Regulation 6(8)

GENERAL SAFETY MEASURES

1. The following measures are those specified for the purposes of regulation 6(8).

WORKPLACE AND WORK PROCESSES

- 2. Ensuring that the workplace is designed, constructed and maintained so as to reduce risk.
- **3.** Designing, constructing, assembling, installing, providing and using suitable work processes so as to reduce risk.
 - 4. Maintaining work processes in an efficient state, in efficient working order and in good repair.
 - 5. Ensuring that equipment and protective systems meet the following requirements—
 - (a) where power failure can give rise to the spread of additional risk, equipment and protective systems must be able to be maintained in a safe state of operation independently of the rest of the plant in the event of power failure;
 - (b) means for manual override must be possible, operated by employees competent to do so, for shutting down equipment and protective systems incorporated within automatic processes which deviate from the intended operating conditions, provided that the provision or use of such means does not compromise safety;
 - (c) on operation of emergency shutdown, accumulated energy must be dissipated as quickly and as safely as possible or isolated so that it no longer constitutes a hazard; and
 - (d) necessary measures must be taken to prevent confusion between connecting devices.

ORGANISATIONAL MEASURES

- 6. The application of appropriate systems of work including—
 - (a) the issuing of written instructions for the carrying out of the work; and
 - (b) a system of permits to work with such permits being issued by a person with responsibility for this function prior to the commencement of the work concerned,

where the work is carried out in hazardous places or involves hazardous activities.

SCHEDULE 2

Regulation 7(1)

(which substantially reproduces the provisions of Annex I of Council Directive 99/92/EC(1)) CLASSIFICATION OF PLACES WHERE EXPLOSIVE ATMOSPHERES MAY OCCUR

Places where explosive atmospheres may occur

1. A place in which an explosive atmosphere may occur in such quantities as to require special precautions to protect the health and safety of the workers concerned is deemed to be hazardous within the meaning of these Regulations.

A place in which an explosive atmosphere is not expected to occur in such quantities as to require special precautions is deemed to be non-hazardous within the meaning of these Regulations.

OJ No. L 23, 28.1.00, p. 57.

Classification of hazardous places

2. Hazardous places are classified in terms of zones on the basis of the frequency and duration of the occurrence of an explosive atmosphere.

Zone 0

A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.

Zone 1

A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.

Zone 2

A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Zone 20

A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods or frequently.

Zone 21

A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.

Zone 22

A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Notes:

- 1. Layers, deposits and heaps of combustible dust must be considered as any other source which can form an explosive atmosphere.
- **2.** "Normal operation" means the situation when installations are used within their design parameters.

SCHEDULE 3

Regulation 7(2)

CRITERIA FOR THE SELECTION OF EQUIPMENT AND PROTECTIVE SYSTEMS

1. Equipment and protective systems for all places in which explosive atmospheres may occur must be selected on the basis of the requirements set out in the Equipment and Protective

Systems Intended for Use in Potentially Explosive Atmospheres Regulations 1996(2) unless the risk assessment finds otherwise.

- **2.** In particular, the following categories of equipment must be used in the zones indicated, provided they are suitable for gases, vapours, mists, dusts or mists and dusts, as appropriate:
 - in zone 0 or zone 20, category 1 equipment,
 - in zone 1 or zone 21, category 1 or 2 equipment,
 - in zone 2 or zone 22, category 1, 2 or 3 equipment.
 - **3.** For the purposes of this Schedule and regulations 7(2) and 17(1)—
 - (a) "equipment" means machines, apparatus, fixed or mobile devices, control components and instrumentation thereof and detection or prevention systems which, separately or jointly, are intended for the generation, transfer, storage, measurement, control and conversion of energy and the processing of material, as the case may be, and which are capable of causing an explosion through their own potential sources of ignition;
 - (b) "protective systems" means devices other than components of equipment which are intended to halt incipient explosions immediately or limit the effective range of an explosion or both, as the case may be, and which systems are separately placed on the market for use as autonomous systems;
 - (c) "devices" means safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but required for or contributing to the safe functioning of equipment and protective systems with respect to the risks of explosion;
 - (d) "component" means any item essential to the safe functioning of equipment and protective systems but with no autonomous function; and
 - (e) "potentially explosive atmosphere" means an atmosphere which could become explosive due to local and operational conditions.

