



Independent Pricing and Regulatory Tribunal

Licence compliance under the Water Industry Competition Act 2006

Annual Report 2011/12

Report to Minister

Water — Compliance Report
October 2012



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ISBN 978-1-922127-37-2 CP70

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1 Executive Summary

We, the Independent Pricing and Regulatory Tribunal (IPART), consider that licensing private schemes under the *Water Industry Competition Act 2006* (the Act):

- ▼ encourages competition for the supply of water and provision of sewerage services and
- ▼ facilitates the development of infrastructure for the production and reticulation of recycled water.

A total of around 2,423 ML of water was recycled by licensees under the Act and used in place of potable water. Further, the Sydney Desalination Plant provided 60,683 ML of desalinated water to Sydney Water to supplement its potable water supply.

As of 30 June 2012, 19 licences have been granted by the Minister to 10 corporations for 9 schemes. These include both network operator and retail supplier licences. In addition, licence applications for another 6 schemes are currently under consideration.

Licence activities under the Act during 2011/12 included.

- ▼ Six network operator licensees were operating infrastructure for 5 schemes. Five retail suppliers were supplying water or providing sewerage services to customers of these schemes.¹
- ▼ Two network operator licensees were commissioning infrastructure for their respective schemes. Both of which also hold retail supplier licences and are expected to commence supply in 2012/13.

¹ Rosehill recycled water scheme has 2 licensed network operators. Veolia Water operates the recycled water treatment plant and SPI Rosehill Network operates the distribution network. See section 3.1 for details.

Overall, licensees operated satisfactorily during 2011/12 and no significant performance matters were reported. A few compliance matters were identified in the annual compliance reports submitted by licensees and through our audit processes. These matters present no risks, in the short to medium term, to customers, public health or the environment. These matters are therefore considered minor. Methods to manage any long-term risks are currently being reviewed. This is discussed below.

- ▼ Veolia water Solutions (VWS) did not establish codes of conduct for its recycled water schemes at the Darling Walk and Bingara Gorge residential developments. These codes are intended to delineate responsibilities between all of the parties involved with managing the schemes. These include VWS, Lend Lease and Sydney Water.

We consider that in the short term, risk to supply of services to customers is not significant. There are currently contractual agreements² in place between Sydney Water and Lend Lease which set out their operational responsibilities. They do not explain VWS' responsibilities but they do cover many of the issues to be addressed in the codes of conduct.

To ensure that the schemes are managed adequately in the future, VWS should establish codes of conduct for both schemes. These should clarify all parties' responsibilities. This view is supported by the findings from a compliance audit of the Bingara Gorge recycled water scheme undertaken in 2012.

We note that VWS is seeking to formalise codes of conduct with Lend Lease and Sydney Water for both schemes. We will review that codes of conduct are established in the next 12 months.

- ▼ There were also some minor issues with reporting by licensees. These included receiving some of the annual compliance reports late or signed incorrectly. Further, copies of insurance expert reports and certificates of currency were not always provided in time.

We have brought these issues to the attention of the licensees concerned to avoid future occurrences.

Over the next year we intend to:

- ▼ engage in more compliance and licence regulation work including audits
- ▼ assist growing number of applicants with their pending licence applications
- ▼ with our stakeholders, further refine our internal processes we use to administer the licensing regime.

Further, we note that the government's 5-year statutory review of the Act is scheduled to commence shortly. In light of our regulatory experience in administering the Act, we look forward to contributing to this review.

² See section 4.1.3 for details.

Finally, a separate government review of the Act's last resort provisions³ commenced in 2011/12. We acknowledge that this is a complex regulatory issue. However, we would like to emphasise that the current arrangements need to be improved as quickly as possible. We consider the lack of effective last resort provisions creates a high level of risk for customers currently receiving essential services from decentralised private schemes licensed under the Act.

³ Last resort provisions set out the arrangements that are made to maintain essential services to the public in the event of a financial failure by a licensed network operator and /or retail supplier (see section 5.2.2 for further details).

2 Introduction

This is the fourth annual compliance report regarding the private water industry licensing regime established under the Act. The regime commenced operation on 8 August 2008 when the *Water Industry Competition (General) Regulation 2008* (the Regulation) was made.

As soon as practicable after 30 June of each year (but on or before 31 October), we must prepare and forward to the Minister for Finance and Services (the Minister) a report on the extent to which private water utility licensees have complied, or failed to comply, with the conditions imposed on their licences during the 12 months ending on 30 June that year.⁴

The Minister must lay the report or cause it to be laid before both Houses of Parliament as soon as practicable after receiving the report.⁵

As per these requirements we have prepared this report to the Minister. The report provides:

- ▼ an overview of existing licence holders (licensees) and their schemes (section 3)
- ▼ information on licensees' performance and explores any breaches of licence conditions in 2011/12 (section 4) and
- ▼ details of licensees' performance in 2011/12 (section 4 and Appendix B).

Further the report also:

- ▼ explains the work we have undertaken to support and refine the licensing regime and highlights new developments in the licensing regime (section 5) and
- ▼ provides an overview of the monitoring and compliance framework which has been established to support the licensing regime (Appendix C).

⁴ *Water Industry Competition Act 2006*, section 89(1).

⁵ *Water Industry Competition Act 2006*, section 89(2).

3 Licences

The Act was introduced as part of the NSW government's strategy for a sustainable water future. The aim of the Act is to harness the innovation and investment potential of the private sector in the water and wastewater industries.

The Act, among other functions, establishes a licensing regime for private sector entrants. This ensures the continued protection of public health, consumers and the environment. A person must not construct, maintain or operate any water industry infrastructure otherwise than under the authority of a licence. A licence is also required to supply water (potable or non-potable) or provide sewerage services by means of water industry infrastructure. These licences are granted by the Minister.

Two types of licences are required to be obtained under the Act.

- ▼ A network operator's licence is necessary to construct, maintain or operate water industry infrastructure. Once the Minister has granted a network operator's licence, the licensee is entitled to operate on terms similar to a public water utility.
- ▼ A retail supplier's licence is required to supply water (potable or non-potable) or provide sewerage services (services) by means of water industry infrastructure.

As of 30 June 2012, a total of 19 licences have been granted to 10 corporations for 9 schemes. These include both network operator and retail supplier licences. This is explained in more detail below.

Further, variations to 3 licences were granted in 2011/12. We also received licence applications for another 6 schemes. We are currently in the process of reviewing these applications. This is also explained below.

3.1 Licensees

The 10 corporations licensed under the Act include

- ▼ Veolia Water Australia Pty Ltd (Veolia Water)
- ▼ SPI Rosehill Network Pty Ltd (SPIRN)
- ▼ AquaNet Sydney Pty Ltd (AquaNet)

- ▼ Aquacell Pty Ltd (Aquacell)
- ▼ Simmonds & Bristow Pty Ltd (S&B)
- ▼ Veolia Water Solutions and Technologies (Australia) Pty Ltd (VWS): VWS holds licenses in relation to 2 schemes - VWS (Darling Walk) and VWS (Bingara Gorge)
- ▼ Sydney Desalination Plant Pty Ltd (SDP)
- ▼ Pitt Town Water Factory Pty Ltd (PTWF)
- ▼ Osmoflo Water Supply Pty Ltd (Osmoflo) and
- ▼ Orica Australia Pty Ltd (Orica).

3.2 Licensed schemes

An overview of the 19 licences granted and their 9 associated schemes is provided in Table 3.1 below.

Table 3.1 Overview of licensed schemes, licensees and the types of licences held⁶

Scheme	Corporation	Licence type	Details/Area	Date of issue of licence(s)
Rosehill recycled water scheme	Veolia Water	Network Operator	Construct, operate and maintain a recycled water treatment plant at Fairfield	8 April 2009
	SPIRN	Network operator	Construct, operate and maintain a recycled water network in Auburn, Bankstown, Fairfield Holroyd, Liverpool and Parramatta Local Government Areas	27 April 2009
	AquaNet	Retail supplier	Supply non-potable water to customers in Auburn, Bankstown, Fairfield, Holroyd, Liverpool and Parramatta Local Government Areas	10 March 2010
Aquacell 1 Bligh St recycled water scheme	Aquacell	Network Operator	Construct, operate and maintain a recycled water treatment plant in 1 Bligh Street, Sydney	2 February 2010
		Retail Supplier	Supply recycled water to owner of 1 Bligh Street, for distribution to commercial occupants of building	
S&B sewage treatment and effluent disposal scheme	S&B	Network operator	Construct, operate and maintain a sewerage reticulation system and subsurface effluent disposal system at Tallowood Ridge residential development in Mullumbimby	28 May 2010

⁶ For more details of the schemes access the private sector licensing section on IPART's website (www.ipart.nsw.gov.au).

