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#### 1973. No. 469

#### PETROLEUM

## Corrosive Substances: Conveyance by Road

REGULATIONS, DATED THE 19TH DAY OF NOVEMBER 1973, MADE BY THE SECRETARY OF STATE UNDER SECTION 6 OF THE PETROLEUM (CONSOLIDATION) (Northern Ireland) 1929.

WHEREAS in pursuance of the provisions contained in section 6 of the Petroleum (Consolidation) Act (Northern Ireland) 1929(a) as applied by the Petroleum (Corrosive Substances) Order (Northern Ireland) 1973(b) and the Petroleum (Inflammable Liquids) Order (Northern Ireland) 1973(c), the Minister of Home Affairs is empowered to make regulations as to the conveyance of petroleum spirit, and such other substances which may be so defined by Order-in-Council under section 19 of the Petroleum (Consolidation) Act (Northern Ireland) 1929, by road, and for protecting persons or property from danger in connection with such conveyance:

Now, therefore, I, in exercise of the powers conferred on me by the said section 6, and the section 1(1) of the Northern Ireland (Temporary Provisions) Act 1972(d) and of all other powers enabling me in that behalf, hereby make the following regulations:-

#### Citation and commencement

1. These Regulations may be cited as the Corrosive Substances (Conveyance by Road) Regulations (Northern Ireland) 1973 and shall come into operation on the 1st February 1974.

## Interpretation

- 2.—(1) In these Regulations—
- "carrying tank" means the tank or, if there is more than one, tanks on a tank wagon or tank trailer designed for the conveyance of liquid, but does not include a fuel tank:
- "container" (subject to paragraph (4) below) means any vessel, can, drum, barrel or other receptacle, but does not include the carrying tank of a tank wagon or tank trailer or a freight container;
- "conveyance" means conveyance by road, and "conveyed" shall be construed accordingly;
- "corrosive substance" means any substance, solution or mixture to which section 6 of the Petroleum (Consolidation) Act (Northern Ireland) 1929 was applied by Article 1 of the Petroleum (Corrosive Substances) Order (Northern Ireland) 1973:
- "freight container" means a receptacle having an internal capacity of not less than 14.5 cubic metres (512.1 cubic feet), so constructed as to be suitable for repeated use in the conveyance of freight by one or more means of transport without intermediate reloading of the contents, but does not include a carrying tank;

<sup>(</sup>c) S.R. & O. (N.I.) 1973, No. 468.

<sup>(</sup>a) 20 Geo. 5 c. 13 (N.I.). (b) S.R. & O. (N.I.) 1973, No. 467.

<sup>(</sup>d) 1972. c. 22.

- "fuel tank" means a tank which forms part of a vehicle and is designed for carrying fuel for use only in the propulsion of that vehicle;
- "owner", in relation to a vehicle which is the subject of a hiring agreement or hire-purchase agreement, means the person in possession of the vehicle under that agreement;
- "vehicle" includes a trailer which does not form part of an articulated vehicle.
- (2) For the purposes of these Regulations an articulated vehicle shall be treated as one vehicle.
- (3) For the purposes of these Regulations a freight container conveyed on a vehicle shall be treated as forming part of the vehicle.
- (4) Where any vessel, can, drum, barrel or other receptacle is contained in another container or is wholly enveloped in a covering or coverings of whatever nature, the expression "container" shall, for the purposes of these Regulations, mean the outermost container or covering, as the case may be.
- (5) In these Regulations any reference to the prescribed notice is a reference to a notice which complies with the provisions of Schedule 1 to these Regulations.

## Application 1997

- 3.—(1) Subject to Regulations 10, 12 and 13, the provisions of Part I of Schedule 2 to these Regulations shall be complied with in the case of any vehicle engaged in the conveyance of any corrosive substance.
- (2) Subject to Regulations 12 and 13, the provisions of Part II of the said Schedule 2 shall be complied with (in addition to those of Part I of that Schedule) in the case of a tank wagon or tank trailer engaged in the conveyance of any corrosive substance.
- 4. Subject to Regulations 11, 12 and 13, the provisions of Schedule 3 to these Regulations shall be complied with in relation to the marking of a container containing any corrosive substance being conveyed or being loaded or unloaded in connection with its conveyance.

