1969/47



THE DANGEROUS GOODS REGULATIONS 1958. AMENDMENT NO. 4

ARTHUR PORRITT, Governor-General ORDER IN COUNCIL

At the Government House at Wellington this 24th day of March 1969 Present:

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL

PURSUANT to the Dangerous Goods Act 1957, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

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REGULATIONS

- 1. Title and commencement—(1) These regulations may be cited as the Dangerous Goods Regulations 1958, Amendment No. 4, and shall be read together with and deemed part of the Dangerous Goods Regulations 1958* (hereinafter referred to as the principal regulations).
- (2) These regulations shall come into force on the day after the date of their notification in the Gazette.

*S.R. 1958/76 Amendment No. 1: S.R. 1961/149 Amendment No. 2: S.R. 1966/14 Amendment No. 3: S.R. 1967/109

- 2. Interpretation—Regulation 2 of the principal regulations is hereby amended—
 - (a) By inserting, after the definition of the term "conveyance", the following definition:

"'Domestic oil-burning installation' means any oil-burning installation installed in respect of any dwellinghouse solely occupied by one family, or in any apartment building in which accommodation is provided for not more than two families, or in any boardinghouse in which lodging alone or board and lodging is provided for not more than four lodgers:".

(b) By omitting from the definition of the term "service tank" the

word "fuel" wherever it occurs:

(c) By inserting, after the definition of the term "store ship", the following definition:

"'Supply tank' means a tank connected to and used as a means of storing fuel for an oil burner or other installation consuming oil, but does not include a service tank:".

3. Where licence to store dangerous goods not required—(1) Regulation 3 of the principal regulations (as amended by regulation 2 of the Dangerous Goods Regulations 1958, Amendment No. 1, and by regulation 2 of the Dangerous Goods Regulations 1958, Amendment No. 2) is hereby further amended—

(a) By revoking the provisos to paragraph (d) of subclause (1), and

substituting the following proviso:

"Provided that this paragraph shall not permit the storage on unlicensed premises of dangerous goods of Class II in any container having a capacity of more than 5 gallons and forming part of an installation adapted for the burning of such dangerous goods:":

(b) By omitting from paragraph (i) of subclause (1) the figure "30",

and substituting the figure "5":

(c) By omitting from paragraph (i) of subclause (1) the word "approved".

(2) The said regulation 3 is hereby further amended by inserting,

after paragraph (i) of subclause (1), the following paragraph:

"(ii) In the case of dangerous goods of Class II having a flashing point not less than 130°F or of dangerous goods of Class III if—

"(i) The goods are stored in one or more tanks of a capacity or total capacity not exceeding 250 gallons; and

- "(ii) The goods are kept as fuel for a domestic oil-burning installation which complies in all respects with the provisions of regulations 120 to 148 of these regulations:".
- 4. Storage of oil for use in connection with internal combustion engines or oil-burning equipment—(1) The principal regulations are hereby further amended—

(a) By omitting from the heading above regulation 120 the word "Fuel":

(b) By omitting from subclauses (3) and (4) of regulation 128, subclause (2) of regulation 136, regulation 145, and regulation 148 the words "a fuel-oil", and substituting in each case the words "an oil":

- (c) By omitting from regulations 121, 125, 126, 128, 133 to 140, 142, 143, and 146 to 148 the words "fuel oil", and the word "fuel-oil", wherever they occur in those regulations, and substituting in each case the word "oil".
- 5. Application of regulations 120 to 148 to domestic installations—The principal regulations are hereby further amended by inserting, after regulation 119 and under the heading "Storage of Oil for Use in Connection with Internal Combustion Engines or Oil-burning Equipment", the following regulation:

"119A. If any oil used in an oil-burning installation is dangerous goods of Class II having a flashing point not less than 130° r and is stored in any tank or tanks having a total capacity not exceeding 250 gallons connected to that installation regulations 120 to 148 of these regulations shall apply in every way as if the oil were dangerous goods of Class III."

- 6. Methods of storing dangerous goods Class III—Regulation 120 of the principal regulations is hereby amended—
 - (a) By omitting the words "installation consuming fuel oil", and substituting the words "oil-burning installation":

(b) By adding the following paragraph:

- "(f) In any tank installed within a building, complying with the requirements of regulations 123A and 126 of these regulations."
- 7. Above-ground storage of dangerous goods Class III—(1) Regulation 121 of the principal regulations is hereby amended by repealing paragraph (c) of subclause (1), and substituting the following paragraph:

"(c) The tank or tanks situated within a compound shall be separated from all protected works by not less than the distances specified in the table set out in subclause (2) of this regulation; and".