Scheme	Corporation	Licence type	Details/Area	Date of issue of licence(s)
		Retail Supplier	Provide sewerage services to Tallowood Ridge residential development	
VWS Darling Walk recycled water scheme	VWS	Network operator	Construct, operate and maintain a recycled water treatment plant in the Darling Walk Development in Darling Harbour, Sydney	24 June 2010
		Retail supplier	Supply recycled water to owner of Darling Walk Development for distribution to commercial occupants of building	
SDP	SDP	Network operator	Construct, operate and maintain a desalination plant located on the Kurnell peninsula	9 August 2010
		Retail supplier	Supply drinking water to Sydney Water's area of operations to supplement potable water supply	
PTWF recycled water scheme	PTWF	Network operator	Construct, operate and maintain non-potable water and sewage reticulation and treatment infrastructure at the Pitt Town release area	11 November 2010
		Retail supplier	Supply non-potable water and sewerage services to customers in the area bordered by Old Stock Route Road, Railway Road, Hawkesbury Valley Way, Macquarie Street and the Hawkesbury River in Pitt Town, Hawkesbury	
VWS Bingara Gorge recycled water scheme	VWS	Network operator	Construct, operate and maintain non-potable water and sewage reticulation and treatment infrastructure at the Bingara Gorge release area	9 December 2010
		Retail supplier	Provide sewerage services and non-potable water to customers in the Wilton Parklands – Bingara Gorge	1 March 2011
Osmoflo recycled water scheme	Osmoflo	Network operator	Construct, operate and maintain a recycled water treatment plant for the Caltex Refinery at Kurnell	14 September 2011
		Retail supplier	Supply recycled water to the Caltex Refinery at Kurnell for industrial/ non-potable use	
Orica groundwater treatment scheme	Orica	Network operator	Operate and maintain an existing groundwater treatment plant at Botany (in and around Botany Industrial Park)	23 April 2012
		Retail supplier	Supply treated groundwater to industrial customers on and adjacent to Botany Industrial Park as a replacement to potable water	

We consider that licensing schemes under the Act encourages competition for the supply of water and the provision of sewerage services. It also helps facilitate the development of infrastructure for the production and reticulation of recycled water.⁷ This is the Act's stated objective.

The table above shows that the majority of the licensed schemes promote the use of recycled water to replace potable water, where possible.

3.2.1 Status of licensed schemes in 2011/12

In 2011/12, the 9 licensed schemes were at different stages of progress. Six network operators were operating infrastructure for 5 of the 9 schemes.⁸ During the period, 5 retail suppliers were supplying water or providing sewerage services to customers. These schemes include:

- ▼ Rosehill recycled water scheme
- ▼ VWS Darling Walk recycled water scheme
- ▼ SDP
- ▼ VWS Bingara Gorge recycled water scheme and
- ▼ Orica groundwater treatment scheme.

The Rosehill and VWS Darling Walk recycled water schemes were only operating for part of the year. Further, for the VWS Bingara Gorge recycled water scheme, only the sewage collection and treatment services were being operated. The recycled water distribution network was still under construction and supply had not commenced.

The remaining 4 of the 9 schemes were not operating as follows:

- ▼ the Aquacell 1 Bligh Street and PTWF recycled water schemes were being commissioned during 2011/12
- ▼ the Osmoflo recycled water scheme and the S&B sewage treatment and effluent disposal scheme are no longer expected to proceed.

Osmoflo have advised that the recycled water scheme at the Caltex Kurnell Refinery will not proceed.⁹ A decision has been made to shut the Refinery in the last quarter of 2014. A recycled water scheme is therefore not required.

The developer of the Tallowood Ridge residential estate has decided not to proceed with the S&B sewage treatment and effluent disposal scheme. Instead the developer will obtain sewer services from the local water authority.

⁷ See the preamble to the Act.

⁸ The Rosehill recycled water scheme has 2 licensed network operators.

⁹ On 22 October 2012 Osmoflo sought cancellation of its licences. Caltex also provide verbal advice of the scheduled closure of it refinery on 24 October 2012.

3.3 Licence variations

In 2011/12, variations to the following licences were requested and granted:

- ▼ SDP's network operator licence and
- ▼ PTWF's network operator and retail supplier licences.

A licensee may request a licence variation for a number of reasons including if there is a change to

- ▼ the configuration of the licensed infrastructure
- ▼ the source of water for the water industry infrastructure for which the licensee is authorised
- ▼ the end uses or area of operations that were originally authorised or
- ▼ the authorised persons listed in the licence, other than the licensee.

Details of the variations made to SDP's and PTWF's licences are included in Appendix A.1.

3.4 Licence applications

As of 30 June 2012, we have received licence applications for another 6 schemes. The following applications are currently being processed:

- ▼ Aquacell Pty Ltd (Workplace 6)
- ▼ Central Park Water Factory Pty Ltd (CPWF)
- ▼ Water Factory Company Pty Ltd (WFC)
- ▼ Mirvac Real Estate Pty Ltd
- ▼ University of Western Sydney (UWS) and
- ▼ Snowy Hydro Limited.

Out of these applications, 5 are combined network operator and retail supplier licence applications. The WFC application is for a NSW-wide retail supplier licence. If this licence is granted, it will be the first of its kind under the Act.

Details of these licence applications are also included in Appendix A.2.

4 Licence compliance

Once licensed, a licensee must ensure compliance with its licence conditions and any other applicable obligations under the Act, the Regulation and any codes of conduct.¹⁰ Licence conditions are imposed via the Act, the Regulation and the licence, and may refer to other legislation, statutory instruments or documents.¹¹

The compliance obligation is effective from the date of issue of a licence. Licensees are required to keep records relating to their activities and should furnish this information to IPART as requested. This information is usually included with exception based annual compliance reports which licensees must submit to IPART by 30 August of each year. These annual compliance reports must be prepared in accordance with our reporting manuals.¹² Annual performance indicators must also be provided with these reports. Licensees' 2011/12 annual compliance reports are summarised below.

We also periodically audit licensees' compliance to verify the information provided in the annual compliance reports.¹³ These compliance audits are undertaken at regular intervals based on our assessment of risk.

The results of the compliance audits conducted during 2011/12 are summarised below.

Further, the adequacy of licensees' licence plans¹⁴ and New Infrastructure¹⁵ were also audited under the Act's licensing regime.¹⁶ Results from these audits undertaken during 2011/12 are also discussed below.

¹⁰ For example, the Marketing Code of Conduct and Transfer Code of Conduct.

¹¹ For example, licence conditions require compliance with the codes of conduct, infrastructure operating plans, retail supply management plans, water quality plans and sewage management plans, and with aspects of the *Environmental Planning and Assessment Act 1979*, *Protection of the Environment Operations Act 1997*, *Public Health Act 1991*, *Plumbing and Drainage Code of Practice*, *Australian Drinking Water Guidelines* and *Australian Guidelines for Water Recycling*

¹² The applicable Network Operator's Reporting Manual and Retail Supplier's Reporting Manual are available on IPART's website (www.ipart.nsw.gov.au).

¹³ See Appendix C.2 for details.

¹⁴ These plans may include infrastructure management, water quality, sewage management or retail supply management plans, as is relevant to the licence.

¹⁵ New infrastructure is defined by the Act as infrastructure that comes into operation after 8 August 2008.

¹⁶ See Appendix C.3 for details.

Finally, all audits were conducted by approved auditors from our Water Licensing Audit and Technical Services Panel (the Panel).¹⁷ This is in accordance with our Audit Guideline.¹⁸ The appointment of auditors from the Panel and the use of the Audit Guideline during 2011/12 proved effective in identifying some areas where audit processes could be further refined.

4.1 Compliance with licence conditions

Overall, licensees operated satisfactorily during 2011/12. A small number of compliance matters were identified in the licensees' annual compliance reports and through our audit processes.

We consider that these matters present little to no risk in the short to medium term to customers, public health or the environment. These matters are therefore considered minor. Methods to manage any long-term risks are currently being reviewed. This is discussed below.

4.1.1 SDP

SDP did not report any breaches of its network operator or retail supplier licence conditions in 2011/12.

4.1.2 Rosehill recycled water scheme

Veolia Water did not report any breaches of its network operator licence during 2011/12.

SPIRN reported that it did not publish copies of its infrastructure operating and water quality plans on its website. This was a previous requirement of the Regulation, namely Clause 12(b) and (c), Part 2, Schedule 1.

We note that this requirement of the Regulation was repealed in December 2011. As such, SPIRN is no longer non-compliant.

Further, no compliance matters were identified during SPIRN's periodic licence compliance audit.¹⁹

AquaNet did not report any breaches of its retail supplier licence conditions in 2011/12.

¹⁷ See Appendix C.4 for details.

¹⁸ The Audit Guideline – *Water Industry Competition Act 2006* is available from our website at http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA.

¹⁹ SPIRN's compliance audit for the period 24 August 2011 to 1 May 2012 conducted by Water Futures and Elevate Solutions.

4.1.3 VWS Darling Walk and VWS Bingara Gorge recycled water schemes

VWS' non-compliances during 2011/12 for its Darling Walk and Bingara Gorge recycled water schemes are listed in Table 4.1 below. These were identified in VWS' annual compliance reports and through our compliance audit processes.

Table 4.1 Summary of non-compliances reported by VWS for its Darling Walk and Bingara Gorge recycled water schemes

No.	Non-compliance reported by VWS	Reasons for non-compliance provided by VWS	Remedial action taken by VWS
1.	VWS network operator licences' standard condition B9: Delineating responsibilities for interconnections. Formal codes of conduct have not been established with Sydney Water and Lend Lease, the developer for these schemes.	Exclusive agreements are currently in place between Lend Lease, and Sydney Water for both the Darling Walk and Bingara Gorge recycled water schemes. These agreements outline Lend Lease's and Sydney Water's operational responsibilities for the supply of potable water and sewerage services for these schemes. These agreements do not include VWS.	VWS is currently in discussion with Sydney Water and Lend Lease to establish formal codes of conduct for both schemes. These codes of conduct will outline VWS', Lend Lease's and Sydney Water's operational responsibilities.
2.	Regulation Clause 12, Schedule 1, Part 2 and Clause 16, Schedule 1, Part 3 of the Regulation: Plans to be loaded to website. The Infrastructure Operating Plan and Water Quality Plan have not been made available on VWS' website.	These plans contain intellectual property that would disadvantage VWS if made public and available to competitors.	N/A – this requirement of the Regulation was repealed in December 2011.

During 2011/12, VWS did not establish formal codes of conduct with Sydney Water and Lend Lease. This is a requirement of its network operator licences. These codes of conduct should delineate the operational responsibilities of all the parties involved in operating infrastructure for the schemes and in supplying services to the developments' tenants.

