

WAITAKERE CITY COUNCIL

WAITAKERE CITY BYLAWS

CHAPTER 7

WATER SUPPLY

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Foreword

WAITAKERE CITY COUNCIL
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CHAPTER 7

WATER SUPPLY

701 Interpretation

701.1 In this Part of this bylaw, unless inconsistent with the context:-

APPROVED means approved by the Engineer.

CONTROLLED CATCHMENT AREA means an area under the control of a local authority, to which the public and domestic animals are prohibited from entry and from which waters are drawn for a public water supply.

DIRECT CONNECTION includes any underwater outlet or any arrangement of pipes, hoses, or fittings temporary or otherwise which renders possible back flow into the local authority's waterworks system.

DISTRIBUTING PIPE means any pipe conveying water supplied by the local authority from a storage tank or from a hot-water apparatus supplied from such tank and under pressure therefrom.

FIRE HOSE REEL means a metal reel, permanently connected to the water supply, on which is wound rubber tubing having an internal diameter of 12.5mm nominal or 20mm nominal, which can be used for first-aid fire-fighting purposes.

FIRE SPRINKLER SYSTEM means the system of pipes fitted with sprinkler nozzles which open by extraordinary rise in temperature to automatically drench an area for the purpose of extinguishing fire and is maintained with a superimposed pressure so that an alarm is actuated with a nozzle opens allowing the pressure to fall to mains pressure.

MECHANICAL SPRINKLER or SPRINKLER means a revolving spray, sprinkler pipe or contrivance to distribute water for garden or lawn watering, but does not include a hand-held hose, or a contrivance installed exclusively for the purpose of extinguishing fire.

PUSH-THROUGH WATER HEATER means a water heater with a stop-tap on the cold-water inlet so designed that the hot water is discharged through an open outlet.

SERVICE PIPE means that section of the pipe conveying water from the street main to the consumer's premises, which lies between the main and a point 250mm distant from the consumer's property and includes:-

- (a) The ferrule or stoptap at the junction of the service pipe with the main;
- (b) Any stoptap fitted at the end of the service pipe; and
- (c) Any stoptap fitted on the service pipe between the end thereof and the main.

STOPTAP includes stopcock, stopvalve, and any other device for stopping at will the flow of water in a line of pipes.

STORAGE TANK means any tank other than a flushing cistern having a free water surface.

SUPPLY PIPE means the pipe provided by the consumer to connect the service pipe to his premises.

UNCONTROLLED CATCHMENT AREA means an area to which the public and domestic animals are not prohibited from entry and from which waters are drawn or likely to be drawn for public consumption.

WET RISER MAIN means a vertical water main installed in a multi-storey building with outlets on each floor to which the fire brigade can connect hose for fire fighting purposes, and connected to a water supply.

ORDINARY AND EXTRAORDINARY SUPPLY

702 Ordinary Supply

702.1 Any water supplied from the waterworks to properties situated within the district and used for any of the following strictly domestic purposes shall be deemed to be an "ordinary supply" for the purposes of this Part of this bylaw - that is to say, water for the use of the Consumer and his wife and children and up to 4 other persons all of whom constitute and conduct themselves as one household, for drinking, for ordinary personal ablution, for cooking, for washing linen or clothes, for washing or cleansing floors, windows, domestic or other furniture or utensils or any part of the consumers dwellinghouse or premises and for water closets, baths and urinals except automatic flushing water closets and urinals. PROVIDED THAT in respect of the former Waitemata District any water supplied from the waterworks to property within the district and not exceeding 91 cubic metres in the year for which the meter is read, shall be deemed to be an 'ordinary supply'.

702.2 Every person paying the local authority the appropriate rates or charges levied in respect of such properties shall be entitled to an ordinary supply of water.

703 Extraordinary Supply

Any water supplied from the waterworks and not used for the purpose of an ordinary supply as herein before defined shall be deemed to be an 'extraordinary supply' for the purposes of this part of the bylaw.

"Extraordinary supply" shall include water used for the following purposes:

- Aerated-water factories
- Automatic flushing or water closets, urinals and latrines
- Blocks of flats and multiple dwelling units
- Boilers
- Bottle washing
- breweries
- Building construction

Butchers, fishmongers, and fish curers
Cleaning business premises by means of a hose
Commercial photographic processing
Cooling of air conditioning and industrial equipment
Fire hose reel
fire sprinkler systems
Hose or other removable pipe or mechanical sprinkler
Hospitals
Hotel, motel and boarding-house premises and clubs
Hydraulic lifts and other hydraulic machinery
Laundries carried on as or in connection with a business
Manufacturing
Milk-shops and dairies
Motor garages conducting a vehicle-washing service
Ornamental and recreational purposes, such as for fountains,
ponds, swimming pools, or the like
Public baths and wash hoses
Railways
Restaurants and refreshment rooms
Sewage-treatment plants
Schools, public and private
Stock watering
Trade, business, manufacture, or other similar undertaking not
otherwise specified
Water supplied to any building or lands which, in terms of the
Rating Act 1967, are not rateable property
Water supplied to other local bodies and to consumers in areas
beyond the jurisdiction of the local authority
Wet riser main

PROVIDED THAT in respect of the former Waitemata District any water supplied from the waterworks to property within the District, and exceeding 91 cubic metres in the year for which the meter is read, shall be deemed to be an 'extraordinary supply'.