(2) The said regulation 121 (as amended by regulation 7 of the Dangerous Goods Regulations 1958, Amendment No. 1) is hereby further amended by revoking subclauses (2) and (3), and substituting the following subclauses:

"(2) The table referred to in paragraph (c) of subclause (1) of this

regulation is as follows:

		Minimum Distance from Protected Works			
Total Capacity of Tanks (in Gallons)		Where a Screen Wall Intervenes Between Tank and Protected Work (in Feet)	Where no Screen Wall Intervenes Between Tank and a Protected Work (in Feet)		
Not exceeding	125	Nil	Nil		
	250	Nül	6		
	500	6	10		
Not exceeding 1,		l š	12		
Not exceeding 5.		12	20		
Not exceeding 12,		15	$\overline{25}$		
Not exceeding 24,		20	30		
Not exceeding 60,		25	35		

"(3) The table referred to in paragraph (d) of subclause (1) of this regulation is as follows:

Capacity of Tank	Minimum Distance from Any Other Tank (in Feet)			
Not exceeding 1,000 Not exceeding 5,000 Not exceeding 12,000				2 3 5

- "(4) For the purpose of this regulation, in relation to a tank of capacity not exceeding 250 gallons, a wall may at the discretion of an Inspector be regarded as a screen wall if every part of it within a distance of 6 ft from the tank is constructed of concrete not less than 4 in. thick, or is of such other construction as may be approved by an Inspector as having similar fire resistance, and there are no openings in the wall within 6 ft of the tank."
- 8. Construction of above-ground tanks—(1) Regulation 122 of the principal regulations is hereby amended by revoking paragraphs (a) and (b) of subclause (1), and substituting the following paragraphs:

"(a) All tanks shall be constructed by means of welding or riveting

from-

- "(i) Black mild-steel plate of the requisite thickness to comply with the table set out in subclause (2) of this regulation; or
- "(ii) Some other material approved by the Chief Inspector; "(b) Horizontal cylindrical tanks shall have either dished curved ends, or in the case of tanks with flat ends, shall, if necessary, have the ends adequately stiffened;
- "(bb) Rectangular tanks shall be stiffened by angle bars and suitable stays;"
- (2) The said regulation 122 is hereby further amended by adding to subclause (1) the following paragraph:

"(g) Tanks shall be protected from exterior corrosion by painting the

outside or by some other approved means."

(3) The said regulation 122 (as amended by regulation 8 of the Dangerous Goods Regulations 1958, Amendment No. 1) is hereby further amended by revoking subclause (2), and substituting the following subclause:

"(2) The table referred to in paragraph (a) of subclause (1) of this

regulation is as follows:

Maximum Capacity	(in G	allons)	Minimum Thickness of Plate (in Inches)
125		••••	.062
250			.078
500	•••••	•••••	.099
7 50		•••••	.157
1,500		•••••	.188
12,000			.250"

- 9. Tanks within buildings—The principal regulations are hereby further amended by inserting, after regulation 123, the following regulation:
- "123A. (1) Subject to the provisions of regulations 120 and 123 of these regulations, any tank for the storage of dangerous goods of Class III may be installed within any building, subject to compliance with the provisions of paragraphs (a) to (g) of subclause (1) of regulation 122 and subclause (2) of regulation 122 of these regulations, and with the provisions of this regulation.

"(2) Any tank or tanks installed within a building shall be installed

within a chamber of fire resistant construction.

"(3) No tank or tanks installed inside a building shall exceed a total capacity of 5,000 gallons if the building is not of fire-resistant construction or 12,000 gallons if the building is of fire-resistant construction.

"(4) The chamber shall be constructed with a fire-resistant access door which shall be kept closed at all times except when it is necessary to

enter the chamber.

- "(5) The door referred to in subclause (4) shall be so located with its lowest point above the floor of the chamber that the lower portion of the chamber will form a compound adequate to retain the total volume of oil which may be stored in all tanks therein.
- "(6) The size of the chamber shall be such as to provide a minimum of 18 in. space between the tank and the roof and sides of the chamber.
- "(7) The chamber shall be vented to the open air by means of a vent having an area in cross section of not less than 100 square inches and any ducting required for this purpose shall be constructed of concrete, metal, or other incombustible material.
- "(8) The walls, roof and floor of the chamber shall be constructed of reinforced concrete (or of such other construction as may be approved by an Inspector as of equivalent fire resistance) having a thickness not less than that specified in the following table:

