

Report on the Operational Audit of the SGSP Rosehill Recycled Water Network

27 September 2017



Project Delivered for:

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0	Draft for client issue	Jon Panic	Ken Lundy	18 September 2017
1	Final	Jon Panic	Ken Lundy	21 September 2017
2	Revised Final	Jon Panic	Client	27 September 2017

Executive Summary

Edge Environment was engaged by SGSP Rosehill Network Pty Limited (SGSPRN) (the Licensee) to undertake an operational audit of the SGSP Rosehill Recycled Water Network for the period 1 August 2016 to 31 July 2017.

The auditor is of the opinion that the Licensee is complying with the requirements of the Network Operator's Licence (no. 09_002). No non-compliances were identified during the audit. The auditor has seen sufficient evidence on which to base this conclusion, and the audit findings accurately reflect the professional opinion of the auditor.

The auditor has noted what the IPART *Audit Guidelines for Greenfield Schemes* and the audit deed require when conducting the audit in determining their findings and preparing this report.

The audit findings have not been unduly influenced by the Licensee and / or any of its associates.

Executive Summary	3
1 Introduction	1
1.2 Objective	1
1.3 Licensee’s Infrastructure, Systems and Procedures	1
1.4 Audit Method	1
Audit Scope	1
Audit Standard.....	1
Audit Steps	1
Audit team	2
Acknowledgements.....	2
Audit Grades.....	2
1.5 Regulatory Regime	2
1.6 Quality Assurance Process	2
1.7 Audit Findings	2
1.8 Site Audit Agenda for Thursday 7 September 2017	3
2 General Obligations	4
2.1 Summary of Findings	4
2.2 Review of Actions	4
2.3 Opportunities for Improvement	4
3 Non-Potable Water Supply Infrastructure	5
3.1 Summary of Findings	5
3.2 Review of Actions	5
3.3 Opportunities for Improvement	5
4 Schedule A to the Network Operator’s Licence	6
4.1 Summary of Findings	6
4.2 Review of Actions	6
4.3 Opportunities for Improvement	6
5 Schedule B to the Network Operator’s Licence	7
5.1 Summary of findings	7
5.2 Review of Actions	7
5.3 Opportunities for Improvement	7
Appendix A – General Obligations	8
Appendix B – Non-potable water supply infrastructure	14
Appendix C – Schedule A to the Network Operator’s Licence	16
Appendix D – Schedule B to the Network Operator’s Licence	17
Appendix E – IPART Audit Initiation Letter	24

1 Introduction

Edge Environment was engaged by SGSP Rosehill Network Pty Limited (SGSPRN) (the Licensee) to undertake an operational audit of the SGSP Rosehill Recycled Water Network for the period 1 August 2016 to 31 July 2017.

1.2 Objective

The objective of the audit is to assess the compliance of the Licensee in meeting the requirements of the *Water Industry Competition Act 2006* (the Act), licence conditions and licence plans.

1.3 Licensee's Infrastructure, Systems and Procedures

The Licensee's infrastructure includes:

- Water storage (reservoirs)
- Pumping stations
- Pipelines
- Testing equipment

The Licensee's systems and procedures relevant to the audit include:

- Infrastructure Operating Plan
- Water Quality Management Plan

1.4 Audit Method

Audit Scope

The detailed scope of the audit is in accordance with the *SGSPRN – 2017 Operational Audit Scope* attached to IPART's audit initiation letter to SGSP dated 11 July 2017 (see Appendix E). This scope is based on the auditable clauses of the Act, WIC Regulation and SGSP's Network Operator's licence (no. 09_002).

The audit period is 1 August 2016 to 31 July 2017

Audit Standard

The primary standard for the audit was the *IPART Audit Guideline for Greenfield Schemes, Water Industry Competition Act 2006 (NSW)*, July 2013 (the Audit Guideline).

The audit generally followed the international standard guidelines for auditing ISO 19011:2011 – *Guidelines for auditing management systems*.

Audit Steps

Following engagement, an Audit Plan was submitted to IPART and the Licensee. This was approved by IPART prior to the audit commencing.

Documentation was requested by the auditor prior to (and following) the site component of the audit to allow the auditor to familiarise themselves with the Project and form an initial picture of the nature of activities and process in place to ensure compliance with the Licence and Act.