We consider that in the short term, risk to supply of services to customers is not significant. There are currently agreements in place between Sydney Water and Lend Lease which set out their operational responsibilities.²⁰ They do not explain VWS' responsibilities but they do cover many of the matters to be addressed in the code of conduct.

An audit of the Bingara Gorge scheme undertaken in 2012²¹ found that there was insufficient delineation of responsibilities for each of the involved parties. The auditor reported that these matters do not impact on the scheme's operation in the short to medium term. However, they should be addressed in the next 6 to 12 months to ensure long-term sustainability of the scheme.

We note that VWS is currently seeking to formalise codes of conduct with Lend Lease and Sydney Water for both the Darling Walk and Bingara Gorge recycled water schemes. The codes should effectively clarify all of the involved parties' responsibilities to ensure that the schemes are managed adequately in the future. We are following this matter up by letter and another audit in 2012/13.

4.1.4 Orica groundwater treatment scheme

Orica did not report any breaches of its network operator or retail supplier licence conditions in 2011/12.

4.1.5 PTWF recycled water scheme

PTWF did not report any breaches of its network operator and retail supplier licence conditions in 2011/12.

4.1.6 Aquacell 1 Bligh St recycled water scheme

Aquacell did not report any breaches of its network operator or retail supplier licence conditions in 2011/12.

4.1.7 S&B sewage treatment and effluent disposal scheme

S&B did not participate in any activities authorised by its network operator or retail supplier licences during 2011/12.

²⁰ There is currently a Sewer Mining Agreement and Consent to Discharge Industrial Trade Wastewater existing between Sydney Water and Lend Lease for the VWS Darling Walk recycled water scheme. Similarly, there is an Agreement for the Supply of Potable Water to top up the Lilac System (recycled water distribution system) in existence between Sydney Water and Lend Lease for the VWS Bingara Gorge recycled water scheme. These agreements outline Sydney Water's and Lend Lease's responsibilities for providing the respective services.

²¹ VWS' compliance audit for the period 9 December 2011 to 30 April 2012 was audited by Water Futures and t-cAM Consulting.

4.1.8 Osmoflo recycled water scheme

Osmoflo did not participate in any activities authorised by its network operator or retail supplier licences during 2011/12.

4.1.9 Other minor compliance matters

Some minor reporting matters were identified in 2011/12 as follows:

- ▼ we received some annual compliance reports from the licensees late (ie, after 30 August 2012)
- ▼ some of the annual compliance reports were not signed appropriately by the licensed corporation's Chief Executive Officer (CEO) and Chairman of the Board or duly authorised Board member other than the CEO²² and
- ▼ a few of the licensees did not provide us with copies of their insurance expert reports and certificates of currency of insurance in time.²³

These matters are not considered material. We have brought them to the attention of the licensees concerned to avoid future occurrences.

4.2 Other Audits

As part of the licensing regime we also undertake the following audits:

- ▼ Licence Plans audits to assess the adequacy of licence plans. These plans may include infrastructure management, water quality, sewage management or retail supply management plans as is relevant to the licence.
- ▼ New Infrastructure audits to assess whether the New Infrastructure is capable of operating safely and in accordance with the requirements of the legislation and any licence conditions. Further, it assesses whether the New Infrastructure operates in accordance with its Licence Plans.

A satisfactory audit report is required to obtain Ministerial approval to commence commercial operation.²⁴

In 2011/12, 4 licensees were audited as follows:

- ▼ Rosehill recycled water scheme - Veolia Water and SPIRN both undertook Licence Plans and New Infrastructure audits
- ▼ VWS Bingara Gorge recycled water scheme - VWS undertook a Licence Plans audit²⁵ and

²² For full details, see the Network Operator's and Retail Supplier's reporting manuals found on our [website](http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA) at http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA.

²³ *Water Industry Competition Act 2006*, section 10(4c).

²⁴ *Water Industry Competition (General) Regulation 2008*, Clause 2, Schedule 1, Part 1.

- ▼ SDP – SDP undertook a Licence Plans audit.²⁶

No significant issues were identified during these audits. Veolia Water and SPIRN were given approval to commence operation on 10 August 2011.²⁷

4.2.1 SDP

SDP's licence plans were audited in November 2011.²⁸ The licence plans were considered adequate and no compliance matters were identified.

4.2.2 Rosehill recycled water scheme

The adequacy of Veolia Water's and SPIRN's network operator licence plans for the Rosehill recycled water scheme was first audited in 2010/11. We received the final audit report for Veolia Water in July 2011.²⁹ The audit report for SPIRN was finalised in August 2011.³⁰

No compliance matters were identified during the Licence Plans audits. However, during SPIRN's audit some information was not available. A follow-up audit in 2012/13 is being arranged to re-examine the adequacy of the licence plans.

4.2.3 VWS Bingara Gorge recycled water scheme

A Licence Plans audit for the VWS Bingara Gorge recycled water scheme was finalised in August 2011.³¹

The audit found that the plans were adequate. However, during the audit some information was not available. This was because not all of the plant and systems were operational.

²⁵ The VWS Bingara Gorge recycled water scheme began construction prior to 8 August 2008. This means that the scheme falls under transitional arrangements and is not subject to a New Infrastructure audit.

²⁶ SDP was under construction prior to 8 August 2008. This means that the scheme falls under transitional arrangements and is not subject to a New Infrastructure audit.

²⁷ VWS and SDP did not require Ministerial approval to commence commercial operation since their schemes were under construction prior to 8 August 2008.

²⁸ SDP's Licence Plans Audit was conducted by Cardno in November 2011.

²⁹ Veolia Water Licence Plans audit was conducted by Water Futures and t-cAM Consulting in April – July 2011.

³⁰ SPIRN's Licence Plans audit was conducted by Water Futures and t-cAM Consulting in April–August 2011.

³¹ VWS' Licence Plans audit was conducted by Water Futures and t-cAM Consulting in May – August 2011.

A follow up audit will be conducted in early 2012/13 to re-examine the adequacy of the licence plans.

4.3 Reporting against performance indicators

A licensee must report to IPART on its performance indicators during 2011/12. We advise licensees of the indicators that they must report on once they are approved to commence commercial operation. In 2011/12, no significant issues were reported with the licensees' performance information.

A total of around 2,423 ML of water was recycled by licensees under the Act and used in place of potable water. Further, SDP provided 60,683 ML of desalinated water to Sydney Water to supplement its potable water supply.

Performance information for the licensed schemes is summarised below. In future years when we have further data we will also provide some analysis of trends. All data is sourced from the licensees' 2011/12 annual compliance reports.

Full details of all of the licensees' performance indicators are included in Appendix B.

4.3.1 SDP

SDP reported that 177,858 ML of sea water was sourced during 2011/12. This was treated and a total of 60,683 ML of drinking water was produced for bulk supply to Sydney Water.

Sydney Water distributed the desalinated water to customers to supplement their potable water supply.

4.3.2 Rosehill recycled water scheme

Veolia Water reported that 3,206 ML of secondary effluent was sourced from Glenfield and Liverpool Sewage Treatment Plants. This was treated in the Veolia Water Fairfield Recycled Water Treatment Plant which produced 2,133 ML of recycled water. A small proportion of the recycled water produced was used on-site at the plant (around 0.1 ML).

The recycled water produced at the plant is supplied to the Rosehill recycled water scheme's customers by AquaNet via SPIRN's reticulation network.

SPIRN reported that 2,145 ML of recycled water was sourced from the plant in 2011/12 for distribution to customers. This is slightly (1.0%) higher than the production volume reported by Veolia Water (2,133 ML). This is attributed to a calculation discrepancy and is not considered material.

The recycled water volume reported by SPIRN is the sum of Veolia Water's monthly production volumes reported to Jemena.³² SPIRN does not measure the volume of recycled water obtained from the plant.

The recycled water volume Veolia Water reported to Jemena should be the same as what was reported to IPART. Jemena explained that the discrepancy arose from Veolia Water changing its measurement methods 3 months after commencing operations.³³

Jemena expects that Veolia Water retrospectively reported production volumes for those first 3 months to IPART in line with its refined method. However, Veolia Water did not notify SPIRN. Consequently, the total volume of recycled water reported by SPIRN included data that was first reported by Veolia Water.

Finally, AquaNet reported that a total of 2,154 ML of recycled water was supplied to the Rosehill scheme's customers. This is slightly (0.4%) higher than the volume of water sourced, as reported by SPIRN (2,145 ML). This discrepancy is also not considered material.

The calculation for the volume of water distributed to customers is based on the total volumes monitored by flow meters at the customers' premises.³⁴ As such, this discrepancy is expected to be related to flow meter measurement variations.

No service interruptions or customer complaints were reported by any of the licensees during this period.

4.3.3 VWS Darling Walk recycled water scheme

VWS' recycled water plant in the Darling Walk Development produced a total of 25.5 ML of non-potable water. This was supplied to Lend Lease, VWS' single bulk customer. Lend Lease in turn supplied the water to the building's tenants.

4.3.4 Orica groundwater treatment scheme

During 2011/12, Orica extracted 356 ML of groundwater and supplied a total of 244 ML of non-potable water. This included around 84 ML supplied for uses on-site at Botany and 160 ML supplied to its industrial customers via 7 connections. This was achieved using 1 km of non-potable water delivery mains.

³² The parent company of SPIRN and AquaNet.

³³ Email from Jemena, dated 14 September 2012.

³⁴ Email from Jemena, dated 14 September 2012.