Total Capacity	of Tank or	Tanks	(in Gallons)		Thickness of Reinforced Concrete (in Inches)
Not exceeding 250	•••••			•••••	4
Not exceeding 750 Exceeding 750	•••••				5 6
				,	

- "(9) The access door shall be so constructed that it has a fire resistance of not less than half that of the material specified for the walls, roof, and floor of the chamber."
- 10. Supply of oil to engines and oil burners—The principal regulations are hereby further amended by revoking regulation 127, and substituting the following regulation:
- "127. (1) A supply tank or tanks, or a service tank or tanks attached to a storage tank, may be used to supply oil to an internal combustion engine or an approved oil burner where the following conditions are complied with:

- "(a) The total capacity of the supply tanks or service tanks so employed shall not exceed 60 gallons if the oil-consuming device is an oil-burner, or 90 gallons if the oil-consuming device is an internal combustion engine:
 - "Provided that the use of supply tanks or service tanks of a total capacity not exceeding 250 gallons may be approved if—
 - "(i) The normal consumption of the oil-consuming device exceeds 60 or 90 gallons as the case may be in 8 hours; or
 - "(ii) The tank is enclosed in a chamber complying with the provisions of regulation 123A of these regulations; or
 - "(iii) The tank is outside any protected work and isolated from it as provided by regulation 121 of these regulations, and in any case where the capacity of the tank exceeds 125 gallons some approved form of compounding is provided if in the opinion of an Inspector there is an undue risk of oil spillage flowing under a house or on to adjoining property;
- "(b) Supply and service tanks shall be constructed in compliance with paragraphs (a), (b), and (bb) of subclause (1) of regulation 122 of these regulations;
- "(c) A supply tank or service tank shall be sealed, except for—
 - "(i) A vent pipe which shall be adequate to prevent the development of undue pressures within the tank, so fitted and protected as to prevent the ingress of rain, insects, and foreign matter and, unless the tank is filled by means of a hand-held nozzle at a level below that of the vent, terminating in the open air;
 - (ii) A filling pipe connecting the service tank to a storage tank, or in the case of a supply tank a filling opening which shall be kept closed except for the purpose of filling the tank, which, if the tank is filled by a hand-held nozzle, shall not be less than 2 in. In diameter and of adequate cross section to provide 1 sq. in. of vent area when the nozzle is inserted:

"Provided that if the tank is filled by a hand-held nozzle a vent opening of not less than $\frac{1}{8}$ in. diameter may be incorporated in the filler cap;

- "(iii) In the case of a service tank an overflow pipe of such diameter that having regard to the rate of filling the tank there is in the opinion of an Inspector no danger of discharge of dangerous goods through the vent pipe or the development of excessive pressure inside the tank; but in every case the diameter of the overflow pipe shall be at least one size larger than the filling pipe;
- "(d) Where a service tank is filled by any means other than by a manually operated pump, the overflow pipe shall discharge into the bulk storage tank, and in every other case the overflow pipe shall discharge in a location which is safe from risk of fire or any other hazard:

"Provided that the overflow pipe shall not be required to discharge back into the bulk storage tank if that tank is located at a higher level than the service tank;

"(e) Approved arrangements shall be made to prevent accidental overfilling of the service tank if this could occur as a result of a flow of oil by gravity from the tank;

"(f) The supply tank or service tank shall not be situated within 7 ft, measured horizontally, of any fire or flame, unless the tank is effectually screened from radiated heat to the satisfaction of an Inspector and is so located that the accidental discharge of oil from the tank will not result in the oil coming into contact with fire, flame, or any heated surface;

"(g) The supply tank or service tank shall be substantially and rigidly installed on incombustible supports in such manner as to ensure protection from mechanical injury and shall not be mounted on a roof; nor shall if exceeding a capacity of 125 gallons be mounted on a wall:

"Provided that a supply or service tank not exceeding a capacity of 60 gallons may for the purposes of this paragraph if attached by steel brackets to a wall by coach screws of not less than $\frac{3}{8}$ in. diameter having at least 3 in. of their length holding into the studs, or by other approved method, be approved as being installed on incombustible supports;

"(h) Where a direct-gravity feed from a supply tank or a service tank to a burner is employed, means shall be provided of preventing fluctuations in the rate of flow of oil unless in the opinion of an Inspector the difference in the available head of oil on the burner when the tank is full and when it is empty is not sufficient to cause material variations in the rate of flow of oil. Those means may consist of a constant-level valve situated at the outlet from the tank or incorporated in the burner, or such other device as may be approved. Where a constant-level valve is used in the oil-supply line to a burner the head of oil supplied to the valve shall be within the limits recommended by the manufacturer of the valve;