# General safety precautions

- 5. Subject to Regulations 10 and 13, every person engaged in the conveyance, or the loading or unloading in connection with conveyance, of any corrosive substance shall secure so far as is reasonably possible that none of the corrosive substance is spilt.
- 6. Subject to Regulations 10, 12 and 13, no explosive substance and no substance or article capable of causing fire or explosion by spontaneous decomposition shall be carried on any vehicle conveying any corrosive substance.
- 7. Subject to Regulations 10, 12 and 13, a suitable and efficient fire extinguisher shall be carried in an easily accessible position on any vehicle conveying any corrosive substance.
- 8. Subject to Regulations 10, 12 and 13, the owner of a vehicle used for the conveyance of any corrosive substance who employs any person in connection with the conveyance shall furnish a copy of these Regulations to, or affix a copy thereof in some place where it can conveniently be read by, that person and shall take all other measures necessary to ensure that that person is acquainted with and carries out the provisions of these Regulations.

- 9.—(1) The driver of a vehicle conveying such substances as come within the scope of these Regulations shall be supplied with instructions in writing, specifying concisely—
  - (a) the nature of the cargo being conveyed in the vehicle; and the nature of any hazard involved;
  - (b) the telephone number of the supplier and his address or the name, address or telephone number of the person to be contacted in the case of an incident;
  - (c) the immediate action to be taken for the protection of operatives, other persons and property in the case of—
    - (i) damage or spillage,
    - (ii) fire (specifying any extinguishing medium which should not be used),
    - (iii) injury;
  - (d) instructions to call the police and fire service as soon as possible in the event of any incidents.
- (2) These instructions shall be supplied by the manufacturer or consignor and shall be kept in a readily accessible position in the driver's cab.

Provided that paragraphs (1) and (2) above shall not apply to a vehicle conveying the regulated substance in containers or receptacles if every container or receptacle bears a warning label containing the information required under sub-paragraphs (a)-(d) of paragraph (1).

(3) All necessary steps shall be taken by the owner of the vehicle to ensure that the driver is aware of these instructions or warning labels and understands them.

## Enforcement

- 10.—(1) It shall be the duty of a local authority empowered under the Petroleum (Consolidation) Act (Northern Ireland) 1929 to grant petroleum-spirit licences to enforce within their district the provisions of these Regulations, and the owner of a vehicle used for the convyance of any corrosive substance and any person employed in connection with the conveyance shall provide all reasonable facilities to a duly authorised officer of the local authority for the purpose of his ascertaining whether the provisions of these Regulations are being duly observed.
- (2) Any such local authority as aforesaid may institute proceedings for any offence against these Regulations committed in the area of that authority.

#### Exemptions

- 11. The provisions of Regulations 3(1), 5, 6, 7 and 8 need not be complied with in the case of any vehicle (other than a tank wagon or tank trailer) if—
  - (a) the total quantity of all the corrosive substances conveyed in the vehicle does not exceed 500 kilograms (1102.5 pounds) and either—
    - (i) none of the corrosive substances specified in Schedule 4 to these Regulations (hereinafter referred to as highly corrosive substances) is conveyed in the vehicle; or
    - (ii) all the highly corrosive substances conveyed in the vehicle are in receptacles which comply with the provisions of Parts I and II of Schedule 5 to these Regulations; or
  - (b) the total quantity of all the corrosive substances conveyed in the vehicle exceeds 500 kilograms (1102.5 pounds) and—