⁽²⁾ S.I. 1996/192, amended by S.I. 2001/3766.

Regulation 7(3)

(which substantially reproduces the provisions of Annex III of Council Directive 99/92/EC)
WARNING SIGN FOR PLACES WHERE EXPLOSIVE ATMOSPHERES MAY OCCUR



Distinctive features:

- (a) triangular shape;
- (b) black letters on a yellow background with black edging (the yellow part to take up at least 50% of the area of the sign).

SCHEDULE 5

Regulation 10

LEGISLATION CONCERNED WITH THE MARKING OF CONTAINERS AND PIPES

The Classification and Labelling of Explosives Regulations 1983 (S.I. 1983/1140).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (S.I. 2002/1689).

The Health and Safety (Safety Signs and Signals) Regulations 1996 (S.I. 1996/341).

The Radioactive Material (Road Transport) (Great Britain) Regulations 1996 (S.I. 1996/1350).

The Carriage of Dangerous Goods by Rail Regulations 1996 (S.I. 1996/2089).

The Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations 1996 (S.I. 1996/2090).

The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996 (S.I. 1996/2092).

The Carriage of Explosives by Road Regulations 1996 (S.I. 1996/2093).

The Carriage of Dangerous Goods by Road Regulations 1996 (S.I. 1996/2095).

The Good Laboratory Practice Regulations 1997 (S.I. 1997/654).

Regulation 15

AMENDMENTS

PART 1

- 1. In section 2 of the Celluloid and Cinematograph Film Act 1922(3) (purposes to which Act applies), after paragraph (iii) of the proviso insert "and
 - (iv) the provisions of this Act shall not apply to a workplace within the meaning of the Fire Precautions (Workplace) Regulations 1997(4).".
 - **2.**—(1) The Petroleum (Consolidation) Act 1928(5) is amended as follows.
- (2) In section 2 (provisions as to licences), omit the proviso to subsection (1) (special provision for harbours).
- (3) Omit section 9 (byelaws as to loading, conveyance and landing of petroleum-spirit in and upon canals) and section 17 (powers of officers as to testing petroleum-spirit).
- (4) In section 18 (warrants to search for and seize petroleum-spirit), for subsection (4) substitute—
 - "(4) This section does not apply to—
 - (a) a workplace within the meaning of the Dangerous Substances and Explosive Atmospheres Regulations 2002 used, or intended for use, for the dispensing of petroleum-spirit, or
 - (b) carriage to which the Carriage of Dangerous Goods by Road Regulations 1996(6) apply.".
 - (5) In section 23 (interpretation)—
 - (a) after the definition of "Contravention" insert—
 - ""the Directive" means Commission Directive 92/69 EEC(7) adapting to technical progress for the seventeenth time Council Directive 67/548/EEC(8) on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances:
 - "Dispensing" means manual or electrical pumping of petroleum-spirit from a storage tank into the fuel tank for an internal combustion engine, whether for the purposes of sale or not:"; and
 - (b) for the definition of "Petroleum-spirit" substitute—
 - ""Petroleum-spirit" means petroleum which, when tested in accordance with Part A.9. of the Annex to the Directive, has a flash point (as defined in that Part) of less than 21°C:".

^{(3) 1922} c. 35. Section 2 is amended by the Cinemas Act 1985 (c. 13), section 24(1) and Schedule 2, paragraph 1 and S.I. 1992/1811

⁽⁴⁾ S.I. 1997/1840, amended by S.I. 1999/1877 and 1999/3242.

