

# The Water Supply Regulations 2009







January 2009

Issued by:

The Regulation and Supervision Bureau for the Water, Wastewater and Electricity Sector in the Emirate of Abu Dhabi

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# Regulation and Supervision Bureau

for

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# **Foreword**

The Regulation and Supervision Bureau (the Bureau) is established in Abu Dhabi law to oversee the economic and technical activities of electricity and water companies that are licensed to operate in the Emirate of Abu Dhabi.

In addition to its duties over licensed companies, the Bureau has certain responsibilities towards the general public, including the assurance of safe and efficient water supplies to customers and these Regulations have been produced with this primary aim in mind.

The new Regulations supersede the Water Supply Regulations 2003 and are effective from 1 February 2009. They may be cited as the Water Supply Regulations 2009 referred to hereafter as the Regulations.

The Regulations are intended to ensure that all connection arrangements to customer's premises are safe and fit for their intended purpose. They are applicable to connection fittings between a licensed distribution company and a customer's premises and also include water supplies provided to customers by water tankers. They have been produced following extensive consultation with a wide range of interested parties.

They are also available in Arabic, but the reader should note they were first written in English. They may also be downloaded from the Bureau's website at www.rsb.gov.ae.

Nicholas Carter Director General

# List of revisions

Revision Number	Date	Prepared by:	Checked by:	Issued to:
ER/P04/003 Revision 1	Dec 2003	JS	LH	Publication
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# **The Water Supply Regulations**

The Regulation and Supervision Bureau hereby makes these Regulations in accordance with Articles (62) and (63)(8) of Law No (2) of 1998 (as amended by Law No (19) of 2007) Concerning the Regulation of the Water and Electricity Sector in the Emirate of Abu Dhabi.

Note: Document numbering

These Regulations use the following numbering system:

**Parts:** are referred by integers (e.g. 1,2,...)

**Regulations:** are referred by one full stop between numbers

(e.g. 1.1,1.2,....)

*Clauses:* are referred by tow full stops between numbers.

(e.g. 2.2.1, 2.3.1)

# Introduction

#### 1.1 Citation and commencement

- 1.1.1 These Regulations may be cited as The Water Supply Regulations 2009.
- 1.1.2 The new Regulations supersede the Water Supply Regulations 2003 and are effective from 1 February 2009. They may be cited as the Water Supply Regulations 2009 referred to hereafter as the Regulations.
- 1.1.3 These Regulations are intended to ensure that all connection arrangements including Water Fittings used for the connection of a water supply to Customers, which includes a water supply provided to Customers by Water Tanker, are safe and fit for their intended purpose.
- 1.1.4 All Water Fittings must be installed, connected or disconnected, in a manner consistent with Good Industry Practice and as may also be prescribed by the manufacturer and/or the Distribution Company from time to time, and shall be of an approved quality and standard fit for their intended purpose.

## 1.2 Interpretation

Words which are defined under this section are used in the Regulations beginning with capital letters. For example, "installed Water Fittings ...".

Terms in common use are not defined here and normal dictionary definitions apply (e.g. valve, device) .

Words expressions other than those described in this section, which are defined in the Law, shall have the meanings ascribed to them in the Law.

Words using the singular or plural number also include the plural or singular number, respectively.

1.2.1 **ADWEA** – Abu Dhabi Water and Electricity Authority, established under Law No (2).