- (i) no highly corrosive substance is conveyed in the vehicle; and
- (ii) all the other corrosive substances conveyed in the vehicles are in receptacles which comply with the provisions of Part III of the said Schedule 5.
- 12.—(1) The provisions of Regulation 4 need not be complied with in the case of a container if the total quantity of all the corrosive substances contained in it is less than one kilogram (2.2 pounds); and for the purposes of this paragraph, in calculating the quantity of a corrosive substance in a battery no account shall be taken of any such substance which has been absorbed by the plates of the battery.
- (2) The provisions of paragraph 1 of Schedule 3 need not be complied with in the case of a container—
  - (a) which is itself a receptacle complying with the provisions of Part III of Schedule 5; or
  - (b) in which all corrosive substances are contained in receptacles complying with the provisions of the said Part III.
- 13. The provisions of Regulations 3, 4, 6, 7 and 8 need not be complied with in the case of—
  - (a) a vehicle brought temporarily into Northern Ireland by a person resident abroad, provided that—
    - (i) all the corrosive substances conveyed in the vehicle are packed and labelled in accordance with the requirements contained in Annexe A to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) signed at Geneva on 30 September 1957 as amended before the date on which these Regulations were made; and
    - (ii) the vehicle complies in every respect with the requirements relating to vehicles contained in Annexe B to that Agreement; or
  - (b) a container conveyed in any vehicle such as is mentioned in paragraph (a).
- 14. The provisions of Regulations 3 to 9 need not be complied with in the case of a corrosive substance conveyed in a battery if the battery—
  - (a) is used in connection with the operation of a vehicle or any apparatus forming part of a vehicle; or
  - (b) contains sulphuric acid in aqueous solution and no other corrosive substance; or
  - (c) contains potassium hydroxide in aqueous solution and no other corrosive substance and complies with the following requirements, that is to say:
    - (i) it must be so closed as to prevent leakage of the solution under normal conditions of conveyance;
    - (ii) adequate protection must be provided against short circuits, and
    - (iii) its cells must be made of steel or of a plastic material affording at least the same degree of protection as is afforded by steel.

Dated this 19th day of November 1973.

W. S. I. Whitelaw,

One of Her Majesty's Principal Secretaries of State.

Regulation 2(5)

### Prescribed notice

1. The notice shall be in the form set out below, except that the figure "8" may be inserted at the bottom of the notice.



- 2. The dimensions of the notice shall be not less than-
- (a) 20 centimetres (7.9 inches) square, in the case of a notice displayed on a vehicle in accordance with Schedule 2 to these Regulations;
- (b) 10 centimetres (3.9 inches) square, in the case of a notice displayed on a container in accordance with Schedule 3 to these Regulations.
- 3. The letters in the notice shall be not less than—
- (a) 2.5 centimetres (1 inch) high, in the case of a notice displayed on a vehicle as aforesaid;
- (b) 1.25 centimetres (0.5 inch) high, in the case of a notice displayed on a container as aforesaid.
- 4. The symbols in the notice shall be black and the letters therein shall be white.
- 5. The background to the upper half of the notice shall be white and that of the lower half shall be black.

Regulation 3

### PART I

#### Marking of vehicles

- 1. The prescribed notice shall be clearly displayed at the front and at the rear of the vehicle.
- 2. The prescribed notice shall be painted or otherwise indelibly marked on a notice board or adhesive label securely fixed to the vehicle or indelibly applied to the vehicle by means of a transfer, and shall be kept clean and in good repair.
  - 3. The prescribed notice shall-
  - (a) be so placed on the vehicle that it is clearly visible from the front or, as the case may be, the rear of the vehicle with the letters of the word "CORROSIVE" in a vertical plane and arranged horizontally; and
  - (b) subject to sub-paragraph (a) above, be placed at the highest practicable point on the vehicle and as near as possible to the centre thereof.
- 4. A notice board or label used for the purposes of paragraph 2 above shall be made of durable material.

#### PART II

## Additional marking of tank wagons and tank trailers

- 5.—(1) On each side of the carrying tank or, if the carrying tank is divided into compartments containing corrosive substances of different sorts, on each side of each compartment there shall be displayed a notice clearly indicating the nature of the contents in accordance with the following provisions of this paragraph.
- (2) In the case of a substance falling within Article 1(1)(a) of the Petroleum (Corrosive Substances) Order (Northern Ireland) 1973, the notices required by sub-paragraph (1) above to be displayed shall indicate the name of the substance (being a name by which the substance is described in either column in the Table in Schedule 1 to the said Order).
- (3) In the case of a solution or mixture falling within Article 1(1)(b) of the said Order or specified in Part II of the said Table, the notices so required to be displayed shall, subject to sub-paragraph (4) below, indicate the name of the corrosive substance contained therein in the largest proportion (being a name by which the substance is described in either column in the said Table) followed by the word "Solution" or "Mixture" as the case may be.
- (4) In the case of a solution or mixture containing a corrosive substance destined for disposal as waste, the notices required by sub-paragraph 1 above to be displayed may bear the words "DISPOSABLE WASTE" instead of complying with sub-paragraph (3) above.
- 6. Each such notice shall be painted or otherwise indelibly marked on the carrying tank or on a notice board or adhesive label complying with the requirements of paragraph 4 above and securely fixed to the carrying tank.
  - 7. The letters in each such notice shall be red and —
  - (a) in the case of a tank wagon or tank trailer which is so divided into compartments for the conveyance of corrosive substances of different sorts, shall be not less than 10 centimetres (3.9 inches) high;
  - (b) in the case of a tank wagon or tank trailer which is so divided into compartments, shall be not less than 5 centimetres (2 inches) high.
  - 8. The background of each such notice shall be white.