The objective of the Orica groundwater treatment scheme is not to provide non-potable water to the industrial customers. Rather it is to contain contaminated groundwater at the Botany site by extracting it, treating it and pumping it away. Orica supplies the treated groundwater to industrial customers to supplement their process water needs. This helps reduce their potable water demand.³⁵

The water supplied to customers depends on how much contaminated groundwater needs to be extracted to contain it on site. It is not driven by customer demand. As such, during 2011/12, a number of long supply interruptions were reported.³⁶ Orica's customers are expected to maintain their potable water connection to meet their demand in these circumstances. Orica did not receive any complaints regarding service.

4.3.5 VWS Bingara Gorge recycled water scheme

21.6 ML of sewage was collected by VWS from the Bingara Gorge development through 12.9 km of sewerage mains and channels. VWS reported that all treated sewage was discharged to a storage dam. As at 30 June 2012, infrastructure for the delivery of non-potable water for irrigation of the golf course was under construction.

Sydney Water provided 17.1 ML of potable water to the development for toilet flushing and garden irrigation. Potable water was supplied through 12.7 km of water mains. These mains were constructed in anticipation of future supply of recycled water. At present, the plant is not validated to supply recycled water to residents and the school located in the development. It is only authorised to supply to the development's golf course.

During 2011/12, around 8 water main breaks were reported (per 100 km of water mains). Each of these occurred following a single water leak event.

VWS only received 2 customer complaints about sewerage services and 6 about water and sewerage billing and accounts.

4.3.6 PTWF recycled water scheme

A total of 0.5 ML of raw sewage was collected and treated to commission PTWF's recycled water system. The recycled water supplied during this commissioning process was therefore small (0.4 ML). This small quantity of recycled water was used for mains flushing (0.3 ML), toilet flushing in residential dwellings and general hose-down purposes (total of 0.1 ML).

³⁵ Overview of Orica groundwater treatment scheme provided in combined network operator and retail supplier licence application submitted to IPART in August 2010.

³⁶ See Appendix B.4 for details.

2.4 km of non-potable water delivery mains and 2.7 km of sewerage mains and channels have been constructed for this scheme.

4.3.7 Aquacell 1 Bligh St recycled water scheme

A total of 2.2 ML of sewage was sourced to commission the Aquacell 1 Bligh St recycled water scheme. This included 1.98 ML mined from the Bondi Ocean Outfall and 0.23 ML sourced from the building.

As the system was not approved for commercial operation during 2011/12, the treated sewage was not recycled in the building. It was disposed to sewer.

4.3.8 S&B sewage treatment and effluent disposal scheme

S&B did not participate in any activities authorised by its network operator and retail supplier licences during 2011/12.

4.3.9 Osmoflo recycled water scheme

Osmoflo did not participate in any activities authorised by its network operator and retail supplier licences during 2011/12.

5 Ongoing improvements and future developments in the licensing regime

5.1 Ongoing Improvements

During the year we focused our efforts on revising and enhancing our systems and procedures as follows.

- ▼ Further information forums were conducted in September 2011. These forums provided an overview of the licensing regime and our experience to date. These forums were attended by scheme proponents, consultants, local government and other regulatory agencies.
- ▼ The licence application forms and guides were revised to provide greater clarity to scheme proponents.
- ▼ The Audit Guidelines and audit factsheets were revised in light of recent audit experience.
- ▼ An industry licensing database to manage licences more efficiently (including licence applications, licence variations, auditing and compliance reporting processes) is being developed.

5.2 Future developments in the licensing regime

We anticipate that there will be a number of new developments in the licensing regime. This will result from the 5-year statutory review of the legislation and the review of last resort arrangements under the Act.

5.2.1 5-year statutory review of legislation

The Metropolitan Water Directorate (the Directorate) in the Department of Finance and Services will be conducting a statutory 5-year review of the Act on behalf of the Minister. We understand that the Directorate will commence the process by releasing a Discussion Paper in the last quarter of 2012.³⁷

The review must consider whether the policy objectives of the Act remain valid and whether the terms of the Act remain appropriate for securing those objectives. The stated objective of the Act is to:

- ▼ encourage competition in relation to the supply of water and the provision of sewerage services and
- ▼ facilitate the development of infrastructure for the production and reticulation of recycled water.³⁸

We look forward to working closely with the Directorate in contributing to this important review. Particularly in light of our experience in administering the licensing regime which is the first of its type in Australia.

5.2.2 Last resort arrangements

The Directorate has already commenced reviewing the Act's Retailer of Last Resort (RoLR) arrangements. The Act includes provisions that ensure the continued supply of water and sewerage services in the event that a licensed retail supplier fails or becomes unviable. These provisions are designed to protect customers and are similar to those applied in the energy industry.

At present, we consider that these provisions lack the necessary detail of a comprehensive RoLR scheme and do not include any arrangements to respond to a licensed network operator failure (termed Operator of Last Resort - OoLR).

The Directorate released a Discussion Paper for public comment in July 2011. In response the Directorate received 19 submissions from government, private agencies and IPART. We understand that the Directorate is now preparing an Options Paper as the next stage of this review process³⁹.

The lack of a last resort arrangement remains an outstanding problem that creates a high level of risk for customers currently receiving essential services from decentralised private schemes under the Act. We therefore conclude that the current arrangements need to be improved and encourage the Directorate to finalise its work in this area as quickly as possible.

³⁷ We were advised of this Discussion Paper by the Directorate in October 2012.

³⁸ See the preamble to the Act.

³⁹ We were advised of this Options Paper by the Directorate in October 2012.



Appendices

A Licence Variations and Applications

A.1 Licence variations

SDP

On 20 December 2011, SDP's network operator licence was amended. The licence now also includes the 18 km-long desalination pipeline which delivers desalinated water from the SDP site to Sydney Water's supply network at Erskineville. This pipeline has been operating since January 2010 but was initially part of Sydney Water's distribution network. It was recently transferred to SDP.

The licence variation enables SDP to:

- ▼ maintain and operate the desalination pipeline and
- ▼ have greater control on the delivery of desalinated water to Sydney Water's point of use.

Sydney Water has retained ownership of the valve controlling inlet flow rates into the supply network at Erskineville.

PTWF recycled water scheme

PTWF's network operator and retail supplier licences were modified to name "Water Factory Company (WFC) Pty Ltd", the parent company of PTWF. This authorises WFC to undertake activities under these licences.

This variation was requested in 2011/12. It was granted by the Minister on 12 July 2012.

A.2 Licence applications

Aquacell Pty Ltd (Workplace 6)

Aquacell's Workplace 6 scheme involves an existing recycled water treatment plant. The recycled water produced is provided to the Workplace 6 building owners and tenants for toilet flushing. It is also used for sub-surface irrigation in adjacent parks owned by the Sydney Harbour Foreshore Authority.

The plant treats sewage extracted from the building's sewer. Aquacell has a sewer mining agreement with Sydney Water which authorises this extraction.

The plant is capable of supplying a total of 0.045 ML/day non-potable water.

Central Park Water Factory Pty Ltd (CPWF)

This scheme involves a wastewater treatment and recycled water facility (RWF) in the basement levels of Building No. 2, One Central Park, within the Central Park Development.

The RWF will collect and treat sewage from the residential dwellings in the development. CPWF intends to collect rainwater and extract groundwater to supplement the sewage source.

The RWF is expected to produce up to 400 ML/year of recycled water which is to replace potable water for residential uses including toilet flushing, irrigation, clothes washing, car washing and general wash-down purposes as well as for fire fighting, in water features and for cooling towers. Potable water from the Sydney Water network will be used as a contingency/top-up supply.

The recycled water supply is scheduled to commence in second quarter of 2013. It is expected that initially raw sewage will need to be extracted from Sydney Water's sewer system to supplement the recycled water system until sufficient sewage can be collected from the development.

All sewerage and water infrastructure (both potable and non-potable) necessary to connect to the RWF will be supplied as part of this scheme. Any trade waste generated by the RWF, or excess sewage collected (such as when need for recycled water is low), will be discharged directly to Sydney Water's sewer system adjacent to Central Park. Sewer mining and trade waste agreements with Sydney Water do not currently exist.

CPWF has also applied to be the potable water supplier for the scheme. It proposes to take delivery of bulk water for drinking purposes from Sydney Water at the boundary of Central Park and then on sell to residents.

CPWF is a subsidiary of the Water Factory Company.

Water Factory Company Pty Ltd (WFC)

WFC has submitted an application for a NSW state-wide retail supplier's licence. WFC is currently targeting a number of residential development projects in NSW to deliver sewerage and water services including the residential developments part of the Central Park Water Factory (CPWF) and Pitt Town Water Factory (PTWF) recycled water schemes. Both CPWF and PTWF are subsidiaries of WFC.

WFC seeks a state-wide retail supplier's licence to provide services for those projects where it also designs, constructs and operates the network infrastructure, ie, wherever it acts as a network operator.

Mirvac Real Estate Pty Ltd

This scheme involves a wastewater treatment plant at a residential building at 8 Chifley Square.

Sewage from the building will be treated for reuse in irrigation, toilet flushing and cooling tower make-up applications. This will replace existing potable water usage. The plant can treat up to 0.06 ML/day of wastewater and generate up to 0.05 ML/day of recycled water.

Up to 1 L/s of sewage will be extracted from the Sydney Water sewer system at Hunter St if required to supplement sewage collected from the building. A sewer mining agreement has been established with Sydney Water authorising this extraction.

Sewage collected from the building in excess of the plant's design capacity or trade waste generated during the treatment process will be discharged to the Sydney Water sewer system at Elizabeth St. A trade waste agreement has been established with Sydney Water for this purpose.

Rainwater will also be harvested and filtered to supplement the recycled water system if required. A maximum of 1 L/s of filtered rainwater will be supplied to the system for this purpose.

Connection to the Sydney Water potable water system will be maintained as a contingency/top-up supply.

The scheme is expected to be constructed by December 2012 and operational by May 2013.