704 No Obligation to give Extraordinary Supply

704.1 The local authority shall be under no obligation to give or continue any extraordinary supply of water.

705 Use of Ordinary Supply

705.1 No consumer or other person shall use or permit or allow to be used in, upon or in connection with any premises for any of the purposes defined in this Part of this bylaw as extraordinary supply, any water supplied from the waterworks as and for ordinary supply.

706 Use of Extraordinary Supply

706.1 No consumer or other person receiving an extraordinary supply for one purpose shall use or permit or allow to be used any part of such supply for any purpose other than the particular purpose for which he receives it.

Continuity of Supply and Pressure

708 Continuity of Supply

708.1 The local authority does not guarantee the uninterrupted supply of water, whether in cases of ordinary or extraordinary supply, and no allowance or compensation will be made or allowed on account of water being shut off, whether for the purpose of laying mains, effecting repairs, attaching new services, or for any other purpose or reason whatsoever.

708.2 All hospitals, schools, factories, office blocks, theatres, restaurants, hairdressing salons, hotels, motels, boarding-houses, blocks of flats, and all consumers who, for the purpose of continuing a business or process, or for any other reason are dependant upon a constant supply of water, shall provide such storage tanks as are necessary to give effective continuity for their particular purpose.

709 Pressure

709.1 The local authority does not guarantee any specified maximum or minimum pressure in its distribution system and no allowance or compensation will be made or allowed on account of change of pressure in the supply.

710 Prohibition of Restriction of Supply

710.1 The local authority may at any time, by resolution publicly notified, and until a further public notice of the rescission of such resolution has been given, restrict or prohibit the use of water for any one or more of the purposes covered in the definition of extraordinary supply, and thereupon it shall be an offence against this Part of this bylaw for any person to use water in the manner so restricted or prohibited.

710.2 If at any time the local authority considers that because of drought or for any other reason the available water supply is not sufficient to allow the unrestricted consumption of water, and that extraordinary measures are necessary in order to conserve such available water supply, the local authority may by resolution publicly notified, and until public notice of the rescission of such resolution has been given, restrict or prohibit the use of water whether an ordinary or extraordinary supply for any specified purpose or for any specified period or may restrict the quantity which may be used. Any such restriction or prohibition may apply to the whole of the district or if the circumstances so require to a portion only of the district.

710.3 No consumer shall in case of any such restriction or prohibition be entitled to any payment or compensation whatsoever.

710.4 Any person offending against or failing to observe or comply with any of the provisions of any such resolution shall be guilty of an offence against this Part of this bylaw.

710.5 In the case of urgency the Engineer or Clerk may prohibit the use of water for an extraordinary purpose he deems necessary pending the next succeeding meeting of the local authority.

711 Water Supply Before Occupation of Dwelling

711.1 No person shall occupy or permit the occupation of a building for residential purposes or human habitation unless such building shall be provided with an adequate and convenient supply of wholesome water for domestic purposes with approved pipes and fittings.

712 Application for Supply

712.1 Any person who:

(a) Shall be desirous of obtaining a supply of water either ordinary or extraordinary in respect of any premises; or

(b) Is receiving a supply to his premises and wishes a change of his premises -

Shall sign an application to the local authority for the same on an application form obtained from the office of the Engineer.

712.2 Every application shall state thereon the purpose for which the supply is required, and any other relevant information as may be required by the Engineer, and shall be signed by the owner or lessee of the premises for which water is required.

712.3 Every application shall if required by the Engineer, be accompanied by a plan to his satisfaction showing the work proposed to be carried out.

712.4 The application shall enter into such agreement as the local authority may require in relation to such supply and the Engineer may determine the method of supply by meter or otherwise.

712.5 There shall be payable by every person applying for a supply of water, a fee for the services of the local authority of and incidental to the establishment of the supply of water. Such fee shall be of such amount as the local authority shall from time to time by resolution determine and shall be called "the connection fee".

712.6 The connection fee shall be paid to the local authority at the same time as there is delivered to it the application referred to in the preceding sub-clause 712.5 hereof.

713 Supplies from Standpipes on Hydrants

713.1 For approved purposes and subject to such conditions as the Engineer may prescribe, an extraordinary supply of water may be given by means of a standpipe to be placed upon a specified fire hydrant. Application on a form to be obtained at the office of the Engineer shall be made for such supply and for the hire of a standpipe if supplied by the local authority.

714 Determination of Size of Service

714.1 The Engineer shall have the right to estimate the proposed consumption and to determine the size of main tapping, the size of meter, and the size of service pipe required for the supply.

715 Issue of Permit

715.1 Upon receipt of any such application in proper form the Engineer may if he is satisfied that a permit should be issued, issue a permit.

716 Work Not to be Commenced Without a Permit

716.1 No person shall attach or connect or permit to be attached or connected with the waterworks, any pipe, stoptap, or other apparatus, nor alter or repair any existing pipe or fitting connected with the waterworks other than the re-washing of taps, unless.

