of an installed system and the owner of a mobile system which has been examined under this regulation shall ensure that the system is not operated, and no person shall supply such a mobile system for operation, after (in each case)—
 - (a) the date specified under paragraph (5)(b), unless the repairs or modifications specified under that paragraph have been completed, and the changes in the established safe operating limits so specified have been made; or
 - (b) the date specified under paragraph (5)(c) (or, if that date has been postponed under paragraph (7), the postponed date) unless a further examination has been carried out under the scheme of examination.
- (7) The date specified in a report under paragraph (5)(c) may be postponed to a later date by agreement in writing between the competent person who made the report and the user (in the case of an installed system) or owner (in the case of a mobile system) if—
 - (a) such postponement does not give rise to danger;
 - (b) only one such postponement is made for any one examination; and

- (c) such postponement is notified by the user or owner in writing to the enforcing authority for the premises at which the pressure system is situated, before the date specified in the report under paragraph (5)(c).
- (8) Where the competent person referred to in paragraph (7) is the user (in the case of an installed system) or owner (in the case of a mobile system) the reference in that paragraph to an agreement in writing shall not apply, but there shall be included in the notification under sub-paragraph (c) of that paragraph a declaration that the postponement will not give rise to danger.
- (9) The owner of a mobile system shall ensure that the date specified under paragraph (5)(c) is legibly and durably marked on the mobile system and that the mark is clearly visible.

Action in case of imminent danger

- 10.—(1) If the competent person carrying out an examination under the scheme of examination is of the opinion that the pressure system or part of the pressure system will give rise to imminent danger unless certain repairs or modifications have been carried out or unless suitable changes to the operating conditions have been made, then without prejudice to the requirements of regulation 9, he shall forthwith make a written report to that effect identifying the system and specifying the repairs, modifications or changes concerned and give it—
 - (a) in the case of an installed system, to the user; or
 - (b) in the case of a mobile system, to the owner and to the user, if any,

and the competent person shall within 14 days of the completion of the examination send a written report containing the same particulars to the enforcing authority for the premises at which the pressure system is situated.

- (2) Where a report is given in accordance with paragraph (1) to-
 - (a) the user of a pressure system, he shall ensure that the system (or, if the report only affects a discrete part of the system, that part) is not operated;
 - (b) the owner of a mobile system, he shall take all reasonably practicable steps to ensure that the system (or, if the report only affects a discrete part of the system, that part) is not operated,

until the repairs, modifications or changes, as the case may be, have been carried out or made.

(3) Where the competent person referred to in paragraph (1) is the user (in the case of an installed system) or owner (in the case of a mobile system) the requirement in that paragraph to give the report to the user or owner shall not apply, and the reference in paragraph (2) to the giving of the report to the user or owner shall be construed as a reference to the making of the report by him.

Operation

- 11.—(1) The user of an installed system and the owner of a mobile system shall provide for any person operating the system adequate and suitable instructions for—
 - (a) the safe operation of the system; and
 - (b) the action to be taken in the event of any emergency.
- (2) The user of a pressure system shall ensure that it is not operated except in accordance with the instructions provided in respect of that system under paragraph (1)(a).

Maintenance

12. The user of an installed system and the owner of a mobile system shall ensure that the system is properly maintained in good repair, so as to prevent danger.

Modification and repair

13. The employer of a person who modifies or repairs a pressure system at work shall ensure that nothing about the way in which it is modified or repaired gives rise to danger or otherwise impairs the operation of any protective device or inspection facility.

Keeping of records, etc.

- 14.—(1) The user of an installed system and the owner of a mobile system shall keep-
 - (a) the last report relating to the system made by the competent person pursuant to regulation 9(3);
 - (b) any such previous reports if they contain information which will materially assist in assessing whether—
 - (i) the system is safe to operate, or
 - (ii) any repairs or modifications to the system can be carried out safely;
 - (c) any-
 - (i) information provided pursuant to regulation 5 of these Regulations; or
 - (ii) instructions specified in section 3.4 of Annex I to Directive 97/23/EC of the European Parliament and of the Council on the approximation of the laws of the Member States concerning pressure equipment(5), which Annex is set out in Schedule 2 to the Pressure Equipment Regulations 1999(6), and provided pursuant to regulation 7(1) and (3) or 8(1) and (3)(b)(i) of those Regulations,

which relate to those parts of the pressure system included in the scheme of examination; and