University of Western Sydney (UWS)

The scheme at UWS involves recycled water storage and transfer infrastructure referred to as the Hawkesbury Water Recycling Scheme (HWRS).

UWS has an agreement with Sydney Water to extract treated effluent from Richmond Sewage Treatment Plant (STP). The treated effluent is recycled for irrigation around the Hawkesbury Campus. The recycled water is transferred from the STP to the Hawkesbury Campus via an existing reticulation network. It is a future objective of HWRS to also provide recycled water to users neighbouring the Hawkesbury Campus including Richmond TAFE and the Hawkesbury Race Club.

Stormwater from the Hawkesbury Campus and nearby Richmond suburbs is harvested and treated separately to supplement the recycled water supply.

UWS seeks a network operator licence to maintain and operate this existing recycled water infrastructure, including any upgrade works. Further, UWS also seeks a retail supplier licence for the supply of recycled water to customers.

Snowy Hydro Ltd

This scheme involves water and sewage treatment system at Cabramurra Township.

Cabramurra Township is wholly owned by Snowy Hydro Ltd. It houses employees, contractors or invitees to support the operation, maintenance and refurbishment of the Snowy Hydro-electric Scheme. The Township is not open to the general public.

Snowy Hydro seeks a network operator licence for the operation and maintenance of existing:

- ▼ drinking water treatment infrastructure
- ▼ drinking water reticulation infrastructure
- ▼ sewage collection and treatment infrastructure and
- ▼ treated effluent disposal infrastructure.

Snowy Hydro has also applied for a retail supplier licence for the supply of drinking water and sewerage services to the residents of Cabramurra Township. The residents will not be charged for these services.

Water is extracted from Eight Mile Creek and treated to a standard suitable for drinking purposes. It is then supplied to the residents via the existing reticulation infrastructure. In the case of supply failure, drinking water can be trucked from Three Mile Dam which is within a 10-km radius of Cabramurra Township.

Sewage is gravity fed from the Township to the sewage treatment plant. Treated effluent is then transferred to and disposed of in a nearby creek. Waste sludge produced during the treatment process is transported to Tumut STP for disposal. Back-up sewerage arrangements are in place to truck sewage from the Township to Tumut STP, if required.

B Annual performance indicators

Details of the annual performance indicators provided to IPART in 2011/12 by licensees are included below.

B.1 SDP

SDP's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Sources of water	Volume of water sourced:		
	- Surface Water (ML)	NWI W1	0
	- Groundwater (ML)	NWI W2	0
	- Desalination (ML)	NWI W3	0
	- Recycling (ML)	NWI W4	0
	- Bulk Supplier (ML)	NWI W5	0
	- Volume of bulk recycled water purchased (ML)	NWI W6	0
	- Other (ML)(sea water)	WICA#1	177,858
	Total volume of water sourced (ML)	NWI W7	177,858
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	0
	Volume of water supplied – on-site (ML)	WICA#2	0
	Volume of water supplied for environmental flows (ML)	NWI W13	0
	Volume of water exports (ML)	NWI W14	60,683
	Total volume of water supplied (ML)	WICA#3	60,683
Infrastructure	Length of water mains (km)	NWI A2	N/A
	Length of potable water mains (km)	WICA#4	N/A
	Length of non-potable water mains (km)	WICA#5	N/A
	Length of sewerage mains and channels (km)	NWI A5	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Number of water treatment plants providing full treatment	NWI A1	1
	Number of recycled water treatment plants	NWI A7	N/A
	Number of sewage treatment plants	NWI A4	N/A
Water quality	Number of zones where microbiological compliance was achieved (e.g. 23/24)	NWI H2	1/1
	Percent (%) of population where microbiological compliance was achieved	NWI H3	100%
	Number of zones where chemical compliance was achieved (e.g. 23/24)	NWI H4	1/1

SDP's performance indicators during 2011/12 under its retail supplier licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Source of Water	Volume of water sourced from public water utility (ML)	WICA#17	0
	Volume of water sourced from (ML):		
	- Surface Water (ML)	NWI W1	N/A
	- Groundwater (ML)	NWI W2	N/A
	- Desalination (ML)	NWI W3	60,683
	- Recycling (ML)	NWI W4	N/A
	- Other (ML)(specify)	WICA#1	N/A
	Total volume of water sourced (ML)	NWI W7	60,683
Uses of water supplied	Volume of water supplied - residential (ML)	NWI W8	N/A
	Volume of water supplied - commercial/municipal/industrial (ML)	NWI W9	0
	Volume of water supplied - other (ML)	NWI W10	0
	Volume of water – environmental overflows (ML)	NWI W13	0
	Volume of bulk water exports (ML)	NWI W14	60,683
	Total volume of water supplied (ML)	WICA#18	60,683

B.2 Rosehill recycled water scheme

Veolia Water's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Sources of water	Volume of water sourced:		
	- Surface Water (ML)	NWI W1	N/A
	- Groundwater (ML)	NWI W2	N/A
	- Desalination (ML)	NWI W3	N/A
	- Recycling (ML)	NWI W4	N/A
	- Bulk Supplier (ML)	NWI W5	N/A
	- Volume of bulk recycled water purchased (ML)	NWI W6	N/A
	- Other (ML)(secondary effluent)	WICA#1	3,206
	Total volume of water sourced (ML)	NWI W7	3,206
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	N/A
	Volume of water supplied – on-site (ML)	WICA#2	Approximately 0.1
	Volume of water supplied for environmental flows (ML)	NWI W13	N/A
	Volume of water exports (ML)	NWI W14	2,133
	Total volume of water supplied (ML)	WICA#3	2,133
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	2,133
	Volume of recycled water – environmental flows (ML)	NWI W23	N/A
	Volume of recycled water supplied - on-site (ML)	NWI W24	Approximately 0.1
	Volume of recycled water supplied – other (ML)	NWI W25	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Total of recycled water supplied (ML)	NWI W26	2,133
Infrastructure	Length of water mains (km)	NWI A2	N/A
	Length of potable water mains (km)	WICA#4	N/A
	Length of non-potable water mains (km)	WICA#5	N/A
	Length of sewerage mains and channels (km)	NWI A5	N/A
	Number of water treatment plants providing full treatment	NWI A1	N/A
	Number of recycled water treatment plants	NWI A7	1
	Number of sewage treatment plants	NWI A4	N/A
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	0
	Average duration of planned interruption – water (minutes)	WICA#6	0
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0
	Average sewerage interruption (minutes)	NWI C16	N/A
	Average frequency of unplanned interruption – water	NWI C17	0
	Average frequency of planned interruption –water	WICA#11	0
	Average frequency of unplanned interruption – potable water	WICA#12	N/A
	Average frequency of planned interruption – potable water	WICA#13	N/A
	Average frequency of unplanned interruption – non-potable water	WICA#14	0
	Average frequency of planned interruption – non-potable water	WICA#15	0
	Average frequency of unplanned interruption – sewerage	WICA#16	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Water quality	Number of zones where microbiological compliance was achieved (e.g. 23/24)	NWI H2	1/1
	Percent (%) of population where microbiological compliance was achieved	NWI H3	100%
	Number of zones where chemical compliance was achieved (e.g. 23/24)	NWI H4	1/1

SPIRN's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Sources of water	Volume of water sourced:		
	- Surface Water (ML)	NWI W1	N/A
	- Groundwater (ML)	NWI W2	N/A
	- Desalination (ML)	NWI W3	N/A
	- Recycling (ML)	NWI W4	2,144.602
	- Bulk Supplier (ML)	NWI W5	N/A
	- Volume of bulk recycled water purchased (ML)	NWI W6	2,144.602
	- Other (ML)	WICA#1	N/A
	Total volume of water sourced (ML)	NWI W7	2,144.602
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	2,153.381
	Volume of water supplied – on-site (ML)	WICA#2	0
	Volume of water supplied for environmental flows (ML)	NWI W13	N/A
	Volume of water exports (ML)	NWI W14	N/A
	Total volume of water supplied (ML)	WICA#3	2,153.381

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	2,153.381	
	Volume of recycled water – environmental flows (ML)	NWI W23	N/A	
	Volume of recycled water supplied - on-site (ML)	NWI W24	N/A	
	Volume of recycled water supplied – other (ML)	NWI W25	2,153.381	
	Total of recycled water supplied (ML)	NWI W26	2,153.381	
Infrastructure	Length of water mains (km)	NWI A2	20.169	
	Length of potable water mains (km)	WICA#4	N/A	
	Length of non-potable water mains (km)	WICA#5	20.169	
	Length of sewerage mains and channels (km)	NWI A5	N/A	
	Number of water treatment plants providing full treatment	NWI A1	N/A	
	Number of recycled water treatment plants	NWI A7	1	
	Number of sewage treatment plants	NWI A4	N/A	
	Infrastructure performance	Number of water main breaks (per 100km water main)	NWI A8	0
		Number of sewerage breaks and chokes (per 100km of sewer main)	NWI A12	N/A
Property connection breaks and chokes (per 100 km of sewer main)		NWI A13	N/A	
Number of sewage treatment plants compliant at all times (e.g. 5/6)		NWI E5	N/A	
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	0	
	Average duration of planned interruption – water (minutes)	WICA#6	0	
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A	
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A	
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0
	Average sewerage interruption (minutes)	NWI C16	N/A
	Average frequency of unplanned interruption – water	NWI C17	0
	Average frequency of planned interruption –water	WICA#11	0
	Average frequency of unplanned interruption – potable water	WICA#12	N/A
	Average frequency of planned interruption – potable water	WICA#13	N/A
	Average frequency of unplanned interruption – non-potable water	WICA#14	0
	Average frequency of planned interruption – non-potable water	WICA#15	0
	Average frequency of unplanned interruption – sewerage	WICA#16	N/A
Water quality	Number of zones where microbiological compliance was achieved (e.g. 23/24)	NWI H2	3/3
	Percent (%) of population where microbiological compliance was achieved	NWI H3	100%
	Number of zones where chemical compliance was achieved (e.g. 23/24)	NWI H4	3/3