- (a) He is the holder of a permit issued by the Engineer, under the Drainage and Plumbing Regulations 1978 and subsequent amendments; or
- (b) In the case of work which is not sanitary plumbing as defined by the Plumbers Gasfitters and Drainlayers Act 1976, he has satisfied the Engineer of his ability to carry out such work and has received a permit from the Engineer to carry out such work which permit the Engineer is hereby authorised to grant.

717 No Deviation From Permit

717.1 No person, without the prior consent of the Engineer, shall carry out any work otherwise than in accordance with the permit granted to him. All work shall be carried out in accordance with and subject to the provisions of the Plumbing and Drainage Regulations 1978 or any amendment and the provisions of this part of the bylaw.

CONNECTIONS, DISCONNECTION, AND INSPECTIONS

718 No Person to Connect to System

718.1 No person, other than an officer or an employee of the local authority shall, without express written authority signed by the Engineer, make any connection with or otherwise interfere with, any part of the waterworks system.

719 Disconnections Required

719.1 Where any water fitting is to be permanently disconnected, the portion of pipe that supplies water to that fitting only, and is not required to supply water to any other fitting, shall also be disconnected in an approved manner.

720 Notice When Supply Not Required

720.1 When any building or property supplied with water by the local authority becomes unoccupied or for any other reason a supply of water is no longer required, the owner or occupier as is appropriate shall give notice thereof in writing to the local authority.

721 Disconnection for Non-payment or Non-compliance With Notice

721.1 If default shall be made for more than 1 month in payment of any monies payable in respect of an incidental to the supply of water from its mains, the local authority may

cut off the supply without notice, and may recover all monies owing in any Court of competent jurisdiction as a debt owing to the local authority.

721.2 The local authority may stop the supply of water to any premises where an owner or occupier –

(a) Fails to comply with a notice from the Engineer requiring repair of defective pipes or fittings; or

(b) Wilfully allows water to run to waste or be misused.

Such supply will only be restored when the offending condition has been eliminated and the reconnection fee paid.

722 Turning-on Fee

722.1 Whenever the water supply has been cut off from any premises such supply will not be again turned on except on payment of a fee of such amount as may from time to time be fixed by resolution of the local authority in that behalf.

723 Inspection of Installations

723.1 It shall be lawful for the Engineer or other duly appointed officer of the local authority at any time of the day or night to enter upon any land, and at any time between the hours of 8 am and 6 pm of any day, to enter into any building for the purposes of inspecting all or any of the fittings and other apparatus therein connected directly or indirectly with the waterworks, and any person resisting or refusing to allow any such entry of inspection shall be guilty of an offence against this Part of this bylaw. If the Engineer or duly appointed officer is obstructed or refused admittance, the local authority may stop the supply of water to that premises in any manner it thinks fit.

724 Point of Supply

724.1 The point of supply to the consumer shall normally be a point 250mm distant from the street boundary but in places where such alignment is inconvenient for making a connection by reason of fences, walls or other causes, it shall be reason of fences, walls or other causes, it shall be sufficient if the service pipe is laid by the local authority to a point as close as reasonably possible to such street boundary.

724.2 The extension to the boundary from the termination of the service pipe, and the supply pipe within the premises shall be provided by the owner or occupier at this own cost and expense, to the satisfaction and approval in all things of the Engineer.

724.3 In the case of an extraordinary supply requiring metering, the meter may be installed on the supply pipe by arrangement between local authority and the consumer.

725 Stoptaps to be Provided

725.1 In addition to any stoptap fitted by the local authority on the service pipe, the consumer shall, except in the case of a fire sprinkler system, fit stoptaps as follows to the satisfaction of the Engineer:

- (a) Where a building is set back from the street boundary, a stoptap shall be fitted on the supply pipe to control all outlets on the premises.
- (b) Where a building is on the property boundary a stoptap shall be provided inside the building as close as possible to the point of pipe entry to control all the outlets on the property.
- (c) In every building of more than 1 floor, at every floor level including sub-floor basement level, one or more stoptaps to control the supply to all outlets on such floor.

All stoptaps shall be kept readily accessible at all time and exterior stoptaps shall be protected by strong durable boxes of earthenware, concrete, cast iron, or other approved material.

726 Only one Point of Supply

726.1 Except with the written consent of the Engineer, no presumes shall be supplied with more than one service pipe and where this consent is given, only under such conditions as the Engineer prescribes

727 One Pipe Not to Service Two Premises

727.1 Without the prior written consent of the Engineer, no building, premises, or land shall be supplied by means of more than one service pipe.

727.2 Except with the consent of the local authority, no water shall be supplied to any building or premises from any pipe or water-supply fitting or appliance laid or installed on or in connection with any other building or premises, provided that where any building is divided into units as specified in sub-clause 727.3 of this bylaw, the Engineer shall specify the manner in which the water shall be piped from the main to such units, and the owner of the land over, on, or under which the said pipe is laid shall be responsible for the maintenance and protection of all pipe from the said main to the satisfaction of the Engineer.