A site visit was undertaken on Thursday 7 September 2017. The site visit comprised a desktop review and initial questioning at the Jemena office in North Sydney, followed by inspections of the operational assets at Woodville, Rosehill and Fairfield and the recently decommissioned asset at Marubeni.

The audit process involved asking questions of the Licensee's representatives and reviewing documentation and data to determine whether the Licensee was meeting the Licence obligations identified by IPART.

Audit team

The audit was led by Edge Environment's Jon Panic who is a Lead Auditor in the *Licence Regulations and Compliance* category of IPART's *Technical Services and Water Licensing Audit Panel*.

Acknowledgements

The auditor acknowledges the presence IPART representative Serge Detoffi as valuable observer and commentator during the site component of the audit.

The auditor also acknowledges the work contributed by David Vaughan and David Seinor representing SGSP and Alban Delpy representing Veolia and appreciates their providing all requested information in a timely manner.

Finally, the auditor acknowledges the work reported by previous auditors, Dr Dan Deere and Mr Jim Sly whose reports provided an excellent initial background to the Project and the extent to which compliance was being managed. Their assessments of risk and targets for compliance for a number of the audited conditions were carried over into this report.

Audit Grades

Audit grades were awarded in accordance with the Guidelines and allocated as follows:

- No requirement (NR)
- Compliant (C)
- Non-compliant Insignificant (NCI)
- Non-compliant Significant (NCS)

1.5 Regulatory Regime

The scheme operates under the *Water Industry Competition Act 2006 (WICA)* (the Act) which references the following requirements:

- *Water Industry Competition (General) Regulation (2008)*
- *Conditions of Networks Operator's Licence No. 09-002*
- *IPART Audit Guideline for Greenfield Schemes, Water Industry Competition Act 2006 (NSW) July 2013*
- Relevant aspects of the national *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) 2006*

1.6 Quality Assurance Process

Quality was assured using the Edge Environment internal quality review process which requires all work to be reviewed and approved by a senior, technically capable, team member. The Final Report was approved by Ken Lundy of Edge Environment as per the approved Audit Plan.

1.7 Audit Findings

No non-compliances were identified during the audit. The auditor found that the approach to compliance with the Licence is comprehensive. A number of recommendations for improvement are suggested for consideration:

1. The auditor understands that the testing cabinet currently housed at Marubeni is soon to be relocated to VISY. The auditor recommends that SGSPRN confirms with IPART that the works associated with this change do not require Ministerial approval prior to being undertaken.
2. Jemena *In Progress Audit Forms* for showing SGSPRN checks on the maintenance work and inspections undertaken by contractor Linbeck. A sample of these forms were reviewed in hard copy after it was advised that the online reporting system (SAP) was not currently allowing SGSPRN to upload weekly audits. Forms were temporarily being uploaded in ECMS in the project document control system. The auditor notes that not all hard copy forms were signed off by the SGSPRN (Jemena) officer and recommends this occurs on all hard copy internal audit reports.
3. The auditor was advised that the management plans are reviewed before the audit and a decision was taken not to make any changes. It is recommended that a record of each review is made and that the review timing is revised from "periodically" to "annually" (or the most appropriate fixed timing).
4. It is recommended that the correct revision date for the *Water Quality Management Plan* is copied to the front page and change log, and that a copy of this revision of the plan be submitted to IPART.

1.8 Site Audit Agenda for Thursday 7 September 2017

The audit agenda for the site component of the audit is shown in the table below.

Phase	Start
10:00am	Meet at Level 14, 99 Walker Street North Sydney
10:15am	Depart North Sydney
10:55am	Arrive at Rosehill Reservoir
11:40am	Depart Rosehill Reservoir
12:00pm	Arrive Woodville Reservoir
12:25pm	Depart Woodville Reservoir
12:25pm	Start Lunchbreak
1:15pm	End Lunchbreak
1:40pm	Arrive Marubeni
1:55pm	Depart Marubeni
2:10pm	Arrive Fairfield
2:55pm	End

2 General Obligations

2.1 Summary of Findings

No non-compliances were identified in the clauses audited under the General Obligations of the WICA Regulations.

2.2 Review of Actions

There were no non-compliances identified and therefore no additional actions taken by the Licensee to respond to any non-compliances.

