

DUBLIN CORPORATION WATERWORKS



REGULATIONS

(SUBJECT TO ALTERATION)

**For The Purpose Of Preventing The Waste,
Undue Consumption, Misuse Or Contamination Of The**

DOMESTIC WATER SUPPLY

under the

**DUBLIN CORPORATION WATERWORKS ACT,
and the several Acts incorporated therein,**

ADOPTED BY THE CORPORATION

On the 15th day of December 1975

**Head Offices:
WATERWORKS DEPARTMENT
70/72 MARROWBONE LANE
DUBLIN 8.**

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DEFINITIONS

1. In these Regulations the following works and expressions shall have the meanings herein defined, namely:

(a) “The Corporation” means the Corporation of Dublin.

(b) “Approval” or “Approved” means approval in writing, or approved in writing by the Corporation.

“Ballvalve” means any float-operated cock for controlling the inflow of water to any cistern or other vessel.

“British Standard” or “British Standard Code of Practice” means the current standard of specification or a Code of Practice published under authority of the General Council of the British Standards Institution

(c) “Capacity” in relation to any cistern means the capacity of the cistern when filled up to the water line.

(d) “Cistern” means a fixed container for water in which the water is at atmospheric pressure.

(e) “Closed Circuit” means any system of pipes and other water fittings through which water circulates and from which water is not drawn for use, and includes any vent pipe fitted thereto but not the feed cistern or the cold feed pipe.

(f) “Consumer” means any corporate body, person or persons supplied with, or applying to be supplied with, or using the water of the Corporation, or any corporate body, person or persons otherwise liable for the payment of the water rates, rents or charges.

(g) “Corrosion-resisting Material” means any material which is highly resistant to any corrosive action to which it is likely to be subjected in the circumstances in which it is used.

(h) “Cylinder” means a cylindrical closed vessel capable of containing water under pressure greater than atmospheric pressure.

- (i) “Distributing Pipe” means any pipe conveying water, supplied by the Corporation, from a storage cistern or feed cistern or from a hot water apparatus and under pressure from such cistern.
- (j) “Domestic Indirect System of Hot Water Supply” means a hot water supply system in which the water supplied to the draw-off points is heated by means of an indirect cylinder or calorifier.
- (k) “Feed Cistern” means any storage cistern used for supplying cold water to a hot water apparatus.

“Flushing Cistern” means a cistern having an efficient flushing apparatus of the valveless syphonic type for flushing a water closet pan, slop sing, urinal or drain.

“Indirect Hot Water Cylinder or Calorifier” means a cylindrical closed vessel of the double feed type capable of containing water under pressure greater than atmospheric pressure and in which the water in the coil or annular heating element within the cylinder in the primary circuit is entirely separate from the water to be drawn off for use.

“Irish Standard” means the current standard or specification published by the Institute for Industrial Research and Standards. Referred to above

- (l) “Premises” means any separately occupied house or building or part of a house or building or any tenement or hereditament and the curtilage thereof in respect of which water is supplied or applied for.

“Service Pipe” means a pipe directly subject to water pressure from the main of the Corporation, including the pipe between the main and the premises to which the water is supplied.

“Storage Cistern” means any cistern other than a flushing cistern, in which the water is at atmospheric pressure, but does not include a drinking trough or drinking bowl for animals, including poultry.

- (m) “Warning Pipe” means an effective overflow pipe so fixed that its outlet end is in a conspicuous position, whether inside or outside a house or building, but within the boundary of the premises, and where the discharge of any water therefrom can be readily seen.
- (n) “Water Fittings” means pipes, fittings and apparatus used in connection with the supply and use of water supplied by the Corporation.

- (o) "Water Line" in any cistern means the top water level at which the cistern is designed to work.
- (p) Where the dimensions of any pipes, fittings or apparatus are given in Imperial Units only, the equivalent dimensions in Metric Units shall also apply.

Authorised Officer

- 2. Where under these Regulations any act is required or authorised to be done by the Corporation, such an act may be done on behalf of the Corporation, by an authorised officer or servant of the Corporation, and where under these Regulations any notice is required to be given by the Corporation, such notice shall be sufficiently authenticated if it be signed, or purports to be signed, by an authorised officer or servant of the Corporation.

Inspection of Installation and Connection with Supply

- 3. Before the laying on of a new water supply from any watermain of the Corporation, or before a connection for a supply of water can be made for domestic or non-domestic use with an existing service pipe supplied with water by the Corporation, the installation to be supplied shall be inspected and approved by an authorised Officer of the Corporation.

In this regard applicants should seek the Corporation's approval of the details before proceeding with an installation so avoiding condemnation of non-complying work after the installation is complete.

All such water fittings and the plumbing work connected therewith which are subsequently to be concealed or buried underground shall be left uncovered for inspection. At least three working days' notice shall be given at the Office of the Corporation when the installation is complete.

Approval of Water Fittings

- 4. For the purpose of ensuring that water fittings comply with these Regulations, accredited representatives or agents of manufacturers shall apply in writing and if requested submit standard samples of pipes, fittings, apparatus, etc., for examination and test by the Corporation. The representative or agent shall be notified of the Corporation's decision in the matter.

Representatives or agents must be resident in Ireland.

Additions or Alterations to Installations

- 5. No additional pipe, fitting or apparatus shall be connected to any installation supplied with water by the Corporation, nor shall any alteration be made to or in any existing pipe, fitting or apparatus (other than a repair) unless at least three working days' notice has been previously given at the Office of the Corporation, nor until both the existing installation and addition thereto shall have been inspected by an authorised officer of the Corporation and found to be in accordance with these Regulations.

Quality of Water Fittings

6. A person shall not, for conveying, delivering, receiving or using water supplied by the Corporation, fix, fit, or use or cause or permit to be fixed, fitted or used any pipe fitting or apparatus which shall not be of good quality and shall not be in accordance with such of the requirements hereinafter set forth as shall be applicable to it.

Provided that a person shall not be required by the Regulation to alter or renew any pipe, fitting or apparatus lawfully existing and lawfully in use at the date when this Regulation first applied, or to construct or provide any addition thereto unless and until such pipe, fitting or apparatus is so defective or restricted or in such condition or position as to cause or be likely to cause waste, undue consumption, misuse or contamination of the water supplied by the Corporation.

Provided, further that a person shall not be prohibited from fixing, fitting or using for such lawful purposes any approved pipe, fitting or apparatus constructed of material the strength, efficiency and durability of which does not fall below that of the material hereinafter specified in these Regulations for such pipe, fitting or apparatus respectively.

Method of Installation

7. The method of installation of all pipes, fittings or apparatus shall be such that the creation of a negative pressure of air in the pipes shall be avoided, that the pipe, fitting and apparatus shall be free from backflow and back-syphonage at all times and that waste, undue consumption, misuse or contamination of the water supplied by the Corporation shall be prevented.

Support of Pipes

8. Every pipe shall be properly and adequately supported and shall be laid or fixed so as to avoid sagging, the development of air locks and reverberation. The maximum spacing of fixings for the support of pipes shall be in accordance with Table 8 of British Standard Code of Practice 310.

Accessibility of Pipes and Fittings

9. All pipes and fittings shall be arranged so as to be readily accessible and where enclosed, the casing or duct shall be so constructed as to afford ready means of access to the pipes and fittings for examination and repair; and the point of discharge of any pipe or cock shall be in a position readily accessible for inspection.

Protection of Pipe, Fittings and Apparatus from damage from frost or other causes

10. Every pipe, fitting or apparatus laid or fixed above or below ground and in such a position whether inside or outside a building as to render it liable to damage by frost or injury from other causes shall be suitably protected from such damage or injury.