- 727.3
- (a) Where either any building is converted or divided into, or, there is erected, constructed or situated on any land, separate flats, shops, offices or any other units, being occupied or capable of being occupied as separate units, each such separate unit shall for all purposes of this part of this bylaw be deemed to be and treated as a separate property and the occupier (as defined by the provisions of Part II of the Rating Powers Act 1988) thereof shall be deemed to be and treated a separate consumer.
 - (b) The occupier aforesaid of every such unit shall be responsible for the payment of all charges in connection with the supply of water, save that this sub-clause shall not in any way derogate from the powers of the local authority under the provisions of the Rating Powers Act 1988, or any enactment passed in amendment or substitution therefore.
 - (c) Where it is proposed either:
 - (i) to convert or divide any building into, or

- (ii) to erect, construct or situate on any land, two or more separate units in accordance with the provisions of preceding subclause (a) hereof, the applicant for the requisite building permit, in addition to any other fees, charges or deposits payable in respect of the said application, also comply with the provisions of Clause 712, of this bylaw and make application for a supply of water for each separate unit and pay the fees prescribed pursuant to the provisions of said Clause 712. **FITTINGS AND MATERIALS, AND INSTALLATIONS.**

728 Work in Streets and Public Places

- 728.1 Except with the written consent of the Engineer, no person shall carry out work in any street, private street, or public place. Any person having obtained such consent shall carry out and complete the same in accordance with the conditions s may be prescribed by the Engineer and without unnecessary delay, and shall well and properly refill all trenches and shall remove all waste materials from each street, private street or public place as soon as possible. The Engineer any specify the hours in which work in such street, private street, or public place may be undertaken.

729 General

- 729.1 All materials, fittings, and appliances used for the supply and distribution in any premises of water supplied by the local authority shall be of consumption, misuses, or contamination of water, or the setting up of water hammer in any part of the system. They shall in every case be of approved design and materials for durability and ready maintenance. All such fittings shall be capable of standing a test pressure of 180m head of water (1.8mpa) and suitable for a working pressure equivalent to 90m head of water (0.9mpa), or such other pressures as the Engineer shall prescribe,

730 Pipes

- 730.1 Pipes used for water supply and distribution in any premises shall be those approved by the Engineer. and shall in every case be capable of standing a test pressure equivalent to 180m head of water (1.8mpa) and be suitable for a working pressure equivalent to that of 90m head of water (0.9mpa) or such other pressures as the Engineer shall prescribe. Where such pipes are made of corrodable material they shall be efficiently protected against external corrosion and unless they form part of a closed circuit from which water is not drawn, against internal corrosion.

731 Pipes and Fitting to be Accessible

- 731.1 Every pipe and fitting within a building shall, so far as is reasonably practicable, be so placed as to be readily accessible for examination, repair, or replacement:

Provided that this shall not prohibit the enclosing of any pipe in a properly designed chase or duct so constructed that the pipe is reasonably accessible for examination, repair, or placement.

732 Pipe Carried Through Brick or Concrete

732.1 Where in the opinion of the Engineer it is necessary that a supply pipe be laid under or carried through any brick or concrete work or laid in any other inaccessible position, such supply pipe shall be carried through an exterior sleeve pipe of approved material and of sufficient length to bring any leakage or waste within easy observation in such manner as to facilitate the carrying out of any necessary repairs to such supply pipe. Where a supply pipe enters a building or basement from the service connection through a sleeve pipe or clearance hole, such supply pipe shall be effectively sealed into the opening with an approved caulking compound and so maintained as to prevent the entry of surface or seepage water.

733 Pipes Above Ground Level

733.1 Every external service pipe fixed above the level of the ground shall be properly protected by the owner of the premises as when required by the Engineer.

734 Depth of Burial of Pipes

734.1 Unless otherwise approved in special cases the minimum cover from the surface to the top of the pipe shall be as follows:

All pipes over 500mm nominal diameter 750 in all locations

Metal pipes up to 500mm nominal diameter 500mm within public and private street boundaries or where likely in the opinion of the Engineer to be crossed by vehicles; 300mm elsewhere.

Plastics or other than metal pipes up to 50mm nominal diameter 600mm within public or private street boundary or where likely in the opinion of the Engineer to be crossed by vehicles; 400mm elsewhere

735 Pipes for Fire Fighting Purposes

735.1 Pipes of material known generally as plastics, and including PVC, polythene, rigid PVC, and all others which are mechanically affected by the action of heat shall not be fitted for use on any supply which is or may be required for fire fighting purposes in any premises.

736 Quick Closing Valves Not to be Used

736.1 Quick-closing valves of any kind shall not be used on any piping directly connected to the service pipe, that is, in any position where they are required to close against mains pressure. In circumstances specially approved they may be used, provided a suitable air chamber is fitted in the supply pipe at the stoptap or next to the fitting as may be required in the particular case. In special circumstances non-conclusive types of valve may be used as approved by the Engineer.

737 Float Valve Installation

- 737.1 Every ball valve or float-operated valve fitted to a storage tank shall be securely and rigidly tied thereto above the top water line, and shall be supported independently of the inlet pipe (unless such inlet pipe is itself rigid and rigidly fixed to the tank) in such a position that no part of the body of the valve would be submerged if the tank were charged to an amount above its overflowing level of twice the diameter of supply and in no case less than 25mm.
- 737.2 Where a ball valve is permitted to be provided with a pipe so arranged as to discharge water into a tank below its overflowing level, effective means such as an air hole shall be provided in the outlet chamber of the ball valve above such level to prevent siphonage of water back through the ball valve. Silencing pipes will be permitted only in break pressure tanks such as flushing cisterns and supply tanks of hot water systems.
- 737.3 No ball valve shall be fitted directly to any thermal storage electric water heater.