2.3 Opportunities for Improvement

1. The auditor understands that the testing cabinet currently housed at Marubeni is soon to be relocated to VISY. The auditor recommends that SGSPRN confirms with IPART that the works associated with this change do not require Ministerial approval prior to being undertaken.
2. Jemena *In Progress Audit Forms* for showing SGSPRN checks on the maintenance work and inspections undertaken by contractor Linbeck. A sample of these forms were reviewed in hard copy after it was advised that the online reporting system (SAP) was not currently allowing SGSPRN to upload weekly audits. Forms were temporarily being uploaded in ECMS in the project document control system. The auditor notes that not all hard copy forms were signed off by the SGSPRN (Jemena) officer and recommends this occurs on all hard copy internal audit reports.
3. The auditor was advised that the management plans are reviewed before the audit and a decision was taken not to make any changes. It is recommended that a record of each review is made and that the review timing is revised from “periodically” to “annually” (or the most appropriate fixed timing).
4. It is recommended that the correct revision date for the *Water Quality Management Plan* is copied to the front page and change log, and that a copy of this revision of the plan be submitted to IPART.

3 Non-Potable Water Supply Infrastructure

3.1 Summary of Findings

No non-compliances were identified in the clauses audited under Non-potable Water Supply Infrastructure.

3.2 Review of Actions

There were no non-compliances identified and therefore no additional actions taken by the Licensee to respond to any non-compliances.

3.3 Opportunities for Improvement

No opportunities for improvement were identified related to the clauses audited under Non-potable Water Supply Infrastructure.

4 Schedule A to the Network Operator's Licence

4.1 Summary of Findings

No non-compliances were identified in the clauses audited under Schedule A to the Network Operator's Licence.

4.2 Review of Actions

There were no non-compliances identified and therefore no additional actions taken by the Licensee to respond to any non-compliances.

4.3 Opportunities for Improvement

No opportunities for improvement were identified related to the clauses audited under Schedule A to the Network Operator's Licence.

5 Schedule B to the Network Operator's Licence

5.1 Summary of findings

No non-compliances were identified in the clauses audited under Schedule B to the Network Operator's Licence.

5.2 Review of Actions

There were no non-compliances identified and therefore no additional actions taken by the Licensee to respond to any non-compliances.

5.3 Opportunities for Improvement

1. It is recommended that the correct revision date for the *Water Quality Management Plan* is copied to the front page and change log, and that a copy of this revision of the plan be submitted to IPART.

APPENDIX A – GENERAL OBLIGATIONS

Table A.1 WIC Reg Sched 1 cl.1(2)(a), (b), (c), (d) and (e)

WIC Reg Sched 1 cl.1(2)(a), (b), (c), (d) and (e)	Requirement	Compliance Grade
	<p>[1(2)(a)] A network operator must immediately notify IPART of any incident in the conduct of its activities that threatens, or could threaten, water quality, public health or safety</p> <p>[1(2)(b)] A network operator must immediately notify the Minister administering the Public Health Act 2010 (NSW) and the Public Health Regulation 2012 (NSW) of any incident in the conduct of its activities that threatens, or could threaten, water quality, public health or safety.</p> <p>[1(2)(c)] A network operator must immediately notify the Minister administering Part 2 of the Water Industry Competition Act 2006 (NSW) of any incident in the conduct of its activities that threatens, or could threaten, water quality, public health or safety</p> <p>[1(2)(d)] A network operator must immediately notify any licensed retail supplier that supplies water or provides sewerage services by means of the licensed network operator's infrastructure of any incident in the conduct of its activities that threatens, or could threaten, water quality, public health or safety</p> <p>[1(2)(e)] A network operator must immediately notify a licensed network operator or public water utility who's infrastructure is connected to the licensed network operator's infrastructure of any incident in the conduct of its activities that threatens, or could threaten, water quality, public health or safety."</p>	No requirement
Risk		Target for Full Compliance
<p>This requirement reflects a high operational risk. It is essential that Relevant stakeholders are made aware of incidents that threaten, or could threaten, water quality, public health or safety.</p>		<p>In the event that a notifiable incident has occurred, evidence that the Licensee provided the required notifications.</p>
Evidence – Interview and Inspection		
<p>David Vaughan: <i>"There were no incidents during the reporting period".</i></p>		
Evidence - Documentation		
<ul style="list-style-type: none"> All Water Quality Monthly Reports for the audit period (e.g. <i>"Rosehill Recycled Water Scheme Monthly Report – June 2017"</i>) which typically stated that: 		