Depth of Pipes Underground

11. Every underground pipe, when not beneath a building, shall be laid at a depth to the top of the pipe of not less than 0.61m (2 feet) and not more than 1.22 m (4 feet) below the finished surface of the ground or pavement immediately above such pipe, and when

passing through the foundations or basement wall of a building it shall be accommodated in a sleeve installed during the course of construction of the building.

Materials for Consumers' Pipes

12. (a) Service Pipes – Every service pipe shall be of copper, stainless steel, steel (G.B.), (see Regulation 20), cast iron, spun iron, ductile iron, asbestos cement, polythene or unplasticised polyvinyl chloride and shall not be less than 13mm (½ inch) in nominal internal diameter throughout.

Provided that any portion of a service pipe laid in a public thoroughfare shall not be of steel (G.B.) or polythene.

- (b) Pipes other than service pipes – Every distributing pipe, pump delivery pipe and pipe other than a service pipe shall be of copper, stainless steel, steel (G.B.), cast iron, spun iron, ductile iron, asbestos cement, polythene or unplasticised polyvinyl chloride and shall not be less than 13mm (½ inch) in nominal internal diameter throughout.

Provided that any distributing pipe laid in a public thoroughfare shall not be of steel (G.B.) or polythene.

Pipes of Other Materials

13. Every service pipe, pump delivery pipe, distributing pipe and pipe fitting not being a pipe or fitting of a material specifically mentioned in Regulation 12, shall be of corrosion resisting material the nature, thickness and strength of which is suitable in the circumstances in which the pipe or pipe fitting is to be used and shall be approved by the Corporation.

Protection of Pipes in Foul Soil or Sewage

14. No service pipe or distributing pipe shall be laid or fixed so as to pass into or through any sewer or drain, or any manhole connected therewith, or into or through any manure hole, cesspool, septic tank, ashpit or refuse chute and except where unavoidable, no service pipe or distributing pipe, shall be laid in or allowed to remain in contact with any foul soil, or any material of such a nature that it would be likely to cause undue deterioration of the pipe. Where the laying of any such pipe through foul or abnormally corrosive soil or injurious material is unavoidable the pipe shall be properly protected from contact with such soil or material either by being encased in a non-corrosive and watertight duct or by some other suitable means. No pipe made of any material susceptible to permeation by any gas which could cause contamination of the water in the pipe shall be laid, installed or allowed to remain in a position where such permeation could reasonably be expected to occur.

Materials of Pipes for Conveying Hot Water

15. Every pipe used for conveying hot water shall be of copper, stainless steel, galvanised steel (G.B.), or some other corrosion resisting material which is not less suitable.

Provided that this Regulation shall not prohibit the use of cast iron low pressure heating pipes which are not less than 50 mm (2 inches) in nominal internal diameter, and which comply with the respective British Standard Specification and forming a heating

installation from which water is not drawn. Provision must be made for the expansion of the pipes and to ensure that the installation will remain watertight.

Pipes of Copper

16. Every pipe of copper shall, as regards chemical composition, method of construction, freedom from defects and form of screw thread be in accordance with the current British Standard Specification for such pipes.;

Provided that for such time as shall be determined by the Corporation, copper pipe with approved joints, not being screwed joints and fixed above ground and within a building shall comply with the dimensions set out in the following table:

Nominal Size	Outside Diameter		Wall Thickness	Tolerance on Wall Thickness
mm	Max mm	Min mm	mm	mm
15 (½ inch)	14.73	14.63	0.71	± 0.076
22 (¾ inch)	21.08	20.98	0.86	± 0.076
28 (1 inch)	27.43	27.33	0.91	± 0.076
35 (1¼ inch)	34.19	34.09	1.12	± 0.102
42 (1½ inch)	40.54	40.44	1.12	± 0.102
54 (2 inch)	53.64	53.54	1.22	± 0.102

Provided, further, that copper pipe with approved joints not being screwed joints and laid under the ground, and to above ground and with in a building, shall be in compliance with the current British Standard Specification for copper tubes to be buried underground, and that copper pipe with approved joints not being screwed joints and fixed above ground and within a building may be in compliance with the current British Standard Specification for light gauge and thin wall copper tubes.

Pipes of Cast Iron, Spun Iron or Asbestos Cement

17. Every service pipe and every distributing pipe of cast iron, spun iron or asbestos cement shall comply in all respects with the following British Standard Specifications:

B.S. 78: Part 1: Cast Iron Spigot and Socket Pipes (vertically cast) and Spigot and Socket Fittings.

B.S. 1211: Centrifugally Cast (Spun) Iron Pressure Pipes for Water, Gas and Sewage.

B.S. 2035: Cast iron flanged pipes and flanged fittings.

B.S. 4622: Grey Iron Pipes and fittings.

B.S. 4772: Ductile Iron Pipes and fittings.

B.S. 486: Asbestos Cement Pressure Pipes.

Provided that no service pipe of such materials shall be of lower standard than Class C of the appropriate respective Specification.

Pipes and Fittings of Steel (G.B.)

18. Every Pipe and fitting of steel (G.B.) shall comply with the current British Standard Specification for such pipes and where required shall be protected against corrosion by adequate galvanising or by using corrosion-resisting metal or alloy lining, or other equally efficient method.

Provided that steel pipes (G.B.) shall not, except with the approval of the Corporation, be used for the supply of either hot or cold water otherwise than as follows:-

- (a) Heating pipes forming a heating installation, or part of a heating installation which is separate from and independent of any other installation conveying water supplied for any other purpose and forming a circuit from which water is not drawn.
- (b) Inside a premises above ground in connection with automatic fire sprinkler installations, on the premises side of the "installation valve", where the water will normally remain stationary in the pipes.
- (c) Certain approved industrial and manufacturing purposes.
- (d) Warning pipes.

Pipes of Polythene

19. Every pipe of polythene shall comply with the current Irish and British Standard Specifications and shall only be used for the supply or discharge of cold water where there is no possibility whatever of the pipe becoming charged with hot water and where the maximum pressure to which the pipe will be liable to be subjected under working conditions does not exceed that set down in the relevant Standard.

Pipes of polythene to be laid under the ground shall comply with the following requirements of the undermentioned Irish or British Standard Specifications.

Nominal Size

½" and ¾"	- Normal Gauge to I.S. 134.
½" to 1½"	- Heavy Gauge to I.S. 134.
½" to 2"	- Class B, Class C or Class D of I.S. 135.
½"	- Class C or Class D of B.S. 1972.
¾"	- Class B, Class C or Class D of B.S. 1972.
½" and ¾"	- Class C and Class D of B.S. 3284.
1" to 3"	- Class B, Class C and Class D of B.S. 3284.
4"	- Class B and Class C of B.S. 3284.
6"	- Class B of B.S. 3284.

Every service pipe, pump delivery pipe, distributing pipe or warning pipe of polythene shall be jointed by means of approved joints. Screwed, butt-welded, spigot joints or joints which require a manipulation of the pipe to accommodate any insert of a larger diameter than the internal diameter of the pipe are not approve.

Pipes of Unplasticised Polyvinyl Chloride

20. Every pipe of unplasticised polyvinyl chloride, hereinafter referred to as UPVC, shall comply with Irish Standard Specification I.S. 123 or British Standard Specification B.S.

3505 and shall only be used for the supply or discharge of cold water where there is no possibility whatever of the pipe becoming charged with hot water or discharging hot water.