738 Storage Tanks

- 738.1 Every tank used for the storage of water, other than a flushing cistern, or one for supplying water to a thermal storage electric water heating unit shall be made of approved material and every such tank shall be made and shall at all times be maintained in an efficient and watertight condition.
- 738.2 If placed inside any building every such tank shall have fixed thereunder, to the satisfaction of the engineer, a tray of 5 lb* lead, No. 12* zinc, or 24 SWG galvanised iron or sheet copper or other suitable material with an overflow pipe of the same material not less than 40mm nominal diameter discharging in a conspicuous position clear of the building and within the boundary of the premises. If the tray is of metal dissimilar to that of the tank or piping, to avoid corrosion it shall not be in direct contact with the tank or piping, but shall be separated by suitable materials which is not an electrical conductor. The overflow pipe shall be of the same material as the tray.
- 738.3 Every such tank shall be enclosed and ventilated so that the water therein may not be liable to contamination from any cause whatsoever and shall be placed in such a position that easy access may be had thereto for the purposes of inspection and cleansing. Adequate scour valves shall be fitted to permit periodic cleansing.
- 738.4 No such tank shall be buried in, or placed below the ground except with the prior written consent of the Engineer, and then only provided that the supply is metered and in accordance with any conditions prescribed by the Engineer.
- 738.5 Every such tank shall be provided with an efficient and approved overflow pipe not less than 40mm nominal diameter, so as to discharge in a conspicuous position outside the building and within the boundary of the premises together with the drain from the tray where fitted.

739 Flushing Cisterns

739.1 Every water closet flushing cistern shall comply with NZS 245*, (including subsequent amendments) and all matters not otherwise referred to in this Part of this bylaw. Cisterns shall have an efficient waste preventing apparatus of the valveless type operating on the syphonic principle. The under side of the bend in the siphon pipe, or the top of the straight discharge pipe in the dome bend in the siphon pipe, or the top of the straight discharge pipe in the dome pattern shall be at such a height that no water runs down the flushpipe unless there is a substantial leakage from an orifice in the cistern of sufficient magnitude to give warning and necessitate repairs being effected. The orifice level shall be no less than 6mm above the top of the overflow pipe. The siphon or dome and discharge pipe shall be of suitable corrosion resistant material. The operating apparatus shall be so constructed that the discharge through the flushpipe ceases automatically upon completion of the required flush irrespective of the position of the starting lever.

740 Flush Valves

740.1 Flush valves shall be installed only by special permit from the Engineer; they shall be of approved waste-preventing type discharging not more than 13.5 litres per flush and supplied by a separate storage tank. They shall be incapable of delivering more than 13.5 litres per flush regardless of any manipulation of the operating lever. The flushvalve shall be so constructed as to seal automatically upon the termination of the prescribed flush, irrespective of the position of the starting lever.

741 Supply to Water Heaters

741.1 The supply of cold water to water heaters other than push-through heaters or approved valve type of gas water-heater, or heat exchanger or other type under mains pressure, shall be by one of the following means;

- (a) Through a supply tank which shall comply with this Part of this bylaw covering tanks and float valves.
- (b) Through a pressure-reducing valve and separate non-return valve. The pressure-reducing valve and check-valve and stringer shall be fitted between two isolating stopvalves. The whole arrangement is to be to the approval of the Engineer.
- (c) A mains pressure water-heater shall be supplied through a checkvalve installed between 2 isolating stopvalves and with such safeguards as shall be determined by the Engineer.
- (d) All water heaters shall be adequately protected against damage due to failure of the water supply.

742 Mixing Valves

- 742.1 No mixing valve in which hot water and cold water are mixed shall be supplied with cold water directly from a supply pipe at mains pressure unless-
- (a) Such valve forms part of an electric or gas water-heater which is not subjected to a working pressure higher than that for which it was designed.
 - (b) The draw-off point is not controlled by a separate stoptap or the cold supply is used in conjunction with a mains pressure hot-water cylinder in which case a checkvalve shall be placed on the cold supply.

743 Protection of ball valves

- 743.1 Every stoptap, ball valve or other fitting installed in an exposed position shall be protected against damage by an approved guard, and if considered necessary by the Engineer shall be fitted in a separate compartment protected by a securely fixed cover.

744 Watering troughs

- 744.1 Every pipe supplying water to a watering trough for animals shall be fitted with a ball valve or some other effective means of controlling the inflow of water so designed as to prevent overflow and having an air gap as required and specified in this Part of this bylaw and fixed in a separate compartment and protected by a securely fixed cover.

PREVENTION OF CONTAMINATION

745 No connection to other supplies

- 745.1 In any system of piping supplied with water by the local authority, no direct connection with any other sources of supply of water shall be made.
- 745.2 No direct connection shall be made or maintained to any drainage system, drainage or sanitary fitting, or to any fittings or apparatus including steam boilers used for the reception or conveyance of any liquid, gas, or drawn water.

746 Drawn water not to be returned

- 746.1 No person shall return or allow to return to any main or pipe or any other part of the water supply system of the local authority any water drain from any part of such system.

