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THE LEGISLATIVE ASSEMBLY FOR THE  
AUSTRALIAN CAPITAL TERRITORY

WATER AND SEWERAGE AMENDMENT REGULATIONS 2004  
(No 1)

Subordinate Law SL2004-45

EXPLANATORY STATEMENT

Circulated by authority of  
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# WATER AND SEWERAGE AMENDMENT REGULATIONS 2004 (No 1)

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## OVERVIEW

These are new regulations under the *Water and Sewerage Regulations 2001*.

## BACKGROUND

The new regulations are intended to address a failure of the ACT housing construction market to produce new residential buildings that have built-in piping for convenient domestic use of rainwater runoff from the premises and for convenient reuse of grey water produced in the premises.

The *Water and Sewerage Regulations 2001* define the term **grey water**. Essentially it is sewage generated by baths, showers, basins, and laundry tubs and certain floor wastes. It excludes wastes from kitchen sinks because of the likelihood of such sewage containing grease and food residues which make such sewerage less desirable for reuse in irrigation. It also excludes waste from toilets due to the high solids content and highly septic nature of toilet sewerage.

An intention is to address the above mentioned market failure by requiring rainwater pipework and grey water pipework to be built into certain new residential construction. At that stage of construction, the cost of insulating that additional pipework is either nil or insignificant compare to the cost of trying to retrospectively install that pipework into the finished walls and falls of a residence. Certain of the new regulations do not apply where retrofitting such pipework would be relatively straight forward due to the accessibility of pipework, (eg: the sanitary drains in the upper floor of a 2 storey residence, as those drains are accessible from the lower floor).

An intention in addressing the above-mentioned market failure is to remove or significantly diminish the economic barrier preventing many householders from making widespread use of rainwater and grey water in place of water supplied through municipal water networks.

The new regulations require the installation of an additional washing machine tap point in certain new residential buildings and extensions to residential buildings, with associated pipework installed for convenient connection to a rainwater tank. An intention is that in doing so, householders will be encouraged to later provide such a tank etc and use rainwater in clothes washing machines as an alternative to using municipal water. An intended consequence is to conserve municipal water supplies.

For the same reason the new regulations also require an additional toilet cistern tap point in certain new residential buildings and extensions to residential buildings, with associated pipework installed for convenient connection to a rainwater tank.

A reason for not extending the requirements for additional rainwater outlets to other domestic applications is to discourage the use of rainwater as a drinking water supply, due to its unregulated nature.

The new regulations also require the installation of additional pipework necessary to keep grey water separate from other sewage until it is drained to a point where it can be later drawn off for reuse. The new regulations do not then prohibit that grey water drainage from being connected to the sewerage network.

The new regulations also have ancillary provisions covering the protection of grey water pipework from connection to other sewerage pipework, and requirements to protect water supply pipework from potential contamination with sewage from a grey water reuse system.

The new regulations do not require the provision of a rain water supply, nor the provision of a grey water reuse system. The new regulations require the installation of built-in pipework that can be later connected to such tanks and systems.

## DETAILS OF THE REGULATIONS

**Clause 1** provides that the name of the new regulations is *Water and Sewerage Amendment Regulations 2004 (No 1)*.

**Clause 2** prescribes that the new regulations commence on 1 January 2005.

**Clause 3** provides that the new regulations amend the *Water and Sewerage Regulations 2001*.

**Clause 4** inserts new regulation 5A (Offences against regulations-application of Criminal Code etc), which indicates that other legislation applies to an offence against the *Water and Sewerage Regulations 2001*. Clause 4 also provides notes about how the Criminal Code applies to certain regulations, and how the Legislation Act, s 133 deals with the meaning of offence penalties expressed in penalty units.

**Clause 5** inserts 4 new regulations, regulation 16A (Building-in separated sanitary drainage for grey water), regulation 16B (Preservation of separated sanitary drainage for grey water), regulation 16C (Overflow from grey water disposal system), and regulation 16D (Retrofitting backflow prevention devices). Each of those 4 new regulations establish offences in relation to licensees in relation to installing certain sanitary drainage, sanitary plumbing or water supply plumbing that does not comply with certain technical requirements set out in the regulations. The offences are strict liability offences.

An intention in specifying that the offences are strict liability offences was to endeavour to encourage the relevant licensees to ensure the relevant work is not done in a manner that fails to comply with the technical requirements set out in the new regulations. That is because a fundamental goal of the new regulations is to ensure pipework is installed in a particular way before building construction advances to the point that it becomes impractical to gain access to that pipework. A detrimental ramification of committing either of the offences is that the non-compliant pipework may be built-into the building structure, such as a concrete slab floor, making it impractical to bring the work into compliance afterwards. Rectifying such non-compliant work could entail partial demolition of the building to gain access to the pipework or to install replacement complaint pipework. Examples of potential adverse ramifications of doing water supply plumbing work or sewage disposal work in a manner that fails to comply with requirements are contamination of municipal water supplies with septic waste products, or ongoing uncontrolled overflow of untreated sewage into the environment.

The provisions of new regulation 16A (Building-in separated sanitary drainage for grey water) are generally intended to apply where it would be difficult to provide grey water drainage pipework retrospectively after a building is complete. It sets out details of circumstances where the provisions apply, and they generally relate to circumstances where there is no access to pipework from a floor or space below the pipework. They also only apply to the situations where a new residence is being constructed or an extension to an existing residence, as set out in the provision. It is not intended that the provision be retrospectively applied to pre-existing pipework

except where that intention is eluded to in the provisions in relation to doing new work on older pipework.