<p><i>“There were no Safety, Health or Environmental incidents during the month. Recycled Water Quality was in specification during the month”</i></p> <ul style="list-style-type: none"> Linbeck “Water – Water Sampling and Test Record” sheets for 26 July 2017 reported no incidents “Network Testing Results” for the audit period
<p>Summary of reasons for grade</p>
<p>There were no notifiable incidents during the audit period.</p>
<p>Discussion and notes</p>
<p>The auditor asked whether there had been any incidents related to the operation of the network and SGSPRN advised that there had not. The auditor reviewed a sample of data including:</p> <ul style="list-style-type: none"> All Water Quality Monthly Reports for the audit period were viewed (e.g. “Rosehill Recycled Water Scheme Monthly Report – June 2017”) which typically stated that: <p><i>“There were no Safety, Health or Environmental incidents during the month. Recycled Water Quality was in specification during the month”</i></p> Three samples of the Linbeck’s (contractor) manual water quality testing sheets (“Water – Water Sampling and Test Record”) were reviewed and no incidents were noted: <ul style="list-style-type: none"> Fairfield, 26 July 2017 Marubeni, 26 July 2017 Rosehill, 26 July 2017 The master spreadsheet “Network Testing Results”, which extracts the data from SCADA, was crosschecked against the Linbeck reports to confirm reporting accuracy in those reports.

Table A.2 WIC Reg Sched 1 cl.2(1), 2(2)(a) and 2(2)(b)

WIC Reg Sched 1 cl.2(1), 2(2)(a) and 2(2)(b)	Requirement	Compliance Grade
	<p>[2(1)] A network operator must not bring any new water or sewerage infrastructure into commercial operation without the written approval of the Minister.</p> <p>[2(2)(a)] The network operator must provide to the Minister a report, prepared by an approved auditor that indicates that the infrastructure complies with the requirements of the Regulation and any licence conditions.</p> <p>[2(2)(b)] The network operator must provide to the Minister a report, prepared by an approved auditor that indicates that the infrastructure is capable of operating safely and in accordance with its infrastructure operating plan and its water quality or sewerage management plan, as the case requires.</p>	<p>Compliant (Clause 2(1))</p> <p>No requirement (Clauses 2(2)(a) and 2(2)(b))</p>
Risk		Target for Full Compliance
	<p>This presents a high operational risk. The Minister’s written approval is only provided when the Licensee has demonstrated that the infrastructure complies and can be operated in accordance with the relevant requirements. Accordingly, the absence of the Minister’s written approval may mean that the infrastructure has not been so assessed.</p>	<p>Evidence that the written approval of the Minister was obtained prior to bringing new water or sewerage infrastructure into service.</p>

Evidence – Interview and Inspection
<p>David Vaughan:</p> <p><i>“No new infrastructure was brought into operation during the audit period, there have been no changes since 2011”.</i></p> <p>The auditor did not observe anything considered new infrastructure during the site inspection.</p>
Evidence – Documentation
Summary of reasons for grade
<p>There were no new infrastructure brought into operation during the audit period, therefore SGSPRN was assessed as complying with the provisions of clause 2.1. As no new infrastructure was brought into operation, there was no requirement for compliance with the remaining provisions in this clause.</p>
Discussion and notes
<p>The auditor asked whether any new infrastructure had been brought into operation and SGSPRN advised that there had not.</p> <p>The auditor understands that the testing cabinet currently housed at Marubeni is soon to be relocated to VISY. The auditor recommends that SGSPRN confirms with IPART that the works associated with this change do not require Ministerial approval prior to being undertaken.</p>

Table A.3 WIC Reg Sched 1 cl.3(c)

WIC Reg Sched 1 cl.3(c)	Requirement	Compliance Grade
	The water or sewerage infrastructure is properly designed and constructed, operated in a safe and reliable manner and maintained in a proper condition, having regard to any publicly available standards or codes relating to its design, construction, operation and maintenance.	Compliant
Risk		Target for Full Compliance
This represents high operational risk. Proper design and construction, safe and reliable operation, and maintenance of infrastructure in proper condition is essential to the effective (safe and reliable) delivery of agreed levels of service.		Evidence that the Licensee has procedures in place for ensuring that practices are kept up to date with changes to such standards or codes.
Evidence – Interview and Inspection		
<p>Infrastructure was observed to be operating in a generally safe and reliable manner. A leaking backflow prevention device at Woodville was observed. Other infrastructure observed was considered to be in good condition.</p> <p>David Seiner:</p> <p><i>“We audit the work Linbeck carries out to ensure it is being completed correctly”</i></p> <p>David Vaughan:</p> <p><i>“Maintenance reports are being saved in the ECMS in our document control system until a solution can be found loading them into SAP.”</i></p>		
Evidence – Documentation		
<ul style="list-style-type: none"> - Online access to SAI Global Standards Online Service - Veolia "Monthly Client Reports – SGSP Network" for the audit period 		