- (d) any agreement made pursuant to regulation 9(7), and, in a case to which regulation 9(8) applies, a copy of the notification referred to in regulation 9(7)(c), until a further examination has been carried out since that agreement or notification under the scheme of examination.
- (2) Anything required to be kept by this regulation shall be kept-
 - (a) in the case of an installed system, at the premises where the system is installed, or at other premises approved for the purposes of this sub-paragraph by the enforcing authority responsible for enforcing these Regulations at the premises where the system is installed;
 - (b) in the case of a mobile system, at the premises in Great Britain from which the deployment of the system is controlled;
 - (c) in a case to which regulation 2(2) applies, by means whereby it is capable of being reproduced as required by regulation 2(2)(a) at the premises referred to in subparagraph (a) or (b) as appropriate.
- (3) Where the user or owner of a pressure system or part thereof changes, the previous user or owner shall as soon as is practicable give to the new user or owner in writing anything (relating to the system or part thereof, as the case may be) kept by him under this regulation.

Precautions to prevent pressurisation of certain vessels

- 15.—(1) Paragraph (2) shall apply to a vessel—
 - (a) which is constructed with a permanent outlet to the atmosphere or to a space where the pressure does not exceed atmospheric pressure; and

⁽⁵⁾ O.J. No. L181, 9.7.97, p. 1.

⁽⁶⁾ S.I. 1999/2001.

- (b) which could become a pressure vessel if that outlet were obstructed.
- (2) The user of a vessel to which this paragraph applies shall ensure that the outlet referred to in sub-paragraph (a) of paragraph (1) is at all times kept open and free from obstruction when the vessel is in use.

PART III

MISCELLANEOUS

Defence

- **16.**—(1) In any proceedings for an offence for a contravention of any of the provisions of these Regulations it shall, subject to paragraphs (2) and (3), be a defence for the person charged to prove—
 - (a) that the commission of the offence was due to the act or default of another person not being one of his employees (hereinafter called "the other person"); and
 - (b) that he took all reasonable precautions and exercised all due diligence to avoid the commission of the offence.
- (2) The person charged shall not, without the leave of the court, be entitled to rely on the defence referred to in paragraph (1) unless, within a period ending seven clear days—
 - (a) before the hearing to determine mode of trial, where the proceedings are in England or Wales:
 - (b) before the intermediate diet, where the proceedings are summary proceedings in Scotland;or
 - (c) before the first diet, where the proceedings are solemn proceedings in Scotland,

he has served on the prosecutor a notice in writing giving such information identifying or assisting in the identification of the other person as was then in his possession.

(3) Where a contravention of these regulations by any person is due to the act or default of the other person, that other person shall be guilty of the offence which would, but for any defence under this regulation available to the first-mentioned person, be constituted by the act or default.

Power to grant exemptions

- 17.—(1) Subject to paragraph (2), the Executive may, by a certificate in writing, exempt any person or class of persons or any type or class of pressure system from the application of any of the requirements or prohibitions imposed by these Regulations, and any such exemption may be granted subject to conditions and to a limit of time, and may be revoked by a certificate in writing at any time.
- (2) The Executive shall not grant any such exemption unless, having regard to the circumstances, and in particular to—
 - (a) the conditions, if any, which it proposes to attach to the exemption; and
- (b) any other requirement imposed by or under any enactment which apply to the case, it is satisfied that the health and safety or persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

Repeals and revocations

18.—(1) Sections 34 to 38 of the Factories Act 1961(7) are repealed.

(2) The Pressure Systems and Transportable Gas Containers Regulations 1989(8), regulation 21(6) of and Schedule 6 to the CDGCPL Regulations and regulation 3 of and Schedule 2 to the Carriage of Dangerous Goods (Amendment) Regulations 1999(9) are revoked.

Transitional provision

19. The substitution of provisions in these Regulations for provisions of the Pressure Systems and Transportable Gas Containers Regulations 1989 shall not affect the continuity of the law; and accordingly anything done under or for the purposes of such provision of the 1989 Regulations shall have effect as if done under or for the purposes of any corresponding provision of these Regulations.

Signed by authority of the Secretary of State

Whitty
Parliamentary Under Secretary of State,
Department of the Environment, Transport and
the Regions

20th January 2000

⁽⁸⁾ S.I. 1989/2169.

⁽**9**) S.I. 1999/303.