747 Minimum Air Gap

- 747.1 The minimum air gap between the outlet of a water supply pipe or fitting which is directly connected to the local authority system and the highest possible water level of the fixture or receptacle into which water is drawn or used shall be twice the diameter of the effective opening of such supply pipe or fitting but in no case shall it be less than 25mm.

748 Priming of Pumps

748.1 No pump shall be equipped with a direct connection for priming or other purposes. Priming may be arranged by means of a discharge point and funnel where the discharge point is a minimum of 25mm above the funnel as defined by air gap.

749 Supply to Shipping

749.1 Each supply point available to shipping including fire connections, shall be equipped with an approved backflow prevention device located to prevent the flow of water from the ship to any supply pipe.

750 Check Valves in Multiple Services

750.1 Where a supply of water to premises from more than one point of supply by the local authority is permitted and where in the opinion of the Engineer they may be interconnected, the supply at each point shall be through a checkvalve installed between 2 isolating gage valves with a bleedvalve fitted on the delivery side of the supply isolating valve so that the effectiveness of the check valve maybe readily determined.

751 Protection of Supply Pipes

751.1 No supply pipe or fitting shall be laid or fixed through, in, or into any drain, sink, asphalt, or manure pit, nor through, in, or near any place where the water may become liable to be contaminated.

752 Prevention of Backflow

752.1 Where in the opinion of the Engineer any consumer has a piping system which maybe connected or used in such a manner as to be a possible source of contamination of the local authority mains, the consumer shall protect the service connection at the point of supply to such property by one of the following backflow preventers as the Engineer may direct:

- (a) **AIR GAP SEPARATOR** defined as a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than 25mm. In all cases the piping from the point of supply to the receiving vessel shall be completely visible.
- (b) **DOUBLE CHECKVALVE ASSEMBLY** defined as an assembly of at least 2 independently acting checkvalves including gatevalves on each side of the checkvalve assembly and suitable leak-detector drains plus connections available for testing the water tightness of each checkvalve. The checkvalves shall set readily and completely. The face of the closure element and valve seat must be of bronze, composition, or other corrosion-resistant material. Pins and bushes shall be of bronze or other corrosion-resistant non-sticking material, machined for dependable operation. The closure element shall be weighted or otherwise made to promote rapid and positive closure.

- (c) **REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION** defined as a device incorporating an automatically operating differential relief valve located between the two checkvalves, two gatevalves for isolating and the necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between two checkvalves, less than the pressure on the local authority main side of the device. At cessation of normal flow the pressure between check valves shall be less than the supply pressure.

In the case of leakage of either checkvalve the differential relief valve shall operate to maintain this reduced pressure by discharging to the atmosphere. When the inlet pressure is equivalent to 1.4m head of water (14 kPa: imperial 2 1b/in 2) or less the relief valve shall open to the atmosphere, thereby providing an air gap in the device. The device must be readily accessible for maintenance and testing and installed in a location where no part of the valve will be submerged.

- (d) A vacuum column defined as an arrangement of pipes which forms an inverted U extending upwards to a point not less than 10.5m above the highest portion in the service pipe and in which there cannot be excess pressure on the property side of the column.

PREVENTION OF WASTE WATER

753 Waste and improper use to be prevented

- 753.1 No person shall use, or permit or suffer to be used, the water supply obtained through the local authority's waterworks system improperly or to an unreasonable extent or in a wasteful manner, or otherwise in any manner contrary to the provisions of this Part, of this bylaw.

754 Overflow Pipes

- 754.1 Overflow pipes, if fitted to baths and water-using fittings or apparatus other than a wash-hand basin, shall be arranged to discharge in the open air in an approved conspicuous position, and they shall not be led into waste pipes or drains.

755 Fittings to be in good repair

- 755.1 No person shall allow any pipe, tap, or other fitting on his premises connected with the water supply to be out of repair or in any way defective so that water is wasted, misused, or contaminated, or water hammer is caused.

756 Deficient Pipes

- 756.1 Where, in the opinion of the Engineer, any pipe, cock, appliance, or fitting in connection with any water service of any premises has deteriorated, or is of inferior quality or workmanship, or is causing or is likely to cause waste of water, or is insufficient for the proper supply of water, it shall be lawful for the Engineer to give to the owner or occupier of such premises notice in writing requiring him to carry out such

works as shall be specified in that behalf in such notice, and failure by such owner or occupier to comply with the requirements of such notice within the time specified therein shall be an offence against this Part of this bylaw.

757 Existing Pipes and Fittings

757.1 Any existing pipes or fittings in any premises connected to the local authority's water supply at the date of this Part of this bylaw or in any property which may subsequently be connected to the water supply any remain in use provided that upon inspection by the Engineer they are found to be satisfactory.

758 Hoses

758.1 Unless such use is specifically permitted otherwise by resolution of the local authority, no person shall use, permit or suffer water from local authority supply to be used through a hose unless such person shall be actually holding such hose in his hand during the time water is flowing through it.

759 Sprinklers

759.1 Sprinklers or unattended hoses may only be used when authorised by resolution of the local authority and then only during the periods determined in the resolution and subject to such sprinklers or unattended hoses being under the immediate personal care of some competent person at all times when in operation.