- Veolia 3 Monthly Inspection *Work Orders*
- *Operation Interface Meeting Minutes* for the audit period
- *Annual Operational Check on Air Valves*
- *Linbeck Water – Weekly Inspections Pump Station, Reservoirs, Pipe Crossings*
- *Jemena In Progress Audit Forms* for the audit period
- *Jemena, SGSP Rosehill Network Pty Limited, Water Quality Management Plan (Revision 5) 6 July 2016* which confirms relevant standards for operation.

Summary of reasons for grade

The infrastructure has previously been assessed as being properly designed and constructed. Maintenance is being undertaken regularly and in accordance with relevant standards and an oversight process is in place to confirm maintenance is occurring as required.

Discussion and notes

Documentation:

The infrastructure has previously been assessed as being properly designed and constructed, therefore this audit focused on assessment of whether the infrastructure is operated in a safe and reliable manner and maintained in a proper condition.

The following evidence sampled confirmed that maintenance activities have continued throughout the audit period:

- Veolia "*Monthly Client Reports – SGSP Network*" for electrical work
- Veolia 3 monthly inspection *Work Orders* showing preventative maintenance on critical infrastructure is being carried out (with history of previous inspections included):
 - o Fairfield Pump Station 25 July 2017
 - o Fairfield Air Valves 25 July 2017
 - o Fairfield Pump Station Pumps (one monthly) 25 July 2017
- *Operation Interface Meeting Minutes* providing an ongoing oversight of maintenance activities
- *Annual Operational Check on Air Valves* dated 22 March 2017 showing check on valves and notes regarding replacement as required
- *Linbeck Water – Weekly Inspections Pump Station, Reservoirs, Pipe Crossings* showing contractor inspections of the infrastructure for:
 - o Marubeni – 26 July 2017
 - o Woodville – 26 July 2017
 - o Rosehill – 26 July 2017
- *Jemena In Progress Audit Forms* for showing SGSPRN checks on the maintenance work and inspections undertaken by contractor Linbeck. A sample of these forms were reviewed in hard copy after it was advised that the online reporting system (SAP) was not currently allowing SGSPRN to upload weekly audits. Forms were temporarily being uploaded in ECMS in the project document control system. The auditor notes that not all hard copy forms were signed off by the SGSPRN (Jemena) officer and recommends this occurs on all hard copy internal audit reports. The dates reviewed included:
 - o 7 December 2016
 - o 25 January 2017
 - o 14 June 2017

The *Water Quality Management Plan* includes a section on Regulatory Requirements (Section 1.3), which details the standards used in operation of the network.

Inspections:

The reservoirs at Rosehill and Woodville were observed to be in good working order. The sites were kept clean and tidy, labels were in place and pipework appropriately colour coded. All electrical equipment including testing cabinets were observed to be operating as required. A leak of a backflow prevention device at Woodville Reservoir was observed. The auditor was advised this component was the responsibility of Sydney Water and a date for repair had not yet been scheduled.

Table A.4 WIC Reg Sch 1 cl. 6(2)(a)