Every service pipe, pump delivery pump and distributing pipe of UPVC shall not be of lower standard than Class C. Provided that ½ inch to 1½ inches (inclusive) nominal size pipes may be in accordance with Table 1 of I.S. 123.

Provided further that this Regulation shall not prohibit the use of Class B UPVC distributing pipes fixed above ground and with in a building.

Every service pipe, pump delivery pipe and distributing pipe of UPVC shall be jointed by means of joints approved by the Corporation.

Connection of Lead or Lead alloy Pipes with other Pipes

21. Every connection between a lead or lead alloy pipe and an iron, steel (G.B.), stainless steel, polythene, unplasticised polyvinyl chloride (Hard PVC), or copper pipe shall be made by means of a union of brass, gunmetal or corrosion-resisting alloy connected to the lead or lead alloy pipe by means of a wiped soldered joint. The Corporation may approve of other alternative connections at its discretion.

Connection with Water Fittings supplied from other Sources

22. No pipe for the conveyance of or in connection with water supplied by the Corporation shall communicate with any pipe, cistern or other vessel used or intended to be used for the conveyance or reception of any water other than water supplied by the Corporation.

Temporary Supplies and Building Supplies

23. Any service pipe or distributing pipe installed to provide a temporary supply of water to a building during its erection or for other approved purposes shall not be used for the permanent supply to a premises without the written approval of the Corporation, who must be asked in writing for approval. Where such temporary supply is allowed for building purposes a standpipe with cock shall be provided and all exposed pipe shall be securely fixed to a stout wooden post, and if the Corporation consider it necessary, the cock shall be enclosed in a strong box of wood or other suitable material complete with a safe lock and key.

Where a service pipe is installed it shall be laid in such a position that it may be used for the permanent supply on completion of the building.

Bends or Curves in Pipes

24. No bend or curve in any pipe shall be made so as materially to diminish or alter the internal diameter or strength of the pipe in any part.

Separate Service Pipes

25. Every premises supplied with water from the Corporation's mains shall be supplied by a separate service pipe, which pipe or any cistern or other pipe, fitting or apparatus supplied thereby shall not communicate, with or supply water to any other premises. The service pipe to each premises shall lie wholly within the curtilage of that premises.

Provided that this Regulation shall not be deemed to apply to a building divided into self-contained flats so long as the following condition is observed:-

That any such flat shall be supplied by a 13mm (½ inch) nominal internal diameter sub-service pipe controlled by a stopcock and branched, within or without the building, from a common service pipe of a nominal internal diameter to be determined by the Corporation in each case, but not less than 19mm (¾ inch) in nominal internal diameter.

Provided, further, that a group or block of houses, not more than six in number, the valuation of each of which does not exceed seven pounds and fifty pence and the rates in respect of which are paid by one owner, may be supplied by a common service pipe, if each house is supplied through a separate sub-service pipe branched from the common service pipe of a nominal internal diameter to be determined by the Corporation in each case, but not less than 19mm (¾ inch) in nominal internal diameter, and controlled by a stopcock outside the premises.

A dwelling house which has been converted into flats and before conversion was supplied by a single 13mm (½ inch) service pipe shall have a larger service pipe or pipes laid on to comply with this Regulations.

A service pipe shall not be connected to any distributing pipe.

A service pipe shall not be connected to any pump suction or delivery pipe except with the approval of the Corporation.

Connection of Service pipe to Corporation Main

26. The connection of every service pipe with any main of the Corporation shall be made by means of a screw-down gunmetal ferrule or an appropriate branch fitted with a sluice valve.

Provided, however, that:-

- (a) For service pipes of from 13mm (½ inch) to 25mm (1 inch) nominal internal diameter the connection shall be by means of a screw-down gunmetal ferrule to Corporation Standard Specification;
- (b) For service pipes of more than 25mm (1 inch) and less than 50mm (2 inches) nominal internal diameter the connection shall be by means of a gunmetal ferrule attached to an appropriate branch inserted in the Corporation main;
- (c) For service pipes of 50mm (2 inches) nominal internal diameter and upwards the connection shall be by means of an appropriate branch inserted in the Corporation main with a sluice valve fixed as close as practicable to the branch.

Point of Entrance of Service Pipe

27. Every service pipe shall so far as is practicable be so laid as to follow the shortest route between the Corporation main and the consumer's premises.

Street Control Stopcock or Sluice Valve on Service Pipe

28. Every service pipe shall be fitted between the point where it crosses the street boundary and the Corporation main with a stopcock or sluice valve operated by means of a removable key only, and having an area of waterway not less than that of a 13mm (½ inch) nominal internal diameter pipe. Such stopcock or sluice valve shall be protected by a cast iron surface cover of Corporation standard pattern set in a stone flag or in concrete of approved form.

Provided that where the service pipe is taken from a main laid in private ground, the stopcock or sluice valve shall be fixed as close to the main as practicable.

Control Stopcock or Sluice Valve on Service Pipe within Premises

29. In addition to the street control stopcock or sluice valve required by Regulation No. 28, every service pipe shall be fitted near its point of entrance to a premise and within such premises, in a convenient and accessible position, with a stopcock or sluice valve of suitable internal diameter and if practicable, fitted with a crutch or wheel for manual operation. If placed in the ground such a stopcock or sluice valve shall be protected by a proper cast iron surface cover.

Cocks and Valves

30. Every bib cock, pillar cock, draining cock, stopcock and ballvalve fixed or fitted to any pipe, fitting or apparatus used for conveying, delivering, containing or measuring the water supplied by the Corporation, unless otherwise required or permitted by the Regulations, shall comply with the appropriate British Standards or other Specifications approved by the Corporation for such fittings.
- (a) Every street control stopcock (as required by Regulation No. 28) of 13mm (½ inch), 19mm (¾ inch), 25mm (1 inch) and 38mm (1½ inch) nominal size shall be made in accordance with the Dublin Corporation Specification for Standard Underground Stopcocks.
- (b) Every gate valve shall comply with British Standard 1952, “Copper alloy gate valves for general purposes,” or other Specification approved by the Corporation.
- (c) Every sluice valve of 50mm (2 inch) nominal size and upwards shall comply with British Standard 1218, “Sluice valves for Waterworks purposes,” or other Specification approved by the Corporation. Such sluice valves when used as a street control valve shall have the spindle screwed to open clockwise and fitted with a cap shaped to fit the Corporation Standard valve key.

Hydrants

31. Every underground fire hydrant shall be of Corporation standard pattern and shall be of a streamlined screw-down valve type with bayonet lug outlet, and shall be enclosed and protected by an approved pre-cast concrete hydrant chamber and a cast iron surface cover of Corporation standard pattern and such surface cover shall be set in stone flagging or in concrete in an approved manner.

Fire Hose Reels

32. No fire hose reel intended to be supplied with water from the Corporation's mains shall be installed until the design of the installation has been approved by the Corporation. Where approval is given the reels shall be supplied by pipes of not less than 38mm (1½ inch) internal diameter. Each reel shall be controlled by a suitable gate valve having a hand wheel, fitted as near as practicable to the reel.

No service pipe, pump delivery pipe or distributing pipe of thermoplastics material shall be used above ground for fire hose reel installations.

Drinking Water Fittings

33. (1) Where in any premises water is required for drinking purposes these Regulations shall not prohibit the fixing over a household sink of a draw-off cock, or in some other suitable independent position, of a draw-off cock, or approved drinking water fountain connected with the service pipe or a pump delivery pipe drawing water from a service pipe.