^{(5) 1928} c. 32. Section 2(1) is amended by the Local Government Act 1972 (c. 70) section 251 and Schedule 29, Part II paragraph 32, by the Local Government Act 1985 (c. 51) section 37 and Schedule II paragraph 4 and by the Local Government (Wales) Act 1994 (c. 19) section 22(3) and Schedule 9 paragraph 2; section 18 is amended by S.I. 1974/1942, 1986/1951 and 1992/743; section 23 is amended by the Statute Law (Repeals) Act 1993 (c. 50) and by S.I. 1974/1942, 1992/1811, 1993/1746 and 1994/3247; section 25A is inserted by S.I. 1999/743.

⁽⁶⁾ S.I. 1996/2095, amended by S.I. 1998/2885, 1999/257, 1999/303 and 2001/1426.

⁽⁷⁾ OJ No. L383, 29.12.92, p. 113.

⁽⁸⁾ OJ No. 196, 16.8.67, p. 1.

- (6) Re-number section 25A(9) (places to which Act does not apply) as subsection (1) and insert at the end "or
 - (c) any workplace within the meaning of the Dangerous Substances and Explosive Atmospheres Regulations 2002, apart from a workplace used, or intended for use, for dispensing petroleum-spirit.
 - (2) For the purposes of subsection (1)(c), any part of a workplace where petroleum-spirit is kept other than for dispensing is not to be regarded as used, or intended for use, for dispensing petroleum-spirit.".
- **3.**—(1) The Petroleum-Spirit (Motor Vehicles etc.) Regulations 1929(10) are amended as follows.
 - (2) For regulation 2 (keeping of petroleum-spirit), substitute—
 - "2.—(1) Subject to paragraph (2), the petroleum-spirit shall not be kept otherwise than in metal vessels so constructed and maintained in such a condition as—
 - (a) to be reasonably secure against breakage; and
 - (b) to prevent the leakage of any liquid or vapour therefrom.
 - (2) Where the vessel in which the petroleum-spirit is to be kept is a fuel tank for an internal combustion engine, the requirement in paragraph (1) that the vessel be made of metal shall not apply.".
- (3) In regulation 7, insert at the beginning of paragraph (1) "Subject to paragraph (3) below," and after paragraph (2) insert—
 - "(3) The disapplication from the requirements of paragraph (1) above in respect of a fuel tank for an internal combustion engine shall only apply to a fuel tank which remains connected to the fuel system of the internal combustion engine it is serving in the way it would ordinarily be so connected when that engine is running.".
- (4) In regulation 15A (disapplication), omit "and" at the end of paragraph (a) and insert after paragraph (b)—

"or

- (c) any workplace within the meaning of the Dangerous Substances and Explosive Atmospheres Regulations 2002.".
- **4.** The Petroleum (Liquid Methane) Order 1957(11) is amended by the insertion at the end of the Schedule (provisions of the Petroleum (Consolidation) Act 1928 not applied to liquid methane), of "Section 25A(1)(c) and (2)".
- **5.**—(1) The Petroleum (Consolidation) Act 1928 (Enforcement) Regulations 1979(**12**) are amended as follows.
- (2) In regulation 1(2) (citation, commencement and interpretation), after the definition of "the 1974 Act" insert—

""the Directive" means Commission Directive 92/69 EEC(13) adapting to technical progress for the seventeenth time Council Directive 67/548/EEC(14) on the approximation of laws,

⁽⁹⁾ Section 25A was inserted by S.I. 1999/743.

⁽¹⁰⁾ S.I. 1929/952, amended by S.I. 1979/427, 1982/630, 1992/1811 and 1999/743; the last mentioned instrument inserted regulation 15A(a) and (b).

⁽¹¹⁾ S.I. 1957/859.

⁽¹²⁾ S.I. 1979/427, amended by S.I. 1981/1059, 1982/630 and 1986/1951.