WIC Reg Sch 1 cl. 6(2)(a)	Requirement	Compliance Grade
	The network operator must ensure that the infrastructure operating plan is fully implemented and kept under regular review and all of the network operator's activities are carried out in accordance with that plan.	Compliant
Risk		Target for Full Compliance
This represents high operational risk. The Infrastructure Operating Plan has been assessed by IPART as an effective an appropriate plan for managing the operational impacts of the Licensees activities, and deviation from this plan would result in non-approved outcomes.		Evidence that the plan is being implemented and reviewed regularly.
Evidence – Interview		
<p>David Vaughan:</p> <p><i>“We regularly crosscheck the amount of water produced against the amount of water consumed to confirm accurate understanding of water balance”</i></p> <p><i>“The IOP is an Asset Management owned plan. They have an annual cycle of review in September each year. The plans are also reviewed before each audit and a decision was made not to change the plans before this audit.”</i></p> <p><i>“The SAP system is used to program all routine maintenance”</i></p> <p>Alban Delpy (Veolia):</p> <p><i>“The metering equipment is not required to be verified until it has reached 8 years’ service life”</i></p>		
Evidence – Documentation		
<ul style="list-style-type: none"> - SGSPRN Infrastructure Operating Plan (Revision 3) dated 31 May 2016. - SCADA screenshot showing water levels at reservoirs - Linbeck Water – Meter Readings Recycled Meters dated 1 June 2017 - Veolia "Monthly Client Reports – SGSP Network" for the audit period - Veolia 3 Monthly Inspection Work Orders - Veolia SGSP Task and Rec Service spreadsheet - Operation Interface Meeting Minutes for the audit period - Annual Operational Check on Air Valves - Linbeck Water – Weekly Inspections Pump Station, Reservoirs, Pipe Crossings 		
Summary of reasons for grade		
A range of commitments from the Infrastructure Operating Plan (IOP) were tested to determine whether they were being complied with on site and all commitments were being implemented		
Discussion and notes		

The following commitments from the IOP were tested to ensure the plan is being implemented:

- *“The Routine Maintenance Activities are planned and conducted using the automated Jemena SAP system and Veolia’s maintenance system based on the Maintenance Schedule”.* Implementation of this commitment was confirmed by reviewing:
 - o Veolia’s monthly client reports detailing preventative, additional and emergency maintenance;
 - o Veolia’s *Task and Rec Service* spreadsheet which detailed the full maintenance schedule for Veolia activities
 - o *Operation Interface Meeting Minutes* which included maintenance as an agenda item
 - o Verbal confirmation by David Vaughan that the SAP system is used to schedule routine maintenance
- *“The Maintenance Strategy for the Rosehill Scheme consists of the following guiding principles:*
 - *Annual inspection of above ground equipment to identify visible signs of damage or deterioration*
 - *Monitoring performance of key equipment items through monitoring of bearing temperature, operation of sump pumps and monitoring sump levels*
 - *Maintenance of equipment in response to inspection and performance monitoring results and to manufacturers’ guidelines.”*

This was confirmed by the evidence reviewed for the previous commitment, as well as:

- o *Annual Operational Check on Air Valves* dated 22 March 2017
- *“Accuracy of metering equipment is monitored monthly through a water balance and periodic calibration.”* This was confirmed verbally by David Vaughan and by Linbeck checks of meter reading equipment. Alban Delpy of Veolia advised that the meter reading equipment was not required to be verified until it had reached 8 years’ service life.
- *“This IOP is updated periodically along with the update of the WQMP. The update will be completed along with a review of the risk and hazard analyses and will take into account data collected during the previous operating period.”* The auditor was advised that the management plans are reviewed before the audit and a decision was taken not to make any changes. It is recommended that a record of each review is made and that the review timing is revised from “periodically” to “annually” (or the most appropriate fixed timing).

APPENDIX B – NON-POTABLE WATER SUPPLY INFRASTRUCTURE

Table B.1 WIC Reg Sched 1 cl.10(a)