- 1.2.2 **Adequate Network Pressure** the water pressure not less than 1.25bar (12.5 metre head) at the Distribution Company supply pipe to the Premises and has sufficient pressure to deliver water directly to the Roof Tanks of lowrise buildings not higher than 10 metres from the service connection pipe invert level (or thereabouts).
- 1.2.3 **Bureau** the Regulation and Supervision Bureau for the Water, Wastewater and Electricity Sector in the Emirate of Abu Dhabi, established under Law.
- 1.2.4 **Customer**—the Person to whom the Distribution Company supplies water for domestic, industrial, agricultural and commercial purposes.
- 1.2.5 **Distribution Company** a company or body holding a Licence from the Bureau, pursuant to the Law.
- 1.2.6 **Distribution System** means the system consisting (wholly or mainly) of water pipes owned or operated by a licensee and used for the distribution of Wholesome Water to the point of delivery to Premises or Customers and includes any plant and equipment, including metering equipment, owned or operated by the licensee in connection with the distribution of water.
- 1.2.7 **Good Industry Practice** means the exercise of that degree of skill, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced person engaged in the same type of undertaking under the same or similar circumstances.
- 1.2.8 **Ground Storage Tank** means the receiving tank after the point of delivery to the Customer from the Distribution System for storing water for subsequent use, and which does not include a cistern.
- 1.2.9 **Guide** means the guide to the Water Supply Regulations 2009 issued by the Bureau, and as amended, substituted or supplemented by the Bureau from time to time.
- 1.2.10 **Law** means Law No (2) of 1998 (as amended by Law No (19) of 2007) Concerning the Regulation of the Water and Electricity Sector in the Emirate of Abu Dhabi and Law No (17) of 2005 (as amended by Law No (18) of 2007)

- and Law No (12) of 2008 concerning the Regulation of the Wastewater Sector (and as otherwise amended from time to time).
- 1.2.11 **Licence** means a licence authorising the conduct of a distribution and supply business as described in Article (94) of Law No (2).
- 1.2.12 **Person** means any body corporate, partnership, person or other entity having independent legal personality.
- 1.2.13 **Premises** means a tract or plot of land and includes the buildings and any appurtenances on the land. A Premises may contain more than one property or dwelling and more than one Customer.
- 1.2.14 **Point of Delivery** means the physical connection point at which the water leaves the Distribution System and enters the Customer Water Fittings.
- 1.2.15 **Responsible Person** means the person who assumes actual responsibility for the installation or the ownership of the Water Fitting.
- 1.2.16 **Roof Tank** means a fixed container, cistern, or break tank located on the roof of a building for the purpose of holding or storing water at atmospheric pressure and which does include a Ground Storage Tank.
- 1.2.17 **Suction Pump** means a pump installed to draw water directly from the Distribution Company's water network.
- 1.2.18 **Water Fitting** means pipes, pipe fittings, joints, and valves, back prevention devices including the Customer's Ground Storage Tank or Roof Tank. Without limiting the foregoing, Water Fitting shall include a pump, meter or any other relevant fittings required to facilitate the connection arrangement to the Customer.
- 1.2.19 **Water Quality Regulations** means the Water Quality Regulations issued by the Bureau under Article (62) of Law No (2).
- 1.2.20 **Wholesome Water** means water that is in compliance with the Water Quality Regulations.

1.2.21 **Water Tanker** – means a road vehicle licensed by the Abu Dhabi Police Traffic and Licensing Department following certification of the tanker by the Distribution Company for the purposes of distributing and supplying Wholesome Water sourced from designated water filling stations which are owned, operated and controlled by the Distribution Companies.

#### 1.3 Application of Regulations

- 1.3.1 Subject to Clause 1.3.2, these Regulations specify the obligations of the Distribution Company, the Customer and the Responsible Person in respect of any Water Fitting through which potable water is supplied to the Customer by the Distribution Company for domestic, industrial, agricultural or commercial purposes.
- 1.3.2 Nothing in these Regulations shall permit:-
  - (a) rain water, recycled water, well water or any other water not supplied by the Distribution Company; or
  - (b) any fluid that is not Wholesome Water, to be discharged into the Water Fitting or into the Distribution System of the Distribution Company.
- 1.3.3 A Customer shall not modify or disconnect the installed Water Fittings without first obtaining the Distribution Company's approval.
- 1.3.4 Except for Clause 2.2.1, these Regulations shall not apply to a Water Fitting which has been lawfully installed and used for the period up to 30 September 2003.
- 1.3.5 Temporary supply arrangements may be provided, where possible, subject to all due consideration being taken to ensure proper Water Fittings are installed, including a backflow prevention device.