⁽¹³⁾ OJ No. L383, 29.12.92, p. 113.

⁽¹⁴⁾ OJ No. 196, 16.8.67, p. 1.

regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances;

"dispensing" means manual or electrical pumping of petroleum-spirit from a storage tank into the fuel tank for an internal combustion engine, whether for the purposes of sale or not, and "dispenser" shall be construed accordingly;

"Her Majesty's Forces" means any of the naval, military or air forces of the Crown, whether raised inside or outside the United Kingdom and whether any such force is a regular, auxiliary or reserve force, and includes any civilian employed by those forces;

"non-retail petroleum filling station" means premises used, or intended for use, for dispensing petroleum-spirit for use in motor vehicles, ships or aircraft, but it does not include any retail petroleum filling station;

"petroleum-spirit" means petroleum which, when tested in accordance with Part A.9. of the Annex to the Directive has a flash point (as defined in that Part) of less than 21°C;

"retail petroleum filling station" means premises used, or intended for use, for dispensing petroleum-spirit to the public for use in motor vehicles, ships or aircraft by ways of sale;

"ship" includes every description of vessel used in navigation propelled by means of an internal combustion engine and any reference to "ship" in these Regulations includes a reference to hovercraft; and

"vehicle fuel" means petroleum-spirit or any other substance which provides the power in an internal-combustion engine in a motor vehicle, ship or aircraft."

- (3) In regulation 2(1) (enforcing authorities)—
 - (a) for "Subject to paragraphs (2) and (3)" substitute "Subject to paragraphs (2) to (4)";
 - (b) omit subparagraph (a)(i), (iii) and (iv);
 - (c) insert after subparagraph (c)—
 - "(d) the Dangerous Substances and Explosive Atmospheres Regulations 2002—
 - (i) in so far as they apply to any activity relating to fuelling motor vehicles and ships with vehicle fuel, and fuelling aircraft with petroleum-spirit, at a retail petroleum filling station, including any vehicle fuel dispenser, other apparatus or storage tank for storing vehicle fuel used thereat in connection with the fuelling concerned of those respective kinds of fuelling; and
 - (ii) in so far as they apply to any activity relating to fuelling motor vehicles, ships and aircraft with petroleum-spirit at a non-retail petroleum filling station, including any petroleum-spirit dispenser, other apparatus or storage tank for storing petroleum-spirit used thereat in connection with that fuelling."; and
 - (d) after paragraph (3), insert—
 - "(4) Nothing in paragraph (1)(d) shall apply to—
 - (a) Her Majesty's Forces;
 - (b) any establishment to which the Control of Major Accident Hazards Regulations 1999(15) apply by virtue of regulation 3 of those Regulations;
 - (c) any site in respect of which notification of an activity is required pursuant to regulation 3 of the Notification of Installations Handling Hazardous Substances Regulations 1982(16); and

⁽¹⁵⁾ S.I. 1999/743, amended by the Greater London Authority Act 1999 (c. 29), section 328(7), and S.I. 1999/2597.

⁽¹⁶⁾ S.I. 1982/1357, amended by S.I. 1996/825.

- (d) any activity at a retail or a non-retail petroleum filling station connected with repairing motor vehicles, ships or aircraft or retailing goods other than, in relation to a retail petroleum filling station, vehicle fuel and, in relation to a non-retail petroleum filling station, petroleum-spirit."
- **6.**—(1) The Petroleum-Spirit (Plastic Containers) Regulations 1982(17) are amended as follows.
- (2) In regulation 8 (disapplication), omit "and" at the end of paragraph (a) and insert at the end of paragraph (b) "or
 - (c) any workplace within the meaning of the Dangerous Substances and Explosive Atmospheres Regulations 2002.".
- **7.** The Dangerous Substances in Harbour Areas Regulations 1987(18) are amended by the omission of "the Petroleum (Carbide of Calcium) Order 1929" in regulation 29 (application of Part VIII—storage of dangerous substances).
- **8.** The Fire Precautions (Workplace) Regulations 1997(19) are amended by the insertion of "and regulations 1 to 6, 8, 9 and 11 of the Dangerous Substances and Explosive Atmospheres Regulations 2002," after "the 1999 Management Regulations" in paragraph (2)(b) of regulation 9 (disapplication).