WIC Reg Sched 1 cl.10(a)	Requirement	Compliance Grade
	The network operator under a licence for water Compliant infrastructure to supply non-potable water for a particular purpose must ensure that the water supplied is fit for that purpose.	Compliant
Risk		Target for Full Compliance
This presents high operational risk. It is essential from a health and safety viewpoint that water supplied for a particular purpose is fit for that purpose.		Evidence that the water supplied is fit for purpose.
Evidence – Interview and Inspection		
Evidence – Documentation		
<ul style="list-style-type: none"> - Jemena, <i>SGSP Rosehill Network Pty Limited, Water Quality Management Plan (Revision 5)</i> 6 July 2016. - Customer Supply Agreement between AquaNet and James Hardie Building Products (yet to be signed) - All Water Quality Monthly Reports for the audit period (e.g. <i>“Rosehill Recycled Water Scheme Monthly Report – June 2017”</i>) which typically stated that: <div style="text-align: center;"><i>“Recycled Water Quality was in specification during the month”</i></div> - Linbeck <i>“Water – Water Sampling and Test Record”</i> sheets for 26 July 2017 reported no incidents - <i>“Network Testing Results”</i> showing collated water quality records for the audit period - <i>“Annual Compliance Report for 2016-2017”</i> Submitted by SGSP Rosehill Network Pty Limited showing water met NWI indicators for the year. - Sydney Water Laboratory Services <i>Final Reports (3 May 2017)</i> showing analysis is being undertaken 		
Summary of reasons for grade		
Sufficient evidence was provided to confirm that non-potable water was being supplied fit-for-purpose.		
Discussion and notes		
<p>The auditor assessed a range of documents and records to determine whether non-potable water was being supplied fit-for-purpose. The auditor understands that Water Quality Monitoring Units, linked to the SCADA control system, monitor the required parameters and if the recycled water is out of specification the supply is terminated.</p> <p>The <i>SGSP Rosehill Network Pty Limited, Water Quality Management Plan (Revision 5)</i> 6 July 2016 identified the water quality specification for these purposes and the water quality testing required to meet the specifications.</p> <p>All Water Quality Monthly Reports for the audit period (e.g. <i>“Rosehill Recycled Water Scheme Monthly Report – June 2017”</i>) were reviewed which typically stated that: <div style="text-align: center;"><i>“Recycled Water Quality was in specification during the month”</i></div> </p> <p>Additionally, Linbeck <i>“Water – Water Sampling and Test Record”</i> sheets for 26 July 2017 reported no incidents (water out of specification).</p>		

“Network Testing Results” which extracts the data from SCADA, was crosschecked against the Linbeck reports to confirm reporting accuracy in those reports.

“Annual Compliance Report for 2016-2017” submitted by SGSP Rosehill Network Pty Limited was reviewed and showed water met NWI indicators for the year.

Sydney Water Laboratory Services *Final Reports* reviewed for sampling taken on 3 May 2017. *“Network Testing Results”* was crosschecked against the Sydney Water Reports to confirm accuracy in the reported data.

APPENDIX C – SCHEDULE A TO THE NETWORK OPERATOR’S LICENCE

Table C.1 Network Operators Licence cl.A2.1

Network Operators Licence cl.A2.1	Requirement	Compliance Grade
	The Licensee enters into and maintains a Project Support Deed with Jemena Limited under which Jemena will provide financial, technical and organisational support to the Licensee.	No requirement
Risk		Target for Full Compliance
This presents significant commercial risk. It is essential that SGSPRN remains financially able to continue operating the network in an effective (safe and reliable) manner.		Evidence that the Licensee has entered into and maintained a Project Support Deed with Jemena Limited.
Evidence – Interview and Inspection		
Evidence – Documentation		
<ul style="list-style-type: none"> - <i>Project Support Deed</i> between Jemena Limited and SPI Rosehill Network dated 7 July 2009. - <i>SGSP Rosehill Operational Audit 2015</i> which states there is no longer a requirement to maintain the Deed 		
Summary of reasons for grade		
The Deed is no longer required to be maintained, therefore there is no requirement to comply with this clause.		
Discussion and notes		
<p>The <i>SGSP Rosehill Operational Audit 2015</i> states:</p> <p><i>“The Project Support Deed expired (in late 2014) following which there was no longer a requirement that it be maintained.”</i></p>		

APPENDIX D – SCHEDULE B TO THE NETWORK OPERATOR’S LICENCE

Table D.1 Network Operators Licence cl.B3

Network Operators Licence cl.B3	Requirement	Compliance Grade
	The Licensee must maintain insurance that is appropriate for the size and nature of the activities authorised under this Licence	Compliant
Risk		Target for Full Compliance
This presents no significant risk to the operational safety of the scheme.		Evidence that the Licensee maintained insurance appropriate for the size and nature of the activities authorised under the Licence.
Evidence – Interview and Inspection		
David Vaughan: <i>“The insurances are updated annually and there was no material change to the type or level of insurance held during the period”.</i>		
Evidence – Documentation		
- Email from SGSPRN to IPART compliance team dated 6 July 2017 with Certificate of Currency attached and advice confirming there has been no material change.		
Summary of reasons for grade		
The insurance required has been maintained throughout the audit period.		
Discussion and notes		
The auditor asked whether there had been any change in the type, or level of insurance held by SGSPRN during the audit period and was advised that insurances are regularly updated, however there had been no material change to the policy. This was confirmed in an email from SGSPRN to IPART compliance team dated 6 July 2017 with Certificate of Currency attached and advice confirming: <i>“...there has been no change in the type, scope or limit on the policy.”</i>		

Table D.2 Network Operators Licence cl.B6

Network Operators Licence cl.B6	Requirement	Compliance Grade
	The Licensee must prepare and submit reports in accordance with the Reporting Manual.	Compliant
Risk		Target for Full Compliance
This presents no significant risk to the operational safety of the scheme.		Evidence that the Licensee prepared and submitted the requisite reports to IPART in accordance with the Reporting Manual.
Evidence – Interview and Inspection		
Evidence – Documentation		
- Email from SGSPRN to IPART Compliance Mailbox dated 24 August 2017 with attached annual compliance report for the year ending 30 June 2017.		

