Roscommon County Fire Service

Dangerous Substances (Retail and Private Petroleum Stores) Regulations, 1979 (S.I. No 311 (1979)

Applications for licences under the Dangerous Substance Act 1972 must comply with the above regulations. The following are some of the more important requirements of these regulations but it is necessary to comply with all the requirements of these regulations.

<u>Reg. 12</u>

- 1. Every application for a first licence (or for the renewal of a licence continued in force under section 8 of the Act) shall:-
- (a) be accompanied by a plan (with 3 copies)drawn to a scale in metric units of measurement of not less than 1:2500, consisting of an exact from the Ordnance Survey map (or tracing thereof) in linen or similar durable material, or
- (b) where there is not readily available an Ordnance Survey map drawn to the scale specified in subparagraph (a), be accompanied by a plan (with 3 copies) in metric units of measurement and consisting of an extract from the relevant Ordnance Survey 1:1000 map (or tracing thereof) in linen or similar durable material, and marked and coloured so as to identify clearly the site or proposed site (including the boundaries which shall be marked in re) of the retail or private store.
- 2. Every plan submitted in accordance with paragraph (1) of this regulation shall be accompanied by:-
- (a) one site plan (with 3 copies) in metric units of measurement of not less than 1:100 so marked and coloured so as to identify clearly:-
 - (i) each underground storage tank, each pipeline or dispensing pump connected to such a tank and each containing store or container compound, and
 - (ii) all other buildings or structures (including cellars or basements) within a distance of 16 metres of each underground storage tank, offset filling point, dispensing pump, ventilating pipe opening, container store or container compound;
- (b) one plan and specification or appropriate particulars (with three copies), including suitable drawings or plans, elevations and sections to a scale in metric units of measurement of not less than 1:50 so marked as to give adequate details of the construction or proposed installation of each underground storage tank, dispensing pump, container store, container compound and any pipeline (including its diameter).

- (c) one plan or specification or appropriate particulars (with three copies) shall be so marked as to show all electrical apparatus installed or to be installed or used at a distance not exceeding 5 metres of each underground storage tank, container store, container compound, dispensing pump or filling, dipping or venting openings of an underground tank or pipeline.
- (d) detailed particulars to be shown on a plan of
 - (i) each building or place at a retail store or private store in or at which any articles, materials or substance (other than petroleum Class 1) liable to spontaneous combustion or ignition or otherwise flammable or dangerous are kept or to be kept and their amounts or quantities.
 - (ii) the amount or quantity of petroleum Class 1 kept or to be kept in each underground storage tank, container store or container compound.
 - (iii) The approximate maximum number of persons employed or likely to be employed at the store and where applicable in each building at the store
- (e) any further particulars, maps or drawing shall be provided which the licensing authority requires by a notice in writing .
- 2. Every application for an amended licence under Regulation 11 (2) of these Regulations shall be accompanied by
 - (a) one plan (in metric units of measurement) or specification or appropriate particulars (with three copies) giving detail of the proposed installation, alteration, enlargement, addition or reconstruction, and
 - (b) any further particulars, plans, maps or drawings which the licensing authority requires by notice in writing.

<u>Reg. 15</u>

- 1. During the transfer to petroleum Class 1 from a tank of a tank vehicle to an underground store or private store, the tank vehicle shall be located at a safe place marked in a plan annexed to the licence and when the transfer takes place during hours of darkness, artificial lighting sufficient and suitable to allow the transfer to be made without risk of injury shall be provided at that place by the licensee.
- 2. Subject to Regulations 41 (1) and 41 (2) of these Regulations and unless otherwise provided in a condition attached to a licence
 - (a) The place referred to under paragraph (1) of this Regulations shall be of sufficient are a tank vehicle to be adequately and safely

accommodated in the area during the transfer referred to in that paragraph

- (b) the surface area of the ground used to accommodate a tank vehicle during such a transfer and within a radius of not less than 4 metres of a petroleum dispensing pump shall be suitable covered with an adequate thickness of concrete or other suitable material and shall be
 - (i) impervious and non-absorbent so as to prevent seepage or escape of petroleum below ground.
 - (ii) properly maintained and in good condition and
 - (iii) provided with a suitable drainage system designed and graded for draining rain, other water, petroleum and any other liquid off into a adequate oil interceptor (provided by the licensee and maintained in an efficient state.)
- 3. Without prejudice to the requirements of subparagraph 2 (b) (iii) of this regulation, all practicable steps shall be taken by the licensee to prevent the escape (by leakage, seepage or otherwise) of petroleum below ground or into any drain, sewer, canal, lake, stream, river, sea or inlet of the sea, or other watercourse ditch or public place from a container store or compound or other part of a retail store or private store.
- 4. In this regulations "oil interceptor" means an oil interceptor, separator, chamber or other device approved by the licensing authority and suitably designed, constructed, vented in a safe manner and maintained so as to retain for recovery and for safe disposal any petroleum conveyed to it by a drainage system.