PART 2

- 9.—(1) The Fire Certificates (Special Premises) Regulations 1976(20) are amended as follows.
- (2) In paragraph 25 of Part III of Schedule 1 (premises for which a fire certificate is required), for the definition of "highly flammable liquid" substitute—
 - "highly flammable liquid" means any liquid, liquid solution, emulsion or suspension, other than aqueous ammonia, liquefied flammable gas, and liquefied petroleum gas, which—
 - (a) when tested in accordance with Part A.9. of the Annex to the Directive has a flash point (as defined in that Part) of less than 32°C except that, if the flash point determined by using one of the non-equilibrium methods referred to in that Part falls within the range 30°C to 34°C, that flash point shall be confirmed by the use of like apparatus using the appropriate equilibrium method referred to in that Part; and
 - (b) when tested at 50°C (within an accuracy of -0 +5°C) using the procedure referred to in Appendix B to the "Approved Requirements and test methods for the classification and packaging of dangerous goods for carriage"(21) with a heating time of 60 seconds supports combustion,

and for these purposes—

- (i) "aqueous ammonia" means ammonia gas dissolved in water;
- (ii) "the Directive" means Commission Directive 92/69 EEC(22) adapting to technical progress for the seventeenth time Council Directive 67/548/EEC(23) on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances; and

⁽¹⁷⁾ S.I. 1982/630, amended by S.I. 1999/743.

⁽¹⁸⁾ S.I. 1987/37, amended by S.I. 1993/1746, 1994/669, 1994/3247, 1996/2092, 1996/2095, 1997/2367, 1998/2885 and 1999/2029.

⁽¹⁹⁾ S.I. 1997/1840, amended by S.I. 1999/1877 and 1999/3242.

⁽²⁰⁾ S.I. 1976/2003, amended by S.I. 1985/1333, 1987/37 and 1992/1811.

⁽²¹⁾ ISBN 071761221X.

⁽²²⁾ OJ No. L383, 29.12.92, p. 113.

⁽²³⁾ OJ No. 196, 16.8.67, p. 1.

- (iii) "liquefied flammable gas" means any substance which at a temperature of 20°C and a pressure of 760 millimetres of mercury would be a flammable gas, but which is in liquid form as a result of the application of pressure refrigeration or both."
- 10. The Carriage of Dangerous Goods by Road Regulations 1996(24) are amended by the substitution for regulation 20 (unloading of petrol at petroleum filling stations and certain other premises licensed for the keeping of petrol) of—

"Direct filling of fuel tanks with petrol from road tankers

- **20.**—(1) Neither the fuel tank for an internal combustion engine nor a portable container shall be filled or replenished with petrol direct from a road tanker conveying petrol in such circumstances that these Regulations apply to that conveyance.
- (2) Except in relation to Her Majesty's Forces, the enforcing authority for these Regulations and for sections 2 to 4 and section 7 and 8 of the Health and Safety at Work etc. Act 1974 in respect of such filling or replenishing with petrol as is referred to in paragraph (1) at any premises for which a petroleum-spirit licence authorising the keeping of petrol is required under the 1928 Act, shall be the petroleum licensing authority, even if the relevant tanker is on a road at the time of that filling or replenishing.
 - (3) In this regulation—
 - (a) "the 1928 Act" means the Petroleum (Consolidation) Act 1928(25);
 - (b) "the Directive" means Commission Directive 92/69 EEC adapting to technical progress for the seventeenth time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances;
 - (c) "Her Majesty's Forces" means any of the naval, military or air forces of the Crown, whether raised inside or outside the United Kingdom and whether any such force is a regular, auxiliary or reserve force, and includes any civilian employed by those forces;
 - (d) "petrol" means petroleum-spirit intended for use as a fuel for an internal combustion engine;
 - (e) "the petroleum licensing authority" means the local authority empowered to grant petroleum-spirit licences under the 1928 Act for the premises concerned;
 - (f) "petroleum-spirit" means petroleum which, when tested in accordance with Part A.9. of the Annex to the Directive has a flash point (as defined in that Part) of less than 21°C; and
 - (g) "petroleum-spirit licence" means a licence authorising the keeping of petroleum-spirit granted by a local authority empowered under the 1928 Act to grant such a licence or by the Secretary of State or by the Health and Safety Executive.".