Provided that where, by reason of the height at which the water is required to be delivered or of some other circumstance, it is not practicable to provide in the premises a service pipe or a pump delivery pipe drawing water from a service pipe, the drinking water fitting or fittings may be supplied from a pump delivery or distributing pipe drawing water exclusively from a storage cistern which:

- (a) is a closed vessel having a tightly fitting access cover bolted or screwed in position;
 - (b) is properly maintained and where necessary, suitably lined or coated to preserve the potability of the water;
 - (c) has an air inlet and an overflow pipe or pipes all suitably screened;
 - (d) is, where necessary, insulated against heat; and
 - (e) is supplied exclusively from a service pipe, or from a pump delivery pipe drawing water either from a service pipe or from a storage cistern which is a closed vessel equipped, maintained and supplied as aforesaid.
- (2) No pipe on which any drinking water fittings are provided shall be so placed that the water in the pipe is likely to become warm before reaching the fittings.
- (3) Where necessary every such draw-off cock shall be identified by means of a legibly and indelibly marked indicator with the words "Drinking Water". Pipes conveying drinking water shall be identified by the methods indicated in B.S. 1720: "Identification of Pipelines".
- (4) The situation of such cocks or fountains shall be subject to the approval of the Corporation.

Use of Water Softening Apparatus

34. No person shall install any apparatus for softening water except in pursuance of an agreement in writing with the Corporation. Where the use of such apparatus is permitted, consumers must ensure that the apparatus is correctly installed and the pipes, fittings and apparatus are suitable for the reception of the softened water.

Non-concussive Self-closing Cocks

35. The Corporation reserve the right to insist on the fixing of approved non-concussive self-closing cocks in all premises other than a dwelling house.

Mixing or Special Cocks

36. Single outlet combination cocks, mixing valves for hot and cold water and all other cocks not being of the ordinary screw-down kind shall be so constructed and of such strength as to be adequate for preventing waste, undue consumption or contamination of water, and shall be approved. All such fittings shall be supplied only from storage or feed cisterns.

Provided that this Regulation shall not prohibit the fixing over a household sink of an approved double outlet combination cock for drawing drinking water if the streams of cold water and hot water are kept separate and do not mix until they emerge from the nozzle of the cock.

Minimum Size of Ballvalve

37. Ballvalves shall be of not less than 13mm ($\frac{1}{2}$ inch) nominal size and shall comply with either B.S. 1212, Part 1, or B.S. 1212, Part 2, or any other specification approved by the Corporation, subject to:-
- (a) 13mm ($\frac{1}{2}$ inch) nominal size ballvalves fitted on any part of a service pipe shall have a 3.2mm ($\frac{1}{8}$ inch) seat and copper or plastic float having a diameter of not less than 127mm (5 inches). Copper floats shall be jointed as specified for Class C in B.S. 1986.
 - (b) 13mm ($\frac{1}{2}$ inch) nominal size ballvalves fitted on a distributing pipe shall have a 6.4mm ($\frac{1}{4}$ inch) bore seat up to 7m (23 feet) head of water. Above this head of water a 3.2mm ($\frac{1}{8}$ inch) bore seat shall be used. The float shall have a diameter of not less than 114mm ($4\frac{1}{2}$ inches).
 - (c) No ballvalve shall be so arranged that it may operate in hot water.

Every ballvalve float shall comply with B.S. 1968, "Floats for ballvalves copper" or B.S. 2454, "Floats (plastic) for ballvalves for hot and cold water".

Materials for Cold Water Cisterns

38. Every cold water cistern shall be watertight and shall be constructed of mild steel, cast iron, stainless steel, asbestos cement, concrete, vitreous china, fireclay, sheets of copper, wood lined with sheet copper of not less than 22 Standard Wire Gauge, or other corrosion-resisting materials as may be approved by the Corporation. The materials used shall be of adequate strength and thickness, and if the cistern is constructed of mild steel sheets or plates, it shall comply *** the current Irish or British Specification for galvanised mild steel cold water cisterns. Concrete storage cisterns shall be constructed in accordance with British Standard Code of 2007 Part 1, Imperial Units, or Code of Practice 2007 Metric Units, "Design and construction of reinforced and prestressed concrete structures for the storage of water and other aqueous liquids".

Provision of Storage for Domestic Purposes

39. For the protection of the water supply and in the interests of the consumers, water which is used for the supply to any flushing apparatus or for the cold water supply to any bath, shower bath, wash basin or other fittings or apparatus, or to any domestic direct or domestic indirect system of hot water supply of the double feed type, or any domestic water heating apparatus, shall be drawn from cold water storage cisterns or feed cisterns.

Where two or more cisterns are coupled together in series without manifold pipes, the inlet and outlet must be at opposite ends of the series.

Minimum water storage requirements for domestic purposes, etc., are set down in Supplemental Regulation No. 6.

Provision of Storage for Hot Water Apparatus

40. Every domestic hot water system or domestic water heating apparatus other than a heating installation shall be supplied with cold water from a feed cistern having a capacity of not less than 136 litres (30 gallons) in the case where such feed cistern is used only in connection with the domestic hot water system or domestic water heating apparatus.

Overflow Warning Pipes

41. Every cold water storage cistern and every feed cistern and every flushing cistern not being an automatic flushing cistern, shall be provided with an efficient warning pipe and with no other overflow.

No warning pipe shall be less than 19mm ($\frac{3}{4}$ inch) in nominal internal diameter.

A warning pipe to be efficient shall be of a capacity sufficient to carry away water at the full rate of inflow to the cistern and be so designed that it will have a proper fall along its length and be free of dips or traps so that water cannot be retained when overflowing has ceased.

Provided that this Regulation shall not prohibit the use of approved combined warning pipe devices which discharge into a fixed bath or to the use of a common warning pipe or pipes designed to receive a number of overflow pipes from flushing cisterns only, grouped together on one floor. The size of each common warning pipe and the number of flushing cisterns to discharge thereto shall be determined by the Corporation in each case.

Position and Method of Fixing Ballvalves

42. Every ballvalve shall be securely and rigidly fixed to the cistern which it serves and shall be supported independently of the inlet pipe (unless such inlet pipe itself be rigidly fixed to the cistern) and in such position that it discharges above the level of the top of the overflow warning pipe and that the outlet or the body of the ballvalve cannot become submerged.

Ballvalves or Other Controls on Supply Pipes

43. Every pipe supplying water to any cistern shall be fitted with a ballvalve or shall have some other approved not less effective device for controlling the inflow of water so designed to prevent overflow and constructed and positioned so as effectively to prevent back-syphonage into the supply pipe.

Protection of Storage and Feed Cisterns

44. Every storage and feed cistern shall be properly covered, but not so as to be airtight, and if fixed in an exposed situation shall be properly protected against frost, and shall be placed in such a position that the water in it would not be liable to contamination and where the interior thereof can be readily inspected and cleansed. Covers shall be rigid with overlapping edges and so designed that they cannot easily be dislodged.

Gate, Diaphragm or Sluice Valves on Outlet Pipes

45. On every outlet pipe, other than a warning pipe, from every storage or feed cistern of a capacity exceeding 18 litres (4 gallons) a suitable gate, diaphragm or sluice valve shall be provided in a convenient and accessible position, as near to the storage or feed cistern as practicable.

Prohibition of Underground Storage Cisterns

46. The installation of underground storage cisterns is prohibited except in very special circumstances and subject to the following conditions:-
- (1) No storage cistern shall be buried or sunk in the ground otherwise than in pursuance of an agreement in writing with the Corporation.
 - (2) No such storage cistern shall be so placed that it is in danger of being flooded.
 - (3) No such cistern shall be buried or sunk in the ground unless:
 - (a) there is sufficient space around and beneath it for the purposes of maintenance and the detection of leakage;
 - (b) it is a closed vessel with a tightly fitting access cover bolted or screwed in position, and with an air inlet and overflow pipe or pipes all suitably screened.