"(i) If more than one gravity-supply tank or service tank is located on any premises the total capacity of such tanks shall not exceed the maximum capacity permitted for a single tank unless—

"(i) The tanks are separated from each other by means of a screen wall or isolated from each other as required by an Inspector; and

"(ii) Where more than one tank is connected to the oilsupply line leading to a burner they shall discharge through a manually operated three-way valve in such manner that only one tank can discharge its contents at any one time;

"(j) Except in the case of installations which are under constant observation by an attendant during the whole time the burner is operating, oil-burner installations shall be provided with approved automatic means of cutting off the oil supply in the event of accidental fire. Those means shall employ a heat-sensing device functioning at a temperature no higher than 200°F located above and as near as practicable in the

case of a vaporising-type burner, to the level-control valve, and in other cases, to the oil inlet to the combustion chamber, and, if the supply or service tank is located in the same room as the furnace, a second heat-sensing device shall be located immediately alongside or above the supply tank or service tank. The cut-off valve shall be located at the point where the oil leaves the tank, or if in the opinion of an Inspector this is not practicable, as near to the tank as practicable and in any case not closer than 7 ft horizontally from the burner or furnace. Unless the design of the heat-sensing device makes it impracticable to do so it shall be so constructed and fitted so that its effectiveness can be tested by manual operation:

"Provided that in all cases where a supply tank or service tank exceeding 5 gallons capacity is located inside a building such automatic means of cutting off the flow of oil shall be

provided at the point of exit from the tank;

"(k) A valve capable of manual operation shall be provided in the pipeline to the engine or oil burner in a readily accessible position close to the supply tank or service tank.

"(2) In assessing the licence fee payable for any licence to store dangerous goods, a licensing authority shall not include the contents of a service tank complying with the provisions of this regulation."

11. New regulations 127A-127c—The principal regulations are hereby further amended by inserting, after regulation 127, the following new regulations:

"127A. Notwithstanding any other regulation, no domestic oil-burning installation shall be supplied by gravity feed direct from any tank or tanks

having a total capacity exceeding 250 gallons.

"127B. If the oil supplying any domestic oil-burning installation installed on any premises is obtained by reticulation from a supply tank situated outside those premises, the arrangements for reticulating the oil supply to the installation shall comply with conditions approved by the

Chief Inspector.

"127c. If, in order to provide gravity feed of oil to an oil burner, the fuel is raised by an oil lifter or other device, the oil lifter or other device shall, for the purposes of paragraphs (h) and (j) of subclause (1) of regulation 127 of these regulations, be regarded as a service tank and the functioning of the heat-sensing device required by paragraph (j) of subclause (1) of regulation 127 shall be made to shut off the pump of the oil lifter."

12. New Regulations 146A-146c—The principal regulations are hereby further amended by inserting, after regulation 146, the following new regulations:

"146A. No person shall install any oil-burning installation except in a location which will remain free of water and in such a manner that the various parts are readily accessible for inspection and maintenance.

"146B. Any person installing an oil-burning installation shall ensure that it complies in all respects with the requirements of these regulations. He shall carry out the installation in a workmanlike manner and in accordance with good trade practice and shall ensure that the burner unit and safety controls are properly adjusted and working effectively and that the oil supply and draft are adjusted for proper combustion.

"146c. Any person who installs any oil-burning installation otherwise than in accordance with these regulations commits an offence against these regulations."

- 13. New regulation 147a—The principal regulations are hereby further amended by inserting, after regulation 147, the following new regulation:
- "147A. The owner of any domestic oil-burning installation shall properly maintain and service the installation at all times."
- 14. Revocations—The following regulations are hereby consequentially revoked—
 - (a) Subclause (1) of regulation 2, and regulations 7, 8, and 9 of the Dangerous Goods Regulations 1958, Amendment No. 1;
 - (b) The Dangerous Goods Regulations 1958, Amendment No. 2.

P. J. BROOKS, Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations make several amendments to the Dangerous Goods Regulations 1958. Definitions of the terms "domestic oil-burning installation" and "supply tank" are added by regulation 2. Licences are no longer required in certain circumstances for domestic oil-burning installations. New regulations are inserted in the principal regulations dealing with the construction, maintenance, and servicing of domestic oil-burning installations. A number of consequential revocations are made.

Issued under the authority of the Regulations Act 1936.

Date of notification in Gazette: 27 March 1969.

These regulations are administered in the Department of Internal Affairs.