<ul style="list-style-type: none"> - Email from IPART to SGSPRN confirming receipt of the annual compliance report. - “Annual Compliance Report for 2016-2017” Submitted by SGSP Rosehill Network Pty Limited
Summary of reasons for grade
The report was prepared in accordance with the <i>Network Operators’ Reporting Manual</i> and submitted by the due date.
Discussion and notes
The IPART <i>Network Operators’ Reporting Manual under the Water Industry Competition Act 20016, May 2010</i> requires the submission of an Annual Compliance report by 31 August each year.
The auditor viewed the “Annual Compliance Report for 2016-2017” Submitted by SGSP Rosehill Network Pty Limited to IPART on 24 August 2017.

Table D.3 Network Operator’s Licence cl.B8

Network Operators Licence cl.B8	Requirement	Compliance Grade
	<p>The Licensee must undertake any monitoring that is required for the purposes of this Licence, any Plan, the Act or the Regulation in accordance with this clause.</p> <p>The Licensee must keep the following records of any samples taken for monitoring purposes specific in the Water Quality Plan:</p> <ol style="list-style-type: none"> I. the date(s) on which the sample was taken; II. the time(s) at which the sample was collected; III. the point or location at which the sample was taken; and IV. the name of the person who collected the sample. <p>The Licensee must ensure that analyses of all samples taken for the purposes of Verification Monitoring are carried out by a laboratory accredited for the specified tests by an independent body acceptable to NSW Health, such as the National Association of Testing Authorities (NATA) or an equivalent body</p>	Compliant
Risk		Target for Full Compliance
<p>This requirement reflects a high operational risk. It is essential that:</p> <ul style="list-style-type: none"> • detailed sample records are maintained to ensure traceability in the event of a non-compliance; and • testing is undertaken by an accredited laboratory to ensure credibility of results. 		<p>Evidence that:</p> <ul style="list-style-type: none"> • the required records have been kept in respect of collected samples; and • sample analysis has been undertaken by NATA accredited laboratory (or equivalent).
Evidence – Interview and Inspection		

Evidence – Documentation
<ul style="list-style-type: none"> - SGSP Rosehill Network Pty Limited, Water Quality Management Plan (Revision 5) 6 July 2016 - “Network Testing Results” showing collated water quality records for the audit period - Sydney Water Laboratory Services <i>Analytical Reports</i> for samples dated: <ul style="list-style-type: none"> o 3 May 2017 o 26 July 2017 - Sydney Water Laboratory Services <i>Final Report</i> for sampling dated 3 May 2017
Summary of reasons for grade
The Licensee is undertaking the water quality monitoring required by the Act and Plan and in accordance with the requirements of this clause.
Discussion and notes
<p>The auditor assessed a sample of water quality testing data. The auditor understands that Water Quality Monitoring Units, linked to the SCADA control system, monitor the required water quality parameters.</p> <p>The SGSP Rosehill Network Pty Limited, Water Quality Management Plan (Revision 5) 6 July 2016 identified the water quality specification for these purposes and the water quality testing required to meet the specifications.</p> <p>Sydney Water Laboratory Services <i>Analytical Reports</i> and <i>Final Report</i> reviewed for sampling taken on 3 May and 26 July 2017. “Network Testing Results” was crosschecked against the Sydney Water Reports to confirm accuracy in the reported data. Sydney Water reports included confirmation of NATA accreditation and records of:</p> <ul style="list-style-type: none"> o the date(s) on which the sample was taken; o the time(s) at which the sample was collected; and o the point or location at which the sample was taken. <p>The auditor understands samples were taken by inline sampling instruments.</p>

Table D.4 Network Operator’s Licence cl.B9

Network Operator’s Licence cl.B9	Requirement	Compliance Grade
	Whenever the Licensee makes a significant amendment to a