Provided that sub-paragraph (a) of this paragraph shall not apply in relation to a concrete cistern designed and constructed in accordance with the relevant recommendations in the British Standard Codes of Practice CP 2007, "Design and construction of reinforced and prestressed concrete structures for the storage of water".

Provision of Flushing Cisterns

47. Every water closet pan and urinal shall be provided with an approved flushing cistern separate and distinct from any cistern used to contain water for domestic or other purposes, or with an approved flushing apparatus which is not less suitable in preventing waste, undue consumption, or contamination of water.

Flushing Cisterns and Permitted Flush of Water Closet Pan

48. Flushing cisterns shall comply with the respective current Irish or British Standard Specification and shall be of 9 litres (2 gallons) or 11 litres (2½ gallons) discharge capacity, which means the quantity of water discharges when the cistern is filled to the water line with the ballvalve closed.

Every flushing cistern shall be clearly and indelibly marked with the name of the manufacturer. This marking shall be in such a position as to be seen without dismantling the article. In the case of vitreous china, the words “Vitreous China” shall be added.

Provided that this Regulation shall not prohibit the use of approved flushing troughs which comply with the essential requirements relating to flushing cisterns.

Flushing Cisterns of Cast Iron

49. Cast iron flushing cisterns of the bell syphon type shall be efficiently protected against corrosion by galvanising.

Flushing Cisterns – Flush Pipe Connection

50. The connection for attachment to the flush pipe shall be screwed as follows:-
- (1) where the cistern is to be used at low level, not less than one-and-a-half inch British Standard pipe (parallel) thread;
 - (2) where the cistern is to be used at high level, not less than 1¼ inch British Standard pipe (parallel) thread.

The flush pipe or flush bend supplied with a low-level flushing cistern shall not be cut or reduced in any way.

The flush pipe or flush bend for a high level cistern shall be fitted in such a manner that a minimum length of two inches is available for the proper connection to the water closet pan.

The use of putty or similar jointing materials is not allowed.

Flushing Cistern – Permitted Flush of Urinal

51. Every urinal shall have a cistern in conformity with the Regulations hereinbefore prescribed with respect to flushing cisterns, except that the cistern shall be capable of delivering a flush of not more than 4.5 litres (1 gallon) discharge capacity to any urinal or per 0.7m (2 feet 3 inches) width of slab.

Provided that where a group of three urinals is flushed by one flushing cistern, the flush shall be of not more than 9 litres (2 gallons) discharge capacity.

Flushing Cisterns – Method of Discharge

52. Every flushing cistern provided in connection with a water closet pan or any urinal shall be so constructed, installed and maintained that the syphonic apparatus shall be capable of being easily and rapidly brought into action when the water is at the water line and

that water cannot flow down the flush pipe except when a flush is being properly delivered.

Flush Valves

53. Every flush valve for controlling the flushing of any water closet pan or similar fitting shall be so designed as to shut off the supply of water automatically after a predetermined quantity of water has been discharged through it and the volume and rate of discharge of the flush of water shall be the same as required of flushing cisterns.
- (a) Every flush valve shall be properly installed and maintained and shall be supplied with water from an independent storage cistern. Where a flush valve is installed in a single family dwelling house the capacity of the storage cistern shall be not less than 136 litres (30 gallons) and this water storage shall be increased by 45.5 litres (10 gallons) for each additional flush valve installed.
- In the case of premises other than a single family dwelling house the capacity of the storage cistern shall be equal to the maximum daily consumption which shall be provided for on the basis of not less than 27.5 litres (6 gallons per head.
- (b) The storage cistern and supply pipe to any such flush valve shall not be used for any other purpose.

Single Flush Pipe only Allowed

54. No pipe other than a flush pipe leading from a flushing cistern or a flushing apparatus shall deliver water to any water closet pan or any urinal.

Water Closet Pans

55. Every water closet pan of the washdown, syphonic, eastern or any special type shall be constructed of vitreous china, fireclay, stainless steel or of other materials approved by the Corporation.

Every water closet pan shall be so constructed that after normal use its contents will be effectively cleared by one flush from the flushing cistern or flushing apparatus to which it is connected.

Every water closet pan shall be clearly and indelibly marked with the name of the manufacturer. This marking shall be in such position as to be seen without dismantling the article. In the case of vitreous china, the words "Vitreous China" shall be added.

Where general approval is given for a particular manufacturer's flushing cistern or flushing apparatus and water closet pan as a high level or as a low level suite, such suite shall be fixed in accordance with the manufacturer's instructions, and any interference with, or alteration of, or substitution of other parts or part is hereby prohibited.

Use of Automatic Flushing Cisterns

56. Self-acting or automatic flushing cisterns shall comply with British Standard 1876, "Automatic flushing cisterns for urinals," and shall not be installed in any premises

where the water is not supplied through a meter except in pursuance of an agreement in writing with the Corporation.

- (a) The distributing pipe connected to any automatic flushing cistern shall be controlled by a stopcock, fixed in a convenient and accessible position, and a regulating cock at the cistern. The regulating cock shall, unless with the approval of the Corporation, be so adjusted that the cistern cannot discharge a flush of water more frequently than once in any period of fifteen minutes.
- (b) The water supply to any automatic flushing cistern on any premises shall be shut off during any periods when the premises are closed.
- (c) Every automatic flushing cistern shall be provided with a removable cover. The cover shall be secured to prevent unauthorised removal.

Hot Water Apparatus – Domestic Fire-Boilers

57. Every fixed domestic fire-boiler shall comply with British Standard 3377, “Back boilers for use with domestic solid fuel appliances,” and the boilers shall be used in accordance with the requirements of Appendix A of this Standard.

Provided that boilers which are not governed by the above specification should be made the subject of special arrangements in respect of manufacture and test, and the appropriate British Standards should be regarded as applicable to all materials used in their construction.

Hot Water Apparatus – Feed Pipe

58. The outlet from a feed cistern to a hot water apparatus shall be at, or not more than 50mm (2 inches) above, the bottom of the feed cistern, and the feed pipe of suitable internal diameter shall deliver water to the hot water apparatus only.
- (a) The feed pipe to a hot water cylinder or to an indirect hot water cylinder or calorifier shall be sized to meet the probable demand of the draw-off cocks and shall be not less than 19mm ($\frac{3}{4}$ inch) in nominal internal diameter.

Hot Water Apparatus – Feed Cistern

59. Every Type of apparatus in or by which water supplied by the Corporation is heated shall be supplied from a cold water feed cistern.

Gas and Electric Heaters

60. Provided that Regulation No. 59 shall not apply to the supply by a direct connection from a service pipe or a pump delivery pipe drawing water from a service pipe, to a properly designed and controlled gas or electric water heater with an internal capacity of not more than 14 litres (3 gallons) so long as such method of supply is in pursuance of an agreement in writing with the Corporation.

Hot Water Apparatus – Suitability of Installation

61. The character of water supplied by the Corporation in any area may vary from soft to hard and for this reason due account must be taken of the possibility of the water causing corrosion or formation of scale.

The choice of materials and the need for the use of a direct, or an indirect system of the double feed type, should be based on the character of the water supplied.

Hot Water Apparatus – Cylinders

62. Every hot water cylinder shall be constructed of copper, stainless steel, galvanised mild steel or of other materials approved by the Corporation.

Where the hot water cylinder is not made of corrosion-resisting material it shall be effectively protected from corrosion.