<u>Reg 32.1</u>

- 1. Subject to any conditions as may be attached to a licence an underground storage tank shall –
- (a) be located outside the bund area of any above ground tank used for the storage of petroleum,
- (b) be separated from every other underground storage tank by a distance of not less than 150 millimetres,
- (c) be set level below ground
- (d) except for a manhole opening, be surrounded or encased in a suitable and adequate manner on all outer surfaces by concrete not less than 150 millimetres in thickness, or where the licensing authority so approves in writing, be placed in a suitable and adequate chamber -

- (i) the wall surround and floor of which shall be constructed of concrete not less than 150 millimetres in thickness and
- (ii) except for any manhole opening be completely surrounded by noncorrosive clean washed sand not less than 150 millimetres in thickness,
- (e) in the case of a manhole
 - (i) be enclosed in a suitable inspection chamber of concrete of adequate construction, the walls of which shall not be less than 150 millimetres in thickness,
 - (ii) be provided with a suitable cover of adequate strength and construction, which shall be so arranged or fitted as to prevent the ingress of surface water or other liquid to the manhole chamber .

Reg 32.4

- 1. Subject to any conditions attached to a licence, the centre point of a manhole opening or offset filling-pipe opening in an underground storage tank or of a dispensing pump used for the delivery of petroleum to a fuel tank of a vehicle shall be located in the open air and at a distance of not less than 4.35 metres from
 - (a) the boundary of a retail store or any opening in a building or any fixed source of ignition sufficient to ignite vapours of petroleum Class 1
 - (b) a public road, unless separated from the road by a screen of adequate fire resistance construction not less than 1.80 metres in height above the surrounding ground level and of such length that any opening to the road is not less than 4.25 metres from the centre point of the manhole or of the offset filling point opening or the dispensing pump.

<u>Reg 36</u>

- 1. Every underground storage tank or separate compartment of such a tank shall be separately vented to the atmosphere by means of a suitable ventilating pipe
 - (a) not less than 1.50 metres from the boundary of a retail store, unless there is provided an adequate intervening screen wall extending from ground level upwards and for a distance in all directions of not less than 1.50 metres beyond the discharge outlet or orifice of the ventilating pipe.
 - (b) Which permits the free escape to the atmosphere of air or vapour from the storage tank or separate compartment, and the nominal internal diameter of the pipe shall be not less than 40 millimetres and sufficient to permit the free escape of air or vapour to the atmosphere when the storage tank or separate compartment is being filled at its safe maximum intake capacity,

- (c) which projects inside the tank or compartment for the distance not exceeding 25 millimetres
- (d) which prevents the collection or retention of rainwater or other liquid in the pipe
- (e) located so that its outlet or orifice to the atmosphere terminates in the open air
 - (i) not less than 4 metres above the surrounding ground level
 - (ii) not less than 0.20 metres higher than the maximum liquid level of petroleum Class 1 in the lank of a tank-vehicle in its standing position whilst delivering that class of petroleum at a retail store or private store,
 - (iii) not less than 6 metres measured horizontally from a dispensing pump
 - (iv) in such a position that any fume or vapour emitted from the pipe discharges upwards and cannot be trapped under eaves or other obstructions of buildings or enter or be drawn into any building or enter structure or confined space by means of an air intake opening, opening window, door or other opening
 - (v) not less than a vertical distance of 1.50 metres from any opening or entry to a basement or other area below ground level, and
 - (vi) is provided with an effective corrosion resistant and flame arresting device incorporation a weather-proof hood to prevent leaves, dirt, rain, or other matter gaining access to the ventilating pipe, and the effective air outlet openings of the device or hood shall be not less than the internal diameter of the pipe.
- (2) Every ventilating pipe provided under paragraph (1) of this Regulation shall be so supported and protected as not to be liable to foreseeable physical or mechanical damage.
- (3) All practicable steps shall be taken to prevent air locks within an underground tank or separate compartment of such a tank

<u>Reg 41</u>

- (1) The ground above the surface of every underground storage tank and underground pipeline connected to such a tank shall be adequately reinforce to an appropriate extent in depth and surface area so as to prevent a risk of damage or injury to the tank or pipeline from the weight of any vehicle, carriage or article used or likely to be conveyed, handled or deposited in the immediate vicinity.
- (2) Subject to paragraph (1) of this Regulation and to any condition attached to a licence
 - (a) the manhole lid of every underground storage tank shall be not less than 0.5 metres below ground level
 - (b) the shell of every underground storage tank shall not be less than 0.6 metres below ground level, and
 - (c) where the tank is located in an area likely to be subjected to vehicular traffic, the area above the tank shall be provided with a layer, not less than 250 millimetres in thickness, of adequately reinforced concrete
 - (i) set on a properly tamped foundation of suitable non-corrosive materials and
 - (ii) extending for an adequate distance in all directions beyond the extremities of the tank