760 Water Used for Cooling

760.1 Air-conditioning or industrial plant using an extraordinary supply for cooling purposes shall be provided with water conservation equipment so that the consumption is limited to that required to make up reasonable losses due to evaporation, wind, flushing, and similar effects. The use of water once through a cooling system that is without the use of recalculating equipment is prohibited without the written permission of the Engineer.

METERS

761 Installation of Meters

761.1 When a supply of water is required by the local authority to be metered, the meter will be supplied and installed by the local authority and the consumer shall pay an amount fixed by the local authority by resolution publicly notified, to cover the cost of such meter provided in this Part of this bylaw.

761.2 Any meter which was installed by the consumer prior to the coming into operation of this Part of this bylaw shall continue to be maintained by him until it is, in the opinion of the Engineer, no longer fit for use, when it will be replaced by a local authority meter.

761.3 Without the prior written authority of the Engineer no branch fitting whatsoever shall be connected to the service pipe between the main and the meter.

761.4 Approved high pressure isolating valves shall be fixed on either side of the meter.

761.5 Except with the written consent of the Engineer no water shall be supplied to more than one tenancy from a single service pipe and/or meter.

762 Protection of Meters

762.1 Where required by the Engineer the consumer shall:-

- (a) Provide an approved site within the premises for the meter;
- (b) Take sufficient precaution to protect the meter from damage at all times;
- (c) Enclose the meter in a suitable box or other enclosure and shall in cases where natural support is absent provide suitable wall brackets or other support; and
- (d) Ensure that the meter shall be readily accessible at all times.

763 Testing of Meters

763.1 Should a consumer dispute the accuracy of a meter he may apply to the Engineer to have the meter tested and if it is found to be over-reading there will be no charge for the test. If the meter is correct or under-reading the consumer shall pay to the local authority the cost of replacing the meter, in addition to the testing fee.

763.2 Should any meter which is owned by the consumer be out of repair, or cease to register accurately, the consumer, on receiving written notice to that effect, shall forthwith have the meter put in order, shall forward the meter to the local authority's workshop to be tested, and shall obtain from the Engineer a certificate of its accuracy before refixing the same and shall pay for such testing. All costs incurred in removal, repairs, and re-installation shall be borne by the consumer.

764 Method of Testing Meter

764.1 All tests of meters shall be made at the local authority's workshop. The test will be made by running a measured quantity of not less than 2,000 litres through the meter and the meter shall be deemed to be correct if it registers within 4 percent either less or more than the measure quantity. In addition, the meter shall be capable of registering small flows from 2 percent of normal flow and upward, the consumer shall have the right of witnessing the test.

765 Fee for Testing

765.1 The fee to be paid for testing meters under the foregoing provision shall be as provided elsewhere in this Part of this bylaw.

766 Meter Accounts Adjusted

766.1 Should any meter after being tested be found to be reading incorrectly the Engineer shall make an adjustment in accordance with the result of such test after due allowance for permissible tolerances, and the consumer shall pay accordingly to such adjustments.

767 Meter Tampered With

767.1 Should any meter have its seal or dial broken or appear to the Engineer to have been tampered with, the Engineer may declare the reading void and estimate the consumption in any manner he thinks fit, and the consumer shall pay according to such estimate, and may be required also to pay for the repair to the meter and for all attendant charges.

768 Estimating Consumption when Meter out of Repair

768.1 Should any meter be out of repair or cease to register (except as in Clause 767.1 above) the Engineer shall estimate the consumption for the period since the previous reading of such meter (based on the average of the previous four period charged to the consumer), which decision shall be final, and such consumer shall pay according to such decision.

Provided that when, by reason of a large variation of consumption due to seasonal or other causes, the average of the previous four periods would be an unreasonable estimate of the consumption, the Engineer shall be entitled to take into consideration other evidence for the purpose of arriving at a reasonable estimate, and such decision shall be final, the consumer shall pay according to such decision.

CHARGES

769 Charges for Service Pipes etc

769.1 The charges payable by the consumer for tapping the main pipe and for laying the service pipe, installing a meter, testing a meter where required, keeping such service pipe and meter in repair and renewing when necessary, disconnection and reconnection where required, and road restoration shall be of such amount as may from time to time be determined by resolution of the local authority or as may be agreed on with any person receiving that supply.

770 Deleted

771 Deleted

772 Reading of Meters and Accounts

772.1 Meters will be read and accounts rendered at such intervals as the local authority may from time to time decide.

773 Water Supplied by Standpipe

773.1 Where a supply of water is given by means of a standpipe, the applicant will be responsible for the full cost of any subsequent repairs found necessary following the use of such standpipe. Water used shall be paid for at normal rates for extraordinary supply or as determined by prior agreement. The consumer shall also pay such hire charges as required by the local authority in the event of using a local authority standpipe.

774 Meter Supply to Non-rateable Properties

774.1 The charges for water supplied to a non-rateable property in the district shall be by meter of such amounts as may from time to time be fixed by resolution of the local authority in that behalf, publicly notified, or as may be agreed on with any person receiving that supply; minimum charges for such extraordinary supply may likewise be specified in the said resolution or agreement.

775 Water Charged at Annual Charge

775.1 When an extraordinary supply of water is granted to a consumer for any purpose at an annual charge, it shall be lawful for the local authority if it thinks fit, to affix a meter to such supply, and the charge shall be determined by the provisions of this Part of this bylaw relating to the purpose for which the water is being used.