AquaNet’s performance indicators during 2011/12 under its retail supplier licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Source of Water	Volume of water sourced from public water utility (ML)	WICA#17	
	Volume of water sourced from (ML):		
	- Surface Water (ML)	NWI W1	N/A
	- Groundwater (ML)	NWI W2	N/A
	- Desalination (ML)	NWI W3	N/A
	- Recycling (ML)	NWI W4	2,153.381
	- Other (ML)(specify)	WICA#1	N/A
	Total volume of water sourced (ML)	NWI W7	2,153.381

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Uses of recycled water	Volume of recycled water supplied - residential (ML)	NWI W20	N/A
	Volume of recycled water supplied - commercial, municipal, industrial (ML)	NWI W21	2,153.381
	Volume of recycled water supplied - agriculture (ML)	NWI W22	N/A
	Volume of recycled water supplied – environmental flows (ML)	NWI W23	N/A
	Volume of recycled water supplied - on-site	NWI W24	N/A
	Volume of recycled water supplied - other (ML)	NWI W25	N/A
	Volume of bulk recycled water exports (ML)	NWI W15	N/A
	Total of recycled water supplied (ML)	NWI W26	2,153.381
Customers - water	Number of connected residential properties – water supply	NWI C2	0
	Number of connected non residential properties – water supply	NWI C3	12
	Total number of connected properties – water supply	NWI C4	12
Small customers	Number of small retail customers in relation to water supply	WICA#20	0
	Number of small retail customers in relation to the provision of sewerage services	WICA#21	N/A
Complaints	Number of water quality complaints	NWI C9	0
	Number of water service complaints	NWI C10	0
	Number of sewerage service complaints	NWI C11	N/A
	Number of billing and account complaints – water and sewerage	NWI C12	0
	Number of other complaints – water and sewerage	WICA#22	0
	Total water and sewerage complaints	NWI C13	0
Restrictions	Number of customers to which restrictions applied for non-payment of water bills	NWI C18	0
	Number of customers to which disconnections applied	WICA#23	0
	Number of customers to which legal actions applied for non-payment of water bills	NWI C19	0

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	0
	Average duration of planned interruption – water (minutes)	WICA#6	0
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0
	Average sewerage interruptions (minutes)	NWI C16	N/A
	Average frequency of unplanned interruption – water	NWI C17	0
	Average frequency of planned interruption –water	WICA#11	0
	Average frequency of unplanned interruption – potable water	WICA#12	N/A
	Average frequency of planned interruption – potable water	WICA#13	N/A
	Average frequency of unplanned interruption – non-potable water	WICA#14	0
	Average frequency of planned interruption – non-potable water	WICA#15	0
	Average frequency of unplanned interruption – sewerage	WICA#16	N/A

B.3 VWS Darling Walk recycled water scheme

VWS' performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	N/A
	Volume of recycled water – environmental flows (ML)	NWI W23	N/A
	Volume of recycled water supplied - on-site (ML)	NWI W24	N/A
	Volume of recycled water supplied – other (ML)	NWI W25	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Total of recycled water supplied (ML)	NWI W26	25.5
Infrastructure	Length of water mains (km)	NWI A2	N/A
	Length of potable water mains (km)	WICA#4	N/A
	Length of non-potable water mains (km)	WICA#5	N/A
	Length of sewerage mains and channels (km)	NWI A5	N/A
	Number of water treatment plants providing full treatment	NWI A1	N/A
	Number of recycled water treatment plants	NWI A7	1
	Number of sewage treatment plants	NWI A4	1

VWS is not required to submit an annual compliance report or performance indicators under its retail supplier licence. This was agreed with IPART as Lend Lease is the only bulk customer and VWS does not provide sewerage services for this scheme.

B.4 Orica groundwater treatment scheme

Orica's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Sources of water	Volume of water sourced:		
	- Surface Water (ML)	NWI W1	N/A
	- Groundwater (ML)	NWI W2	356.0
	- Desalination (ML)	NWI W3	N/A
	- Recycling (ML)	NWI W4	N/A
	- Bulk Supplier (ML)	NWI W5	N/A
	- Volume of bulk recycled water purchased (ML)	NWI W6	N/A
	- Other (ML)	WICA#1	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Total volume of water sourced (ML)	NWI W7	356.0
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	159.8
	Volume of water supplied – on-site (ML)	WICA#2	83.8
	Volume of water supplied for environmental flows (ML)	NWI W13	0
	Volume of water exports (ML)	NWI W14	0
	Total volume of water supplied (ML)	WICA#3	243.6
Infrastructure	Length of water mains (km)	NWI A2	N/A
	Length of potable water mains (km)	WICA#4	N/A
	Length of non-potable water mains (km)	WICA#5	1.0
	Length of sewerage mains and channels (km)	NWI A5	N/A
	Number of water treatment plants providing full treatment	NWI A1	1
	Number of recycled water treatment plants	NWI A7	N/A
	Number of sewage treatment plants	NWI A4	N/A
Infrastructure performance	Number of water main breaks (per 100km water main)	NWI A8	0
	Number of sewerage breaks and chokes (per 100km of sewer main)	NWI A12	N/A
	Property connection breaks and chokes (per 100 km of sewer main)	NWI A13	N/A
	Number of sewage treatment plants compliant at all times (e.g. 5/6)	NWI E5	N/A

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	N/A	
	Average duration of planned interruption – water (minutes)	WICA#6	N/A	
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A	
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A	
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	1010	
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	176176	
	Average sewerage interruption (minutes)	NWI C16	N/A	
	Average frequency of unplanned interruption – water	NWI C17	N/A	
	Average frequency of planned interruption –water	WICA#11	N/A	
	Average frequency of unplanned interruption – potable water	WICA#12	N/A	
	Average frequency of planned interruption – potable water	WICA#13	N/A	
	Average frequency of unplanned interruption – non-potable water	WICA#14	0.50	
	Average frequency of planned interruption – non-potable water	WICA#15	0.18	
	Average frequency of unplanned interruption – sewerage	WICA#16	N/A	
	Water quality	Number of zones where microbiological compliance was achieved (e.g. 23/24)	NWI H2	N/A
Percent (%) of population where microbiological compliance was achieved		NWI H3	N/A	
Number of zones where chemical compliance was achieved (e.g. 23/24)		NWI H4	1/1	

Orica’s performance indicators during 2011/12 under its retail supplier licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Source of Water	Volume of water sourced from public water utility (ML)	WICA#17	0
	Volume of water sourced from (ML):		
	- Surface Water (ML)	NWI W1	0
	- Groundwater (ML)	NWI W2	356.0

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	- Desalination (ML)	NWI W3	0
	- Recycling (ML)	NWI W4	0
	- Other (ML)(specify)	WICA#1	0
	Total volume of water sourced (ML)	NWI W7	356.0
Uses of water supplied	Volume of water supplied - residential (ML)	NWI W8	0
	Volume of water supplied - commercial/municipal/industrial (ML)	NWI W9	159.8
	Volume of water supplied - other (ML)	NWI W10	83.8
	Volume of water – environmental overflows (ML)	NWI W13	0
	Volume of bulk water exports (ML)	NWI W14	0
	Total volume of water supplied (ML)	WICA#18	243.6
Customers - water	Number of connected residential properties – water supply	NWI C2	N/A
	Number of connected non residential properties – water supply	NWI C3	7
	Total number of connected properties – water supply	NWI C4	7
Complaints	Number of water quality complaints	NWI C9	0
	Number of water service complaints	NWI C10	0
	Number of sewerage service complaints	NWI C11	N/A
	Number of billing and account complaints – water and sewerage	NWI C12	0
	Number of other complaints – water and sewerage	WICA#22	0
	Total water and sewerage complaints	NWI C13	0
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	N/A
	Average duration of planned interruption – water (minutes)	WICA#6	N/A
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	1010

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	176176
	Average sewerage interruptions (minutes)	NWI C16	N/A
	Average frequency of unplanned interruption – water	NWI C17	N/A
	Average frequency of planned interruption –water	WICA#11	N/A
	Average frequency of unplanned interruption – potable water	WICA#12	N/A
	Average frequency of planned interruption – potable water	WICA#13	N/A
	Average frequency of unplanned interruption – non-potable water	WICA#14	0.50
	Average frequency of planned interruption – non-potable water	WICA#15	0.18
	Average frequency of unplanned interruption – sewerage	WICA#16	N/A