Every hot water cylinder to which any of the following Irish or British Standards apply, shall comply with the relevant requirements of that Standard.

I.S. 161	“Copper cylinders for domestic purposes”;
B.S. 699	“Copper cylinders for domestic purposes”;
B.S. 1566	Part 1, “Copper indirect cylinders for domestic purposes – Double feed indirect cylinders”;
B.S. 853	Part 2, “Calorifiers for central heating and hot water supply. Part 2 Copper”;
B.S. 843	“Thermal storage electric water-heaters.
B.S. 1565	“Galvanised mild steel indirect cylinders, annular or saddle-back type”;
B.S. 853 Part 1,	“Calorifiers for central heating and hot water supply. Part 1, mild steel and cast iron.”

Copper combination hot water storage units of the direct type, complying with B.S. 3198, may be used in areas where soft water is supplied.

Hot Water Apparatus – Hot Water Storage

63. Every cylinder or cistern shall have available a capacity to meet the probable demands of the draw-off cocks.

Hot water systems must be designed so as to avoid over-heating which can cause waste of water.

Limit of Depletion of Hot Water Storage

64. No cock or other means of drawing water (other than a cock with a removable key for emptying the system) shall be connected to any part of a domestic hot water system in such a position that by its use the level of the water in the hot water storage cistern or cylinder can be lowered:
- below the level of the top of any pipe connecting the cistern or cylinder to the apparatus in which the water in the system is heated; or
 - by more than one-half of the depth of the cistern or by more than one-fourth of the depth of the cylinder.

Provided that:

- (1) if the hot water system includes two or more hot water cylinders at different levels this Regulation shall apply only in relation to the lowest cylinder; and
- (2) this Regulation shall not apply in relation either to an open vessel in which water is directly heated or to a hot water storage cistern or cylinder forming part of a hot water system in which water is heated only under thermostatic control by electricity, gas or oil.

Hot Water Apparatus – Provision for Expansion

65. In every heating installation and hot water apparatus provision shall be made for the expansion of the water during heating to prevent the water running to waste during such expansion. If the water is contained in a closed cylinder under pressure the expansion of the water shall be provided for by an expansion pipe of not less than 19 mm ($\frac{3}{4}$ inch) in nominal internal diameter connected to the top of the cylinder. Every such pipe shall have a rise in every part of its course. It shall be carried above the level of the water line of the feed cistern to a height of at least 0.46 m (18 inches) for every 7.62 m (25 feet) in the height between the levels of such cistern and the boiler of the system and bent down over the cistern with the open end above the overflow warning pipe connection or carried through the roof so as to discharge above it, or carried through an external wall within the boundary of the premises.

Installation of Combination Cocks and Mixing Valves

66. Where combination cocks, mixing valves and similar apparatus for mixing hot and cold water are installed in any premises, the hot water system and the cold water connection to such mixing apparatus shall be supplied from the same feed cistern or from separate cisterns situated at the same level.

All such fittings shall be supplied by means of suitably sized pipes, whether direct from storage cisterns or branched from common distributing pipes, which will ensure an adequate and constant discharge at all fittings particularly in times of simultaneous demand.

Limit of Length of Single Hot Water Pipe

67. Every cock fixed for the purpose of drawing off hot water shall be at no greater distance than 12 m (40 feet), measured along the pipe to which it is connected, from any hot water apparatus, domestic hot water cylinder, domestic water heating apparatus, or from one of the pipes of a secondary flow and return system where for such distance the pipe does not exceed 19 mm ($\frac{3}{4}$ inch) in nominal internal diameter. Where the nominal internal diameter of a pipe exceeds 19 mm ($\frac{3}{4}$ inch) but not exceeding 25 mm (1 inch) the distance allowed shall be 7.6 m (25 feet).

Materials for Baths, Bidets, Wash Basins, Sinks, Slop Sinks, and Urinals

68. Every fixed;
- Bath shall be constructed of stainless steel, sheet steel, cast iron, fireclay, or cast acrylic sheet.
 - Wash Basin shall be constructed of stainless steel, vitreous china, fireclay, cast iron, steel or cast acrylic sheet.
 - Sink shall be constructed of stainless steel, monel metal, vitreous china, fireclay, cast iron, steel or cast acrylic sheet.

- Slop Sink shall be constructed of vitreous china or fireclay.
- Urinal shall be constructed of stainless steel, vitreous china, fireclay or reinforced polyester glass fibre.

Or of other materials approved by the Corporation.

All such fittings shall be clearly and indelibly marked with the name of the manufacturer. This marking shall be in such a position as to be seen without dismantling the article. In the case of a vitreous china, the words "Vitreous China" shall be added.

No ceramic ware sanitary appliance or apparatus made of earthenware shall be installed in any premises.

Baths, Bidets, Wash Basins and Sinks

69. Every outlet of a draw-off cock or other fitting which discharges water into a bath, bidet, wash basin, sink or similar apparatus with or without an overflow shall be clear above the flood rim and never less than 13 mm (½ inch).

When hot and cold cocks are provided together, the hot cock shall be positioned on the left-hand side.

Provided that this Regulation shall not apply to any bidiet, sitz bath, bedpan washer, slop sink or similar apparatus incorporating any water inlets located below the flood rim, if every pipe conveying hot or cold water to such apparatus is connected to:-

- (a) an independent storage cistern supplying water to such apparatus only; or
- (b) a flushing cistern.

Use of Hose or Movable Pipe

70. A person shall not draw or use water through any hose or movable pipe where water is not supplied through a meter, which is used as a basis of charge, except in pursuance of an agreement in writing with the Corporation.

Every service pipe, pump delivery or distributing pipe supplying a hose or movable pipe shall be fitted with an approved backflow preventer.

Standpipes

71. Every standpipe which is accessible to the occupants of more than one dwelling house shall be provided with an approved non-concussive self-closing cock or other approved equally suitable waste-preventing cock.

Watering Troughs

72. Every watering trough for animals shall be of cast iron or of other material approved by the Corporation and shall be maintained watertight. The service pipe or distributing pipe shall be controlled by a stopcock fixed in a convenient and accessible position, and by a ballvalve securely fixed within a separate compartment and protected by a cover secured with brass set screws or which can be locked by a removable key. The ballvalve outlet shall be clear above the flood rim of the trough and the trough shall be provided with an emptying plug or cock.

Drinking Bowls

73. Drinking bowls or similar water fittings for animals, including poultry, shall be supplied with water from an independent storage cistern, which cistern and supply pipe shall not be used for any other purpose.

Disuse of Fittings

74. Where the use of any water fitting installed in any premises is to be permanently discontinued, such fitting and so much of any pipe to which it is connected as is not required to supply water to any other fitting shall be disconnected from the remainder of the installation.

Vacation of Premises or Supply to be Discontinued

75. When any premises supplied with water becomes unoccupied or for any other reason a supply of water is no longer required, the consumer shall give notice in writing thereof to the Corporation.

Testing

76. The Corporation may examine and subject to such tests as considered desirable, pipes, fittings, apparatus, etc., used in connection with the supply and use of water supplied by the Corporation.

Corporation Not Responsible

77. The Corporation will not be in any way responsible for the perfection of consumers' pipes, fittings, apparatus, etc., or for any damage or inconvenience that may be occasioned through incrustation, bursting, or the overflowing of consumers' pipes, fittings, or apparatus, etc., arising from injuries by frost, or any other cause.

Discontinuance of Improper Pipes, Fittings or Apparatus

78. Any consumers' pipes, fittings or apparatus which shall be fixed or used otherwise than in accordance with these Regulations, or the materials or workmanship of which shall in the opinion of the authorised Officer of the Corporation, be of bad or defective quality, shall be altered in accordance with these Regulations.