776 Supplies to Local Authorities

776.1 The charges to be made for water supplied to other local authorities shall be of such amounts as may from time to time be fixed of the local authority or as may be agreed on with any local body receiving that supply.

777 Water for Extinguishing Fires

777.1 Unmetered connections which may be provided for fire protection systems shall be used for no other purpose and shall be independent of any other service connection to the property.

777.2 In any case in which, in the opinion of the Engineer, a fire connection is so constructed or of located that it is likely that water will be drawn from it or from any part of it by any person for purposes other than fire fighting, the Engineer may cause a water meter to be installed on such fire service or on such part. In every such case whenever water has been used for fire fighting purposes, the Engineer shall estimate the quantity of water so used and a sum based on such estimate at the appropriate charge rate, shall be allowed against the cost of such amount of water charged to the owner's account.

777.3 A fire sprinkle system shall be constructed and installed and thereafter maintained in good order to the satisfaction of the Engineer, and shall be so designed and fixed that water cannot be drawn therefrom from any other purpose.

777.4 In the case of premises outside the district, a connection for a sprinkler system may be provided from a local authority main, with the prior consent of the local authority.

777.5 Hose reels used solely for fire protection purposes may be installed only under conditions prescribed by the Engineer.

777.6 The cost of making, repairing, and renewing the connection from the main to the consumer's premises shall be paid and borne by the consumer.

777.7 An annual license fee of such amount fixed by resolution of the local authority shall be paid by the consumer to the local authority in respect of such installation.

777.8 Water used for the purpose of extinguishing fires will not be charged for.

SUPPLY OUTSIDE DISTRICTS

778 Application of Bylaw

778.1 Where the local authority supplies water outside the district and in the area of another local authority with the consent of that local authority, then for that supply all of the provisions of the empowering Act relating to waterworks shall apply and all the provisions of this Part of this bylaw shall apply equally to all places, persons, and things outside the district as they apply to the same within the district.

PROTECTION OF WATER SUPPLY

779 Prohibitions

779.1 No person shall pollute or cause to be polluted any water that is part of the waterworks in any controlled catchment area or uncontrolled catchment area, or in any part of the waterworks prior to the withdrawal of water therefrom by some pipe lawfully connected therewith.

779.2 In any controlled catchment area or any part of the waterworks prior to the withdrawal of any water therefrom by some pipe lawfully connected therewith, no person shall:-

- (a) Camp;
- (b) Take, departure, or allow to stray any livestock including horses, cattle, sheep, or goats;
- (c) Bathe or wash any linen or other thing; or
- (d) Deposit any dirt, rubbish, foul liquid, or matter of any kind.

779.3 In any controlled catchment area or land held by the local authority as a water reserve, no person shall, without first obtaining a permit in writing from the local authority:-

- (a) Enter;
- (b) Hunt, trap, shoot or fish;
- (c) Light or maintain any fire;
- (d) Take any dog;
- (e) Damage or destroy any trees, shrubs, or other existing cover, or interfere with any property;
- (f) Take any firearm or weapon of any kind which may be used for the destruction of birds and animals; or
- (g) Use any pesticide or toxic substances for any purpose whatsoever.

779.4 In granting any such permit the local authority may impose such conditions as it shall consider necessary or advisable, and every person to whom any such permit shall have been issued who shall fail to comply with every condition therefore shall be guilty of an offence against this Part of this bylaw.

779.5 No person shall burn, bury, or otherwise dispose of any refuse or other matter unless it is to the satisfaction of the custodian.

780 Carcasses to be Removed

780.1 Any person who kills any animal on any controlled catchment area or land held by the local authority as a water reserve shall remove the carcass thereof from such area, or shall dispose of the carcass as directed by and to the satisfaction of the Engineer.

781 Permits to be Presented

781.1 No person to whom any permit shall have been issued as aforesaid shall enter or leave any controlled catchment area or land held by the local authority as a water reserve without presenting such permit for inspection by the custodian and notifying the custodian of his intention of entering or leaving such area as the case may be.

781.2 Every person on any controlled catchment area or land held by the local authority as a water reserve shall upon demand forthwith produce any such permit as aforesaid for inspection by the custodian.

781.3 No permit issued as aforesaid shall be capable of being transferred.

781.4 It shall be lawful for the local authority at any time by notice in writing delivered to the holder to revoke or suspend such permit for such time as shall be stated in such notice.

782 Against Interference and Obstruction

782.1 In any controlled catchment area or any land held by the local authority as a water reserve:-

(a) No person whether he is a holder of any permit issued under the provisions of this Part of this bylaw or not (other than a duly appointed officer of the local authority), shall commit or cause or permit to be committed any act which may interfere with or be likely to interfere with the free and lawful exercise of any rights vested in any other person in any such area.

(b) Every person shall upon the request of the custodian or other officer of the local authority immediately leave the controlled catchment area or land held by the local authority as a water reserve, but shall nevertheless be liable also to be prosecuted for the breach of any of the provisions of this Part of this bylaw, and the failure so to leave shall constitute a further offence.

(c) No person shall obstruct or hinder any duly appointed officer of the local authority in the exercise of any powers vested in him under the provisions of this Part of this bylaw.