Regulations 4 and 12

## Marking of containers

- 1.—(1) On the outside of the continer there shall be displayed a notice clearly indicating the nature of the contents in accordance with the following provisions of this paragraph.
- (2) In the case of a substance falling within Article 1(1)(a) of the Petroleum (Corrosive Substances) Order (Northern Ireland) 1973, the notice required by sub-paragraph (1) above to be displayed shall indicate the name of the substance (being a name by which the substance is described in either column in the Table in Schedule 1 to the said Order).
- (3) In the case of a solution or mixture falling within Article 1(1)(b) of the said Order or specified in Part II of the said Table, the notice so required to be displayed shall, subject to sub-paragraph (4) below, indicate the name of the corrosive substance contained therein in the largest proportion (being a name by which the substance is described in either column in the said Table) followed by the word "Solution" or "Mixture" as the case may be.
- (4) In the case of a solution or mixture containing a corrosive substance destined for disposal as waste, the notices required by sub-paragraph 1 above to be displayed may bear the words "DISPOSABLE WASTE" instead of complying with sub-paragraph (3) above.
- 2. The prescribed notice shall be clearly displayed on the outside of the container.
- 3. Each notice required by this Schedule shall be painted or otherwise indelibly marked on the container or on an adhesive label securely fixed thereto.

Regulation 11

## Highly corrosive substances

Boron trichloride Bromine Bromine pentafluoride Bromine trifluoride Chlorine trifluoride Chlorosulphonic acid Chromic acid Chromyl chloride Fluorosulphonic acid Hydrazine (anhydrous); and aqueous solutions containing more than 50 per cent by weight of hydrazine Hydrofluoric acid Iodine chloride Nitric acid Nitrohydrochloric acid Oleum .

Potassium hydrogen difluoride

Pyrosulphuryl chloride Selenic acid Sulphur dichloride diSulphur dichloride Sulphuric acid Sulphur trioxide Sulphuryl chloride Thionyl chloride

Regulations 11 and 12

### Conditions as to receptacles

#### PART I

1, The receptacles must not contain a greater quantity of any substance specified in the first column of the following Table than the quantity specified opposite thereto in the second column.

						•			
Substance								Maximi	um quantity
Boron trichloride								10 kgs	(22 lb.)
Bromine						·	· ·	10 kgs	. (22 lb.)
Bromine pentafluoride	•		•	•	·		•		. (4.4 lb.)
Bromine trifluoride	•	•	•	•	Ċ		•		. (4.4 Îb.)
Chlorine trifluoride	•	•	•	•			•		. (4.4 lb.)
Chlorosulphonic acid	• ,	•	•	•	•	•	•	125 kgs	. (275.6 lb.)
Chromic acid	•	•	•	•	•	•	•		. (275.6 lb.)
Chromyl chloride	•	•	•	•	•	•	•		. (275.6 lb.)
	•	•	•	•	•	•	•		
Fluorosulphonic acid		•	•	•	•	.•	•	10 kgs	. (22 lb.)
Hydrazine— Anhydrous; and aqueous solutions containing more									
Annydrous; and aque	ous s	soruu:	OHS	comai	ning	more	<b>;</b>	10 1	(00.11.)
than 72 per cent b	y we	ergnt	or n	yorazı	ne	•		10 kgs	(22 lb.)
Aqueous solutions containing more than 50 per cent but not more than 72 per cent by weight of hydrazine 125 kgs. (275.6 lb.)									
	72 pe	er cer	it by	weigh	it of	hydr	azıne		. (275.6 lb.)
Hydrofluoric acid	•	•	•				•	50 kgs	. (110.2 lb.)
Iodine chloride	•	`•					•	2 kgs	. (4.4 lb.)
Nitric acid—									
Red fuming									. (11 lb.)
100% strength									. (22 lb.)
Aqueous solutions		,							. (275.6 lb.)
Nitrohydrochloric acid			•		<b>:</b> -			5 kgs.	(11 lb.)
Oleum									. (11 lb.)
Potassium hydrogen diflu	oride	· ·	•	•	·	•		125 kgs	. (275.6 lb.)
Pyrosulphuryl chloride	.01100		•	•	·	•	•	10 kgs	. (22 lb.)
Selenic acid .		•	•	•	•	. :	•	125 kgs	(275.6 lb.)
Sulphur dichloride	•	•	•	•	• .	. •	•	10 kgs	. (22 lb.)
diSulphur dichloride	•	•	•	•	•	•	•		. (22 lb.)
Sulphuric acid .		٠.	•	•	•	•	•	10 kgs	. (275.6 lb.)
	•	•	•	•	•	•	•	10 kgs	. (22 lb.)
Sulphur trioxide	•	•	•	•	•	•	•	10 Kgs	(22 Ib.)
Sulphuryl chloride	•	•	•	•	•	•	•		. (22 lb.)
Thionyl chloride	•	•	•	•	•	•	•	10 Kgs	. (22 lb.)