#### 2.1 Demand management

- 2.1.1 The Distribution Company shall, in accordance with Law No(2) and these Regulations:
  - (a) Promote the conservation and the efficient use of water; and
  - (b) Prevent the waste and over-consumption of water after it has left the pipelines of its Distribution System and supplied to Premises.
- 2.1.2 Customers shall therefore comply with all policies and guidelines, the purpose of which is to promote and prevent waste and over-consumption of water, as issued by the Distribution Companies from time to time.

# 2.2 Restriction on installation, connection, modification and use of Water Fittings

- 2.2.1 No Water Fitting shall be installed, connected, modified or used by the Customer which by reason of being damaged, worn or otherwise faulty, causes or is reasonably likely to cause:-
  - (a) Waste, misuse, undue consumption or contamination of water supplied by the Distribution Company; or
  - (b) The erroneous measurement of water supplied by the Distribution Company.

## 2.3 Requirements for Water Fittings

- 2.3.1 The Responsible Person shall ensure that the Water Fitting either:-
  - (a) Conforms to the specifications and the standards identified in the Guide; or
  - (b) Conforms to a specific specification or a standard approved in writing by the Bureau.

- 2.3.2 The Responsible Person shall ensure that every Water Fitting is safe and fit for its intended purpose.
- 2.3.3 The Responsible Person shall ensure that the Water Fitting shall be installed in accordance with a method of installation approved in writing by the Distribution Company or as prescribed by the manufacturer.
- 2.3.4 The Responsible Person or the Customer shall not incorporate a Suction Pump into any Water Fitting without having obtained the prior written approval of the Distribution Company.
- 2.3.5 The Responsible Person shall install and maintain a float operated valve or such other fitting or device as shall be required to control the flow of water into the Customer's Ground Storage Tank or Roof Tank in order to prevent the overflow of water therefrom.
- 2.3.6 The Distribution Company shall ensure that all service connections to the Customer's Ground Storage Tank or Roof Tank are fitted with a float operated valve or such other fitting or device required to control the flow, in addition to an appropriate backflow prevention system.

## 2.4 Application for new connection

2.4.1 The Responsible Person requiring a new water supply connection shall make an application in a form prescribed by the Distribution Company. Supporting documents are required to be provided by the Responsible Person in accordance with the Distribution Company requirements in order to ensure that the application for a new connection is able to be fully and properly considered by the Distribution Company.

## 2.5 Security of supply

2.5.1 The Distribution Company shall ensure a piped water supply to all Customer Premises in the Emirate of Abu Dhabi. However, under certain circumstances Customers

may be supplied with water on a temporary basis by means of Water Tanker.

- 2.5.2 The Distribution Company shall ensure that under normal operating conditions water is supplied at reasonable demand with minimum pressure of 1.25bar (12.5metres) measured at the main supply pipe to the Customer. The Distribution Company shall also ensure that Customers connected directly to high pressure Distribution System 6.0bar and above should allow for pressure reducing valve to be installed preventing any possible damage of the Water Fittings.
- 2.5.3 The Distribution Company shall carry out a full assessment to determine the type and size of water supply connection to Premises. In case of long service connections, the Distribution Company must be satisfied that such connections are of the correct size to meet the Customer's demand without causing any operational or technical risk to the Distribution System, in relation to pressure or flow. Otherwise a temporary supply to the Customer may be considered.

## 2.6 Quality of supply

- 2.6.1 The Distribution Company shall be responsible for ensuring that the water quality exiting its Distribution System is Wholesome Water and complies with the Water Quality Regulations.
- 2.6.2 The Responsible Person shall ensure that regular inspections are carried out of the Water Fittings including Ground Storage Tanks and Roof Tanks and, when necessary, undertake cleaning of these tanks according to the procedures set out in the Guide, to ensure water does not become contaminated after it enters the Customer's Water Fittings.