Penalties

79. Every person who shall violate, refuse or neglect to comply with or shall do or cause to be done any act, matter or thing in contravention of these Regulations or any part thereof shall for every such offence be liable to a penalty in a sum not exceeding Five Pounds and in the case of a continuing offence to a further penalty in a sum not exceeding One Pound for each day after written notice by the Corporation.

Note: - In addition to offences against these Regulations, there will be found in Part III a list of statutory offences carrying penalties.

Repeal

80. From and after the date of the coming into operation of these Regulations, the Regulations for preventing waste, undue consumption, misuse or contamination of the water of the Corporation which were made by the Corporation on the seventeenth day of April in the year one thousand nine hundred and fifty-two, shall be and are hereby repealed.

CORPORATION OF DUBLIN

PART II

SUPPLEMENTAL REGULATIONS AND CONDITIONS OF SUPPLY

Application for Water Supply

1. Any person requiring a new or additional water supply from the Corporation should first contact the Corporation to ascertain if a water main is available from which a domestic water supply or a water supply for a particular purpose could be granted.

Furthermore, waters of varying degrees of softness or hardness may be received in any particular part of the water supply area, consequently the hot water supply installation, particularly the domestic hot water system, will require to be suitable for the type of water supplied.

When the whole of the water installation is complete and ready for inspection by the Corporation, the applicant shall fill in and deliver to the Corporation the appropriate Application Form, together with a site plan of the premises for which the water supply is intended.

Forms of application may be obtained at the Office of the Corporation. Proper completion and timely submission of these forms is advisable if delay in obtaining the estimated cost of laying on the water supply is to be avoided.

Laying on of New Supplies

2. Where the laying on of a new supply has been agreed to by the Corporation, i.e., when the water installation has been inspected and approved by the Plumbing Inspectorate, the Corporation shall at the expense of the consumer carry out the portions of the work detailed hereunder, provided that the Corporation has been paid in advance the total cost and charges of and incidental to such work.

The consumer or his agent should contact the appropriate Works Inspector, when the necessary lodgement has been made, so that arrangements can be made for the laying on of the water supply.

- (a) Supplies within the Municipal District:

Where the premises to be supplied is situated within the County Borough of Dublin, the Corporation will lay the service pipe from the main to the street boundary, including the excavation and reinstatement of the street, the provision and insertion in the main of the screw-down ferrule or branch pipe, the provision, laying and jointing of the piping, street control stopcock or valve and cover, and the fixing of the meter and cover (when such are required).

- (b) Supplies in Extra Municipal Districts:

Where the premises to be supplied is situated outside the County Borough of Dublin, the Corporation will provide and insert in the watermain the screw-down ferrule or branch pipe and will provide only the street control stopcock or valve cover. The

consumer shall at his own cost carry out any other work necessary for completing the laying of the service pipe, including the excavation and reinstatement of the ground or street (including that necessary for making the connection to the main), the provision and the jointing of the service pipe, the fixing of the street control stopcock or valve and cover, and the fixing of the meter and cover (when such are required). The consumer should also make arrangements with the County Council or other local authority for excavating the street when such is required.

Repair of Service Pipes in City of Dublin Corporation

3. By Section 97 of the Local Government (Dublin) Act, 1930, the Corporation may agree to renew or maintain the branch pipes or any particular part of the branch pipes by means of which a supply of water is conveyed from the main pipe to any premises in the County Borough of Dublin.

In pursuance of this Section the Corporation will maintain the portion of any service pipe laid in any street in charge of the Corporation, from the main pipe to a point nine inches from where the pipe enters private property.

Supply of Water for Non-Domestic Use

4. The Corporation as authorised by Statute may contract with any person to supply water for other than domestic use upon such terms, conditions and rate or rent as may be mutually agreed upon. Accordingly, the Corporation is prepared to contract with any person to supply water for non-domestic use, provided always that such supply can be given without unduly affecting the supply to existing consumers.

In this connection it must be stressed that the ordinary street service mains have not been designed to meet large demand from non-domestic consumers. There are, however, many portions of the water supply system where there are mains of larger capacity, in varying degrees. It is, therefore, a matter of the first importance to any person requiring water for trade or industrial use that he should consult with the Corporation before finally selecting the site of the premises at which the water supply is required.

The following supplemental conditions shall apply to trade and industrial water supplies:-

- (a) All the water supplied by the Corporation for non-domestic use shall be discharged through the service pipe into a storage cistern (or cisterns), the capacity of which shall be not less than the maximum daily (twenty-four hour) quantity of water required for such use.

Where two or more cisterns are coupled together in series without manifold pipes, the inlet and the outlet must be at opposite ends of the series.

- (b) To avoid the possibility of contamination of the Domestic Water Supply by back-siphonage, the water supplied by the Corporation must be discharged into the air not less than 152 mm (6 inches) above the flood rim of the storage cistern (or cisterns).
- (c) The top water line of the storage cistern (or cisterns) shall be at a height to be determined by the Corporation.
- (d) The rate of discharge per hour through the service pipe shall be controlled so as not to exceed, at any time, one-twelfth of the maximum daily requirements.

- (e) The water shall be supplied by measurement in accordance with the conditions laid down in Regulation No. 5 hereunder.

Note – The purpose of the foregoing conditions is to ensure as far as possible a uniform rate of discharge through the service pipe as a protection against undesirable peak load conditions in the Corporation mains and to provide for a reserve of water at the premises in the event of the supply from the main being interrupted for repairs or otherwise, thus avoiding possible immobilisation of staff, failure of air conditioning plants, damage to computers or other valuable equipment or to boilers or other plants.

In no circumstances will the Corporation permit temporary large withdrawals of water from the mains for serving cooling plants or other operations.

Supply of Water by Measurement

- 5. Any water supplied by the Corporation for non-domestic use to any premises situated within the County Borough of Dublin or outside the County Borough shall be supplied by measurement, and at such standard rate of charge per thousand gallons as may be from time to time fixed by the Corporation provided that in any case where the consumption of water should be normally small and not likely to become excessive, the Corporation may contract to supply an annual rent or charge instead of by measurement.

The following special conditions shall apply to metered supplies:-

- (a) Every meter used for the purpose of measuring and ascertaining the quantity of water supplied by the Corporation shall, with its appurtenance, be hired to the consumer by the Corporation at such standard rent or charges as may be from time to time fixed by the Corporation, and the Corporation shall decide the nominal size and type of such meter and the point in the service pipe where it shall be placed.
- (b) When the quantity of water registered by a meter at normal flows is not more than 3 per cent above or below the actual quantity passed, the meter shall be deemed to be accurate.
- (c) If from any cause a meter shall cease to register or shall be proved to register inaccurately the quantity of water passed through it, the Corporation may make a fair and reasonable estimate of the quantity of water supplied. The quantity so estimated shall be based upon the registration of the substituted meter or upon the registration during the previous quarter, or of the corresponding quarter of the previous year, whichever basis is equitable, having regard to all the circumstances of the case.
- (d) The Corporation will remove and test any of its meters at the request of the consumer, provided that the consumer pays in advance to the Corporation a sum sufficient to cover the cost of removing, testing, returning and fixing the meter or any temporary meter. Should the meter prove to be inaccurate (by registering on test at normal flow more than 3 per cent above or below correct registration), the sum paid by the consumer in respect of the test will be returned to him and no charge will be made by the Corporation. Such tests shall be made at the Corporation's testing station.

Minimum Water Storage for Domestic Purposes, Etc.