B.5 VWS Bingara Gorge recycled water scheme

VWS' performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
Sources of water	Volume of water sourced from public water utility (ML)	WICA#17	N/A	
	Volume of water sourced:			
	- Surface Water (ML)	NWI W1	N/A	
	- Groundwater (ML)	NWI W2	N/A	
	- Desalination (ML)	NWI W3	N/A	
	- Recycling (ML)	NWI W4	0	Treated Water discharged to Storage Dam – 09 Dec 11
	- Bulk Supplier (ML)	NWI W5	N/A	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	- Volume of bulk recycled water purchased (ML)	NWI W6	N/A	
	- Other (ML)(secondary effluent)	WICA#1	N/A	
	Total volume of water sourced (ML)	NWI W7	0	
Sewage collected	Volume of sewage collected – residential sewage, non-residential sewage and non-trade waste (ML)	NWI W16	21.64	
	Volume of sewage collected - trade waste (ML)	NWI W17	N/A	
	Total volume of sewage collected (ML)	NWI W18	21.64	
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	0	Water from SWC Supplied in Lilac system (non-potable water distribution network to households)
	Volume of water supplied – on-site (ML)	WICA#2	17.05	Water from SWC Supplied in Lilac system
	Volume of water supplied for environmental flows (ML)	NWI W13	N/A	
	Volume of water exports (ML)	NWI W14	N/A	
	Total volume of water supplied (ML)	WICA#3	17.05	Refer above
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	N/A	
	Volume of recycled water – environmental flows (ML)	NWI W23	N/A	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	Volume of recycled water supplied - on-site (ML)	NWI W24	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Volume of recycled water supplied – other (ML)	NWI W25	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Total of recycled water supplied (ML)	NWI W26	0	Treated Water discharged to Storage Dam – 09 Dec 11
Infrastructure	Length of water mains (km)	NWI A2	N/A	
	Length of potable water mains (km)	WICA#4	N/A	
	Length of non-potable water mains (km)	WICA#5	12.69	Lilac system complete to 30 June 12 including connections to properties
	Length of sewerage mains and channels (km)	NWI A5	12.94	Sewerage system complete to 30 June 12 10.09 gravity plus 2.85 pressure
	Number of water treatment plants providing full treatment	NWI A1	N/A	
	Number of recycled water treatment plants	NWI A7	1	Part of Schedule A3 in Network Operator's Licence
	Number of sewage treatment plants	NWI A4	1	Part of Schedule A3 in Network Operator's Licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments	
Infrastructure performance	Number of water main breaks (per 100km water main)	NWI A8	7.88	1off water leak in the Lilac system	
	Number of sewerage breaks and chokes (per 100km of sewer main)	NWI A12	0		
	Property connection breaks and chokes (per 100 km of sewer main)	NWI A13	0		
	Number of sewage treatment plants compliant at all times (e.g. 5/6)	NWI E5	1/1		
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	N/A		
	Average duration of planned interruption – water (minutes)	WICA#6	N/A		
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A		
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A		
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0		
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0		
	Average sewerage interruption (minutes)	NWI C16	0		
	Average frequency of unplanned interruption – water	NWI C17	N/A		
	Average frequency of planned interruption –water	WICA#11	N/A		
	Average frequency of unplanned interruption – potable water	WICA#12	N/A		
	Average frequency of planned interruption – potable water	WICA#13	N/A		
	Average frequency of unplanned interruption – non-potable water	WICA#14	0		
	Average frequency of planned interruption – non-potable water	WICA#15	0		
	Average frequency of unplanned interruption – sewerage	WICA#16	0		
	Environmental	Sewer overflows reported to environmental regulator (per 100km of sewer main)	NWI E13	0	
		Percent of sewage volume treated that was compliant (%)	NWI E4	0	
Compliance with environmental regulator – sewerage (yes/no)		NWI E7	yes		

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	Percent of biosolids reused	NWI E8	0	

VWS' performance indicators during 2011/12 under its retail supplier licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
Source of Water	Volume of water sourced from public water utility (ML)	WICA#17	17.05	Water from SWC supplied in Lilac system
	Volume of water sourced from (ML):			
	- Surface Water (ML)	NWI W1	N/A	
	- Groundwater (ML)	NWI W2	N/A	
	- Desalination (ML)	NWI W3	N/A	
	- Recycling (ML)	NWI W4	0	Treated Water discharged to Storage Dam – 09 Dec 11
	- Other (ML)(specify)	WICA#1	N/A	
	Total volume of water sourced (ML)	NWI W7	17.05	Water from SWC supplied in Lilac system
Sewage collected	Volume of sewage collected – residential sewage, non-residential sewage and non-trade waste (ML)	NWI W16	21.64	
	Volume of sewage collected - trade waste (ML)	NWI W17	N/A	
	Total volume of sewage collected (ML)	NWI W18	21.64	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
Uses of water supplied	Volume of water supplied - residential (ML)	NWI W8	17.05	Water from SWC supplied in Lilac system
	Volume of water supplied - commercial/municipal/industrial (ML)	NWI W9	0	
	Volume of water supplied - other (ML)	NWI W10	0	
	Volume of water – environmental overflows (ML)	NWI W13	N/A	
	Volume of bulk water exports (ML)	NWI W14	N/A	
	Total volume of water supplied (ML)	WICA#18	17.05	Water from SWC supplied in Lilac system
Uses of recycled water	Volume of recycled water supplied - residential (ML)	NWI W20	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Volume of recycled water supplied - commercial, municipal, industrial (ML)	NWI W21	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Volume of recycled water supplied - agriculture (ML)	NWI W22	N/A	
	Volume of recycled water supplied – environmental flows (ML)	NWI W23	N/A	
	Volume of recycled water supplied - on-site	NWI W24	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Volume of recycled water supplied - other (ML)	NWI W25	0	Treated Water discharged to Storage Dam – 09 Dec 11
	Volume of bulk recycled water exports (ML)	NWI W15	N/A	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	Total of recycled water supplied (ML)	NWI W26	0	Treated Water discharged to Storage Dam – 09 Dec 11
Customers - water	Number of connected residential properties – water supply	NWI C2	120	
	Number of connected non residential properties – water supply	NWI C3	1	School
	Total number of connected properties – water supply	NWI C4	121	
Customers - sewerage	Number of connected residential properties - sewerage	NWI C6	120	
	Number of connected non residential properties - sewerage	NWI C7	1	
	Number of connected non-residential properties - trade waste	WICA#19	0	
	Total number of connected properties - sewerage	NWI C8	121	
Small customers	Number of small retail customers in relation to water supply	WICA#20	120	
	Number of small retail customers in relation to the provision of sewerage services	WICA#21	120	
Complaints	Number of water quality complaints	NWI C9	0	
	Number of water service complaints	NWI C10	0	
	Number of sewerage service complaints	NWI C11	2	
	Number of billing and account complaints – water and sewerage	NWI C12	6	
	Number of other complaints – water and sewerage	WICA#22	0	
	Total water and sewerage complaints	NWI C13	8	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
Restrictions	Number of customers to which restrictions applied for non-payment of water bills	NWI C18	N/A	
	Number of customers to which disconnections applied	WICA#23	N/A	
	Number of customers to which legal actions applied for non-payment of water bills	NWI C19	0	
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	0	
	Average duration of planned interruption – water (minutes)	WICA#6	0	
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	N/A	
	Average duration of planned interruption –potable water (minutes)	WICA#8	N/A	
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0	
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0	
	Average sewerage interruptions (minutes)	NWI C16	0	
	Average frequency of unplanned interruption – water	NWI C17	0	
	Average frequency of planned interruption –water	WICA#11	0	
	Average frequency of unplanned interruption – potable water	WICA#12	N/A	
	Average frequency of planned interruption – potable water	WICA#13	N/A	
	Average frequency of unplanned interruption – non-potable water	WICA#14	0	
	Average frequency of planned interruption – non-potable water	WICA#15	0	
	Average frequency of unplanned interruption – sewerage	WICA#16	0	

B.6 PTWF recycled water scheme

PTWF's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
Sources of water	Volume of water sourced from public water utility (ML)	WICA#17	0	
	Volume of water sourced:			
	- Surface Water (ML)	NWI W1	0	
	- Groundwater (ML)	NWI W2	0	
	- Desalination (ML)	NWI W3	0	
	- Recycling (ML)	NWI W4	0	
	- Bulk Supplier (ML)	NWI W5	0.1	Potable water supplied by SWC
	- Volume of bulk recycled water purchased (ML)	NWI W6	0	
	- Other (ML)(secondary effluent)	WICA#1	0	
	Total volume of water sourced (ML)	NWI W7	0.1	
Sewage collected	Volume of sewage collected – residential sewage, non-residential sewage and non-trade waste (ML)	NWI W16	0.5	Low Pressure Sewer System
	Volume of sewage collected - trade waste (ML)	NWI W17	0	
	Total volume of sewage collected (ML)	NWI W18	0.5	
Volume of water supplied (uses of water supplied)	Volume of water supplied –other (ML)	NWI W10	0.3	Mains flushing
	Volume of water supplied – on-site (ML)	WICA#2	0.1	Toilet flushing & hose down (estimate)
	Volume of water supplied for environmental flows (ML)	NWI W13	0	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	Volume of water exports (ML)	NWI W14	0	
	Total volume of water supplied (ML)	WICA#3	0.4	
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	0	
	Volume of recycled water – environmental flows (ML)	NWI W23	0	
	Volume of recycled water supplied - on-site (ML)	NWI W24	0	
	Volume of recycled water supplied – other (ML)	NWI W25	0	
	Total of recycled water supplied (ML)	NWI W26	0	Plant not validated yet
Infrastructure	Length of water mains (km)	NWI A2	5.135	Total
	Length of potable water mains (km)	WICA#4	0	
	Length of non-potable water mains (km)	WICA#5	2.44	Stages 2B & 3
	Length of sewerage mains and channels (km)	NWI A5	2.695	Stages 2B & 3
	Number of water treatment plants providing full treatment	NWI A1	0	
	Number of recycled water treatment plants	NWI A7	0	Plant not validated yet
	Number of sewage treatment plants	NWI A4	0	
Infrastructure performance	Number of water main breaks (per 100km water main)	NWI A8	0	
	Number of sewerage breaks and chokes (per 100km of sewer main)	NWI A12	0	
	Property connection breaks and chokes (per 100 km of sewer main)	NWI A13	0	
	Number of sewage treatment plants compliant at all times (e.g. 5/6)	NWI E5	N/A	