#### 2.7 Environmental conditions

2.7.1 All field installations shall be suitable for the prevailing climatic conditions of the Emirate of Abu Dhabi.

#### 2.8 Leakage

- 2.8.1 The Responsible Person shall ensure that immediate steps are taken to repair any water leakage that occurs from the Customer's Water Fittings. Such leakage generally occurs after the Point of Delivery to the Customer at either the main service valve or the water metering point.
- 2.8.2 Where multiple customers are supplied from a common service connection i.e. residential, commercial and industrial Premises or mixed use Premises, the Responsible Person shall ensure that regular inspection for leakage is conducted, particularly within that part of the Customer's Water Fittings system between the Point of Delivery to the Premises and the Customer's internal meters/isolating valves, which includes (but is not limited to) the Ground Storage Tank and Roof Tank.
- 2.8.3 The Responsible Person shall co-ordinate any repair works for leakage with the Distribution Company where such repair work is expected to have an impact on the Distribution System, particularly where isolation of any part of the Distribution System is required.
- 2.8.4 Where constant leakage on the Customer's Water Fittings is detected, the Distribution Company shall notify the Responsible Person to repair the leak immediately. If such leakage is not repaired within twenty-four (24) hours from the time the Responsible Person is notified, the Distribution Company may carry out any necessary steps to repair such leakage in accordance with Guide, policies and procedures developed by the Distribution Company and approved by the Bureau.

## 2.9 Customer storage tanks

- 2.9.1 In high-rise buildings, Ground Storage Tanks and Roof Tanks must be considered in accordance with these tanks' storage capacity criteria as set out in the Guide and/or as directed by the Distribution Company.
- 2.9.2 For low-rise buildings direct supply of potable water to Roof Tanks is achievable in many parts of the Emirate

of Abu Dhabi as a result of network supply and pressure improvements. Therefore, the provision of Ground Storage Tanks to low-rise buildings should be made after taking the following into consideration:

#### (a) Adequate network pressure

Ground Storage Tanks shall not be considered in the following cases:

- (i) New low-rise buildings. The Distribution Company will confirm the Distribution System pressures and supply conditions that apply to the location of the proposed construction. Ground Storage Tanks will not be considered if Adequate Network Pressure and supply conditions are available. The Responsible Person must consult and obtain prior approval from the Distribution Company before considering the provision of Ground Storage Tanks.
- (ii) Existing low rise buildings. Ground Storage Tanks may be by-passed upon approval by the Distribution Company. In areas where adequate network pressure and supply conditions exist, the Distribution Company shall notify the Responsible Person should he or she wish to consider modifying the connection.
- 2.9.3 The benefits provided by the new supply arrangements should be conveyed to all customers and the Distribution Company must offer all possible assistance to facilitate a change of connection at the Customer's Premises.
- 2.9.4 Where Clauses 2.9.2 (a)(i) and (ii) apply, Roof Tanks must be provided. Sizing of Roof Tanks shall be according to the Guide's Roof Tank sizing criteria.
- 2.9.5 In low-rise single metered Premises which include (but is not limited to) villas and government housing known as Shabiat, a direct dedicated connection to the kitchen from the supply pipe to the Roof Tank shall be considered by the Distribution Company.

#### (b) Inadequate network pressure

2.9.6 In circumstances where direct supply to low-rise buildings Roof Tanks cannot be guaranteed due to inadequate network pressure, insufficient flow or intermittent supply, Ground Storage Tanks shall be considered by the Distribution Company. A by-pass connection arrangement to the Ground Storage Tank complete with isolation valves shall also be included. The by-pass arrangements can be utilised once the pressure and the supply conditions become adequate. The size of the Ground Storage Tank and Roof Tank shall be determined in accordance with the tank storage capacity criteria as set out in the Guide.