6.	
Dwelling house (up to 3 bedrooms)	136 litres (30 gals.) for cold only
Do.	227 litres (50 gals.) for hot and cold
Do. (4 bedrooms and over)	363 litres (80 gals.) for hot and cold
Dwelling house (having 2 bathrooms)	682 litres (150 gals.) for hot and cold
Factory	45 litres (10 gals.) per head
Flats (Bedsitters with communal bathrooms)	90 litres (20 gals.) per head
Flats (self-contained)	227 litres (50 gals.) per flat
Hospitals, Maternity per bed	455 litres (100 gals.)
Do., General per bed	227 litres (50 gals.)
Do., Laundry, per bed, plus staff	136 litres (30 gals.)
Do., Staff on duty	45 litres (10 gals.) per head
Do., Nurses Home and Medical Quarters	136 litres (30 gals.) per head
Hotels	227 litres (50 gals.) per head
Do.(having bedrooms with private bathrooms)	1045 litres (230 gals.) per bedroom
Offices	45 litres (10 gals.) per head
School, day, boys	23 litres (5 gals.) per head
Do., day, girls	36 litres (8 gals.) per head
Do., boarding	113 litres (25 gals.) per head
Restaurants and Canteens	7 litres (1½ gals.) per meal

These minimum requirements do not include fire-fighting or industrial needs. It is not possible to formulate precise requirements for all types of buildings owing to the variety of fittings and the number of occupants, even between buildings or a similar type. It is therefore important to ensure that adequate storage is provided in all cases.

CORPORATION OF DUBLIN

PART III

EXTRACTS FROM STATUTES (ABRIDGED)

Note-The full titles of the Acts referred to in these extracts are:-

- (i) The Dublin Corporation Waterworks Act of 1861;
- (ii) The Waterworks Clauses Act of 1847; and
- (iii) The Public Health (Ireland) Act, 1878.

The Act of 1847 is incorporated in the Act of 1861 by Section 4 and in the Act of 1878 by Section 67.

Use of Unauthorised Pipes or Fittings

Act of 1861, Sections 45 and 46:-

The Corporation shall not be bound to supply water unless the pipes, fittings and other apparatus used in connection therewith are made of such size, strength and material and are so arranged and repaired as the Corporation may from time to time prescribe or approve.

Corporation May Repair Pipes or Fittings

Act of 1861, Section 47 (as amended by Provisional Order Confirming Act, 1874):-

The Corporation may, without notice, repair or alter any pipe, cistern or other apparatus of any consumer so as to prevent waste of water, and the expense of such work, together with full cost, shall be recoverable from the consumer by action at law.

Waste of Water

Any person who wilfully or negligently permits any pipe, cistern or other apparatus in connection with the water supplied by the Corporation to be out of repair or used so that the water is misused or wasted, or who allows foul air or other noisome material to enter the pipes of the Corporation shall be liable to a penalty not exceeding £5.

Inspection of Meters

Act of 1861, Section 50:-

Any person who hinders an authorised officer from entering any premises for the inspection or removal of any water meter or its accessories, the property of the Corporation, shall be liable to a penalty not exceeding £5.

Misuse of Water

Act of 1861, Section 51:-

Every person who takes water, not being entitled to do so from any pipe, stream, or reservoir of the Corporation, or who being entitled to do so uses it for any purpose other than that for which it is supplied shall be liable to a penalty of £5 over and above any loss sustained by the Corporation.

Power of Corporation to Cut Off Water Supply

Act of 1861, Section 52:-

If any consumer fails or neglects to pay any rates or other sum of money payable by him lawfully, or does or causes to be done anything in contravention of this Act, or who fails to do anything which under the provisions of this Act ought to be done by him for the prevention of waste, misuse, undue consumption or contamination of the water, or who refuses any authorities officer admittance or prevents him entering any premises to which for the time being he is authorised to enter, the Corporation may cut off the water supply for so long as the cause of complaint remains and may recover full cost by action at law.

Provision of Storage Cisterns

Act of 1847, Section 54:-

The Corporation, in any district in which it is not obliged by statute to provide water constantly laid on under pressure, may require any consumer to provide a storage cistern to hold the water with which he is supplied by the Corporation.

Note – This clause must be read in conjunction with clauses 45 to 48 of the Act of 1861 referred to previously.

Hours of Inspection

Act of 1847, Section 57:-

Any authorised officer of the Corporation between the hours of 9 a.m. and 4 p.m. may enter any premises supplied with water by the Corporation in order to examine if there is waste or misuse of water, and if the consumer refuses to admit or hinders such officer, the Corporation may cut off the water from the premises.

Supplying Water to Another Premises

Act of 1847, Section 58:-

Any owner or occupier of a premises supplied with water by the Corporation who shall supply to any other person, or wilfully permits him to take any such water from any cistern or pipe in such premises, unless for the purpose of extinguishing fire, or unless he be a person supplied with water by the Corporation and his pipes, without his default, be out of repair, shall be liable to a penalty not exceeding £5.

Tampering with Corporation Valves or other Apparatus

Act of 1847, Section 60:-

Any person who shall wilfully or carelessly break or alter or open any lock, valve or other apparatus of the Corporation, or do any other thing by which the water of the Corporation is wasted, shall be liable to a penalty not exceeding £5.

Tampering with Meters

Act of 1878, Section 70:-

Any person who wilfully or negligently injures or suffers to be injured any mater the property of the Corporation, or who fraudulently alters the index of a meter, or prevents the due registration of the water supplied, or who fraudulently abstracts or uses the water of the Corporation, shall be liable to a penalty not exceeding £5.

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Provision of Flushing Cisterns

Flushing Cisterns and Permitted Flush of Water Closet Pan

Flushing Cisterns of Cast Iron

Flushing Cisterns - Flush Pipe Connection

Flushing Cistern - Permitted Flush of Urinal

Flushing Cisterns - Method of Discharge

Flush Valves

Single Flush Pipe only allowed

Water Closet Pans

Use of automatic Flushing Cisterns

Hot Water Apparatus - Domestic Fire-Boilers

Hot Water Apparatus - Feed Pipe

Hot Water Apparatus - Feed Cistern

Gas and Electric Heaters

Hot Water Apparatus - Suitability of Installation

Hot Water Apparatus - Cylinders

Hot Water Apparatus - Hot Water Storage

Limit of Depletion of Hot Water Storage

Hot Water Apparatus - Provision for Expansion

Installation of Combination Cocks and Mixing Valves

Limit of Length of Single Hot Water Pipe

Materials for Baths, Bidets, Wash Basins, Sinks, Slop Sinks and Urinals

Baths, Bidets, Wash Basins and Sinks

Use of Hose or Movable Pipe

Standpipes

Watering Troughs

Drinking Bowls

Disuse of Fittings

Vacation of Premises or Supply to be Discontinued

Testing

Corporation Not Responsible

Discontinuance of Improper Pipes, Fittings or Apparatus

Penalties

Repeal

Part II

Application for Water Supply

Laying of New Supplies

Repair of Service Pipes in City of Dublin

Supply of Water for Non-Domestic Use

Supply of Water by Measurement

Minimum Water Storage for Domestic Purposes, Etc

Part III

Extracts from Statutes (abridged)

Use of Unauthorised Pipes or Fittings

Corporation May Repair Pipes or Fittings

Waste of Water

Inspection of Meters

Misuse of Water

Power of Corporation to Cut Off Water Supply

Provision of Storage Cisterns

Hours of Inspection

Supplying Water to Another Premises

Tampering with Corporation Valves or other Apparatus

Tampering with Meters