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments	
Service Interruptions	Average duration of unplanned interruption – water (minutes)	NWI C15	0		
	Average duration of planned interruption – water (minutes)	WICA#6	0		
	Average duration of unplanned interruption – potable water (minutes)	WICA#7	0		
	Average duration of planned interruption –potable water (minutes)	WICA#8	0		
	Average duration of unplanned interruption – non-potable water (minutes)	WICA#9	0		
	Average duration of planned interruption – non-potable water (minutes)	WICA#10	0		
	Average sewerage interruption (minutes)	NWI C16	0		
	Average frequency of unplanned interruption – water	NWI C17	0		
	Average frequency of planned interruption –water	WICA#11	0		
	Average frequency of unplanned interruption – potable water	WICA#12	0		
	Average frequency of planned interruption – potable water	WICA#13	0		
	Average frequency of unplanned interruption – non-potable water	WICA#14	0		
	Average frequency of planned interruption – non-potable water	WICA#15	0		
	Average frequency of unplanned interruption – sewerage	WICA#16	0		
	Environmental	Sewer overflows reported to environmental regulator (per 100km of sewer main)	NWI E13	0	
Percent of sewage volume treated that was compliant (%)		NWI E4	N/A	Plant not validated yet	
Compliance with environmental regulator – sewerage (yes/no)		NWI E7	yes		
Percent of biosolids reused		NWI E8	0		
Water quality	Number of zones where microbiological compliance was achieved (e.g. 23/24)	NWI H2	0	Plant not validated yet	
	Percent (%) of population where microbiological compliance was achieved	NWI H3	0		

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator	Comments
	Number of zones where chemical compliance was achieved (e.g. 23/24)	NWI H4	0	

PTWF submitted a NIL return under its retail supplier licence.⁴⁰ No licensed activities were undertaken during 2011/12.

B.7 Aquacell 1 Bligh St recycled water scheme

Aquacell's performance indicators during 2011/12 under its network operator licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Sources of water	Volume of water sourced from public water utility (ML)	WICA#17	0
	Volume of water sourced:		
	- Surface Water (ML)	NWI W1	0
	- Groundwater (ML)	NWI W2	0
	- Desalination (ML)	NWI W3	0
	- Recycling (ML)	NWI W4	N/A
	- Bulk Supplier (ML)	NWI W5	0.1
	- Volume of bulk recycled water purchased (ML)	NWI W6	0
	- Other (ML)		
	Bondi Ocean Outfall Sewer Mining (ML)	WICA#1	1,979.45 kL
	Building Sewer (ML)	WICA#1	230.46 kL
	Total volume of water sourced (ML)	NWI W7	2,209.91 kL

⁴⁰ IPART's Retail Supplier's Reporting Manual under the *Water Industry Competition Act 2006* establishes that a NIL report must be submitted if the licensee does not participate in any licensed activities during the reporting year.

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Volume of recycled water supplied (Uses of recycled water)	Volume of bulk recycled water exports (ML)	NWI W15	N/A
	Volume of recycled water supplied - on-site (ML)	NWI W24	0
	Volume of recycled water supplied – other (ML)	NWI W25	0
	Total of recycled water supplied (ML)	NWI W26	0
Infrastructure	Length of water mains (km)	NWI A2	N/A
	Length of non-potable water mains (km)	WICA#5	N/A
	Length of sewerage mains and channels (km)	NWI A5	N/A
	Number of recycled water treatment plants	NWI A7	1
	Number of sewage treatment plants	NWI A4	N/A

Aquacell’s performance indicators during 2011/12 under its retail supplier licence

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Source of Water	Volume of water sourced from public water utility (ML)	WICA#17	0
	Volume of water sourced from (ML):		
	- Surface Water (ML)	NWI W1	0
	- Groundwater (ML)	NWI W2	0
	- Desalination (ML)	NWI W3	0
	- Recycling (ML)	NWI W4	0
	- Other (ML):		
	Bondi Ocean Outfall Sewer Mining (ML)	WICA#1	1,979.45 kL
	Building Sewer (ML)	WICA#1	230.46 kL
	Total volume of water sourced (ML)	NWI W7	2,209.94 kL

Indicator Set	Indicator	NWI Indicator #. or WICA Indicator #	Report on Indicator
Uses of recycled water	Volume of recycled water supplied - residential (ML)	NWI W20	N/A
	Volume of recycled water supplied - commercial, municipal, industrial (ML)	NWI W21	0
	Volume of recycled water supplied - agriculture (ML)	NWI W22	0
	Volume of recycled water supplied - on-site	NWI W24	0
	Volume of recycled water supplied - other (ML)	NWI W25	0
	Volume of bulk recycled water exports (ML)	NWI W15	0
	Total of recycled water supplied (ML)	NWI W26	0
Customers - water	Number of connected residential properties – water supply	NWI C2	0
	Number of connected non residential properties – water supply	NWI C3	1
	Total number of connected properties – water supply	NWI C4	1
Small customers	Number of small retail customers in relation to water supply	WICA#20	1
	Number of small retail customers in relation to the provision of sewerage services	WICA#21	1

C Compliance and monitoring framework

We monitor licence compliance by various means including periodic self-reporting, audits, information from other regulators, complaints to the Energy and Water Ombudsman and media reports.

C.1 Periodic self-reporting

We have developed 2 reporting manuals, one for each licence type (ie, network operator and retail supplier). These manuals explain our approach to compliance monitoring and clarify reporting requirements for licensees. The reporting manuals can be found on our website at:

http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA

C.1.1 Classification of conditions

The reporting manuals prioritise compliance reporting by classifying all licence obligations as requiring either 'immediate' or 'annual' reporting, based on an assessment of the potential impact of a breach of the obligation.

Immediate reporting is limited to those licence obligations where a breach could have serious consequences or have a critical impact on the NSW Government's policy objective(s). Annual reporting is required for all other obligations.

C.1.2 Immediate licence compliance reporting

Where a licence breach requires immediate reporting, the licensee is required to initially telephone IPART and shortly thereafter follow-up with written confirmation. Reporting must occur as soon as the event occurs or as soon as a licensee becomes aware that the event is likely to occur.

Licensees are also required, as a standard condition of licence, to immediately notify IPART, the Minister for Health, the Minister for Finance and Services and potentially affected licensed network operators, retail suppliers or public water utilities of any incident in the conduct of the licensee's activities that threatens, or could threaten, water quality, public health or safety. We, in consultation with NSW Health and the previous Department of Water and Energy⁴¹, have produced an Incident Notification procedure guide for licence holders to follow in order to comply with this licence requirement.⁴² The procedure guide can be found on our website. Such incidents may or may not be the result of an apparent licence breach. The requirement to immediately report a licence breach in accordance with the reporting manuals is removed where an incidence has triggered the immediate incident notification requirements set out in the Incident Notification procedure guide. However, for completeness, licensees are required to include details of any breach that is subject to either immediate licence compliance reporting or immediate incident notification in their annual compliance reports.

C.1.3 Annual Licence Compliance Report

Licensees are required to submit an annual compliance report certifying that the licensee has complied with its licence obligations other than those identified in the report. Licensees that have breached a licence obligation are required to provide an exception report which details the:

- ▼ date or period of non-compliance
- ▼ extent and nature of the non-compliance (including whether and how many customers and/or other licensees have been affected)
- ▼ results of any monitoring (where applicable)
- ▼ reasons for non-compliance
- ▼ actions taken to rectify the breach and to prevent it re-occurring
- ▼ actual/anticipated date of full compliance.

Annual performance indicators must also be provided as part of the annual compliance report.

⁴¹ This is now the Metropolitan Water Directorate in the Department of Finance and Services.

⁴² See Incident Notification by private sector water licensees – *Water Industry competition Act 2006* on IPART's website (www.ipart.nsw.gov.au).

C.2 Licensing and Regulatory Compliance Audits

Risk based auditing forms a critical component of our compliance and monitoring framework. The key objectives of the audit framework are to:

- ▼ support the policy objectives of the legislative framework
- ▼ minimise the risk of supply failure
- ▼ assist the Minister or IPART in monitoring compliance with the requirements of the legislation and licence conditions
- ▼ assist the Minister or IPART to review licences
- ▼ ensure licensees develop adequate infrastructure operating, water quality, sewage management or retail supply management plans (as relevant)
- ▼ ensure infrastructure is maintained in a satisfactory condition
- ▼ support the general transparency and integrity of the scheme.

The Act and Regulation do not prescribe the frequency of audits that we may require as part of our compliance reporting or licence review process. We will use a risk based approach to determine when and how often a compliance audit must be conducted, based on the nature, scale and potential impacts of the licensed activity being undertaken and the licensee's record of compliance. It is possible that compliance audits will be required annually for some licensees. At a minimum, an audit will be required at least every 5 years to assist in the licence review process.

C.3 Other Audits

Audits are also conducted for other aspects of the licensing regime; in particular audits are carried out to assess the following:

- ▼ the adequacy of licensing plans (infrastructure management, water quality, sewage management or retail supply management plans) as is relevant to a particular licence
- ▼ the adequacy of new infrastructure prior to commercial operation, and
- ▼ 5-yearly licence review.

C.4 Audit Panel

Only an approved auditor can conduct audits on behalf of the Minister, IPART or a licensee for the purposes of the licensing scheme under the Act. An approved auditor is a person nominated by IPART, chosen by the licensee from a panel of persons nominated by IPART or nominated by the licensee and approved by IPART.

The Water Licensing Audit and Technical Services Panel (the Panel) was established in 2008/09 by IPART as the preferred approach to the appointment of auditors.

Auditors may apply to become a member of the Panel at any time subject to satisfying the selection criteria. A list of approved auditors on the Panel is available on our website at:

http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA

C.5 Audit guidelines

The Audit Guidelines, which include the audit approach, detailed audit scopes and reporting templates for each type of audit, can be found on our website at:

http://www.ipart.nsw.gov.au/Home/Industries/Water/Private_Sector_Licensing_WICA