#### 2.10 Water Tankering

- 2.10.1 Water Tanker owners and operators distributing and supplying Wholesome Water for the purposes of drinking, washing and cooking are required to have their tankers certified by the Distribution Company in accordance with testing qualification procedures that comply with the Water Quality Regulations and any other relevant procedures adopted by the Distribution Company to ensure Wholesome Water is delivered water to Customers.
- 2.10.2 All Water Tankers certified by the Distribution Company must have appropriate signage stating "Drinking Water" which is clearly visible on the external body of the Water Tanker in both the Arabic and English languages, along with an appropriate pictorial symbol clearly indicating that the water is Wholesome Water.
- 2.10.3 The Distribution Company shall also display its seal on the external body of the Water Tanker together with its certification issue date, certificate unique number and the tanker registration details.

# **General Principles**

#### 3.1 Notification

3.1.1 Any Responsible Person who proposes to install a Water Fitting shall comply with the procedure of connection identified in Annex A of the Guide which includes the provision of all the information and documentation required to establish a connection or as required by the Distribution Company.

#### 3.2 Inspections, measurements and tests

- 3.2.1 In order for the Distribution Company to carry out its obligations under these Regulations it shall (amongst other things) carry out such inspections, measurements and tests on Water Fittings located on Premises.
- 3.2.2 For the purposes of Clause 3.2.1, inspections shall be carried out by any Person appointed or authorised by the Distribution Company or the Bureau
- 3.2.3 In carrying out these inspections, the appointed or authorised Person may remove from the Premises such samples of water, land and Water Fittings considered necessary for the purposes of establishing whether or not a Customer or Responsible Person is compliant with these Regulations.

#### 3.3 Enforcement

- 3.3.1 Each Distribution Company shall enforce the requirements of these Regulations in relation to the regulated activities for which it holds a licence under the Law.
- 3.3.2 Failure to comply with these Regulations shall be as contrary to the Law and subject to punishment by the imposition of a fine. Any such failures will be addressed in accordance with Articles 65(5) and Article (66) of Law No (2). Action may be taken again any Distribution Company, Customer or Responsible Person.
- 3.3.3 These Regulations are subject to amendment by the Bureau from time to time.

#### 3.4 Relaxation of requirements

- 3.4.1 The Distribution Company may, upon a written application of a Responsible Person and after due consideration, authorise a relaxation of the Regulations, subject to such limitations as the Distribution Company or the Bureau may determine.
- Where a Responsible Person reasonably considers that it would be inappropriate for any particular requirement of these Regulations to be enforced in relation to a Water Fitting, the Responsible Person may request the Distribution Company to consider relaxing such requirements, excluding Regulations 2.2 and Clause 2.3.5 which shall be met at all times.

# 3.5 Approval by the Bureau of new specifications for Water Fittings

- 3.5.1 Before approving a specification or standard under Clause 2.3.1(b), the Bureau shall consult:-
  - (a) All Distribution Companies;
  - (b) Such trade associations and government authorities as it considers appropriate; and
  - (c) Such organisations appearing to it to be concerned with the interests of water users as it considers appropriate.
- 3.5.2 Where the Bureau approves a standard or specification under Clause 2.3.1(b) it shall give notice of the approval to all persons who were consulted under Clause 3.5.1 and shall publish it in such manner as it considers appropriate.

## 3.6 Compliance

3.6.1 Compliance with these Regulations shall be assessed in accordance with the Law and the relevant provisions of the Guide.

#### 3.7 Charges

3.7.1 The fees for the installation, repair, connection and disconnection of Water Fittings to be charged by the Distribution Company shall be determined in accordance with those approved by the Bureau pursuant to the relevant condition of the Distribution Company's Licence.

#### 3.8 Disputes

- 3.8.1 Any dispute between the Distribution Company and the Responsible Person in relation to the exercise of the Distribution Company's powers under these Regulations may be referred to the Bureau to advise on a solution and recommended action.
- 3.8.2 In accordance with the Law, the court with the appropriate jurisdiction in the Emirate of Abu Dhabi shall also hear disputes relating to these Regulations.

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