## PART II

- 2. The receptacle must—
- (a) if containing boron trichloride, bromine pentafluoride, bromine trifluoride, chlorine trifluoride or iodine chloride, be made of a metal; or
- (b) if containing any other corrosive substance be made of material, which in either case is not liable to be corroded by the particular corrosive substance contained therein.
- 3. The receptacle must be so constructed and closed that none of the contents can, under normal conditions of conveyance, escape from it.
- 4. The receptacle must be so constructed that no part of its interior surface can, under normal conditions of conveyance, be so affected by contact with the contents as to make the use of that receptacle dangerous.
- 5. The receptacle, if made of glass, porcelain, stoneware or other fragile material, must be secured inside a protective package by suitable cushioning material.

### PART III

- 6. The receptacle must be made of a material which is not liable to be corroded by the particular corrosive substance contained therein.
  - 7. The receptacle must not—
  - (a) if containing sodium hypochlorite in aqueous solution with an available chlorine content equivalent to an aqueous solution containing not more than 14 per cent by weight of pure sodium hypochlorite, contain more than 2 kilograms (4.4 pounds) of the solution; or
  - (b) if containing any other corrosive substance, contain more than 1 kilogram (2.2 pounds) of the substance.
- 8. The receptacle must be so constructed and closed that none of the contents can, under normal conditions of conveyance, escape from it.
- 9. The receptacle must be so constructed that no part of its interior surface can, under normal conditions of conveyance, be so affected by contact with the contents as to make the use of that receptacle dangerous.
- 10. The receptacle must be enclosed in a protective package made of metal, wood or fibre-board and, where that package encloses severaly receptacles, it must not contain, in all, more than 30 kilograms (66.2 pounds) of corrosive substances.
- 11. The receptacle, if made of glass, porcelain, stoneware or other fragile material, must be secured inside the protective package referred to in paragraph 10 above by suitable cushioning material.

### EXPLANATORY NOTE

(This note is not part of the Regulations, but is intended to indicate their general purport.)

These Regulations, made under section 6 of the Petroleum (Consolidation) Act (Northern Ireland) 1929, require certain notices to be displayed and precautions to be observed during the conveyance by road of the corrosive substances to which that section was applied by the Petroleum (Corrosive Substances) Order (Northern Ireland) 1973 and make provision for the enforcement of the Regulations.

Certain of the requirements about notices (Schedule 2, Part I) apply to all vehicles and there are additional requirements (Schedule 2, Part II) in the case of tank wagons or tank trailers. Schedule 3 contains requirements for the marking of containers.

Exemption is given from certain requirements in specified circumstances (Regulations 10 to 13), in particular, where the corrosive substance is conveyed by vehicles other than tank wagons and trailers in receptacles which comply with the relevant provisions of Schedule 5 and either the total quantity conveyed does not exceed 500 kilograms or none of the highly corrosive substances listed in Schedule 4 are being conveyed.