The provisions of new regulation 16B (Preservation of separated sanitary drainage for grey water), are intended to preserve pre-existing grey water sanitary drains. They have application to pre-existing pipework as well as new and future pipework. The intention is to protect grey water pipes from contamination by connection to sanitary fixtures that can produce non-grey water sewage. The provision also provides an example of circumstances that establish an offence against regulation 16B.

The provisions of new regulation 16C (Overflow from grey water disposal system), are intended to reduce the risk of uncontrolled discharge of sewerage into the environment arising from overflow, blockage or malfunction of a grey water disposal system. It is not intended that the regulation require a parcel of land to be connected to a sewerage network where no such connection exists, but it does apply where a land parcel does have such a connection.

The provisions of new regulation 16D (Retrofitting backflow prevention devices), are intended to require retrofitting of backflow prevention devices to protect water supply plumbing from sewerage contamination, where required by other regulations referred to in regulation 16D. Those other requirements may require a backflow prevention device to be fitted to water supply plumbing when it is being installed in situations where there is high risk of the plumbing being contaminated with sewage. Regulation 16D recognises that providing a grey water disposal system sometime after the construction of a building may create such a contamination risk for the pre-existing water supply plumbing. However, as no work is being done to that water supply plumbing as a consequence of installing a grey water system, without the provisions of regulation 16D, there would not be a requirement in law to retrofit a backflow prevention device on the at-risk water supply plumbing. An intent of regulation 16D is to require the licensee responsible for doing sanitary drainage work in relation to a grey water disposal system, to ensure that relevant water supply plumbing that may be affected by that work is fitted with a backflow prevention device if required by the regulation. It is not intended that that licensee personally do that water supply plumbing work to fit a required backflow prevention device, but rather, regulation 16D is intended to require that licensee to either personally do that work or to arrange for another licensee to do that work, where that work is required by the regulation.

**Clause 6** inserts new regulations 24A (Building-in separated rainwater supply service), and 24B (Installing rainwater supply service).

New regulation 24A (Building-in separated rainwater supply service), essentially requires additional pipework to be built into certain residential buildings to facilitate the use of rainwater as an alternative supply of domestic water. It is only intended to apply where new washing machine taps or a new toilet cistern tap is being installed, except where the regulation provides that it does not apply. An objective is to require the room where the washing machine taps are, or will be, installed, to have a duplicate cold water tap or outlet built-in. One of the duplicates is for the main cold water supply; the other set is potentially for rainwater supply. For toilet cisterns, the objective is similar—to provide duplicate cistern taps or outlets. One for the main water supply and the other is potentially for rainwater.

An intention is to facilitate later use of rainwater for domestic use in washing machines and toilet flushing, thus conserving water from other sources, by requiring the extra pipework to be installed during installation of the relevant other plumbing work. It is not intended that the extra pipework be supplied with rainwater at the time of installation, however, but rather is intended to make it convenient to connect a future rain water tank to the required pipework, without having to do additional plumbing work inside the building's walls or floors.

The reason for only requiring rain water pipework to be provided for washing machines and toilet cisterns is that they are taken as being the 2 kinds of water outlets that are least likely to be also used to supply drinking water. An objective is to not encourage the use of rainwater for drinking water, due to its unregulated quality.

New regulation 24A also establishes a strict liability offence against a licensee that fails to comply with the requirements of the regulation. The reason for specifying that the offence is one of strict liability is the same as the relevant reason set out above in relation to the offences in clause 5.

New regulation 24A also provides much technical detail about technical requirements for the relevant plumbing work, as there is a lack of technical standards or other document that adequately provides such details for the relevant circumstances. An intention is to ensure that the additional fittings such as taps and decorative flanges match as closely as possible those of the adjacent corresponding main water supply fittings. That is to avoid undue objection to the additional fittings, on the basis of them not matching other similar adjacent fittings.

It is not intended that the additional pipework be terminated inside the building at a tap fitting, but that is desirable. Alternatively it can be terminated at a pipe cap in accordance with the relevant requirements prescribed in the regulation.

New regulation 24B (Installing rainwater supply service), essentially prescribes that the requirements of regulations 18, 19 and 21 apply to doing water supply plumbing work in relation to providing the required rain water pipework. That is necessary as there is no requirement to connect the rainwater pipework to a water supply, as making that connection can be done later and is not mandatory. Therefore the requirements of regulations 18, 19 and 21 would not otherwise apply to the rainwater pipework, as those regulations generally apply to pipework connected to a water supply. It is necessary to apply those regulations to the rainwater pipework to ensure that they meet relevant technical requirements ready to receive a water supply connection at any future time.

**Clause 7** omits note 2 of the Dictionary to the *Water and Sewerage Regulations 2001*, and prescribes a replacement note 2 and new notes 3 and 4. All 3 of those notes deal with definitions of certain key terms used in the regulations.

**Clause 8** inserts new definitions in to the Dictionary to the *Water and Sewerage Regulations 2001*, for the following key terms used in the new regulations—

***Australian Standard 3500;***

*cistern tap point;*

*grey water disposal system;*

*grey water point;*

*rainwater point;*

*separated grey water waste fixture;* and

*washing machine tap point.*

Each of those definitions is specific to the application of those terms in the regulations, and not necessarily based on other interpretations of the meaning of those terms.

## **FINANCIAL IMPLICATIONS**

Nil