⁽²⁴⁾ S.I. 1996/2095, amended by S.I. 1998/2885, 1999/257, 1999/303 and 2001/1426.

^{(25) 1928} c. 32.

Regulation 16

PART 1
REPEAL AND REVOCATION

Column 1	Column 2	Column 3
Title	Reference	Extent of repeal or revocation
The Petroleum (Consolidation) Act 1928	c. 32	The proviso to section 2(1). Section 9.
		Section 17.
		In section 25A, the word "and" at the end of paragraph (a).
The Celluloid, etc. Factories, and Workshops Regulations 1921	S.R. & O. 1921/1825	The whole Regulations.
The Manufacture of Cinematograph Film Regulations 1928	S.R. & O. 1928/82	The whole Regulations.
The Petroleum (Carbide of Calcium) Order 1929	S.R. & O. 1929/992	The whole Order.
The Petroleum (Compressed Gases) Order 1930	S.R. & O. 1930/34	The whole Order.
The Cinematograph Film Stripping Regulations 1939	S.R. & O. 1939/571	The whole Regulations.
The Petroleum (Carbide of Calcium) Order 1947	S.R. & O. 1947/1442	The whole Order.

PART 2 REPEAL AND REVOCATION

Column 1 Title	Column 2 Reference	Column 3 Extent of repeal or revocation
The Factories Act 1961	c. 34	Section 31.
The Magnesium (Grinding of Castings and other Articles) Special Regulations 1946	S.R. & O. 1946/2197	The whole Regulations.
The Dry Cleaning Special Regulations 1949	S.I. 1949/2224	The whole Regulations.
The Factories (Testing of Aircraft Engines and	S.I. 1952/1689	The whole Regulations.

Column 1 Title	Column 2 Reference	Column 3 Extent of repeal or revocation
Accessories) Special Regulations 1952		
The Shipbuilding and Shiprepairing Regulations 1960(26)	S.I. 1960/1932	Regulations 48 to 52, 54 and 55 to 66.
The Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972	S.I. 1972/917	The whole Regulations.
The Abstract of Special Regulations (Highly Flammable Liquids and Liquefied Petroleum Gases) Order 1974	S.I. 1974/1587	The whole Order.
The Dry Cleaning (Metrication) Regulations 1983	S.I. 1983/977	The whole Regulations.
The Factories (Testing of Aircraft Engines and Accessories) (Metrication) Regulations 1983	S.I. 1983/979	The whole Regulations.
The Dangerous Substances in Harbour Area Regulations 1987	S.I. 1987/37	Regulation 29(a).
The Workplace (Health, Safety and Welfare) Regulations 1992	S.I. 1992/3004	Regulation 6(3)(b).
The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996	S.I. 1996/2092	Regulation 22(b).
The Carriage of Dangerous Goods by Road Regulations 1996	S.I. 1996/2095	Schedule 12.

⁽²⁶⁾ Regulations 48 to 52 and 54 were revoked by S.I. 1997/1713, regulation 9(2) and the Schedule, save insofar as they applied to the matters referred to in regulation 2(a) to (c) of S.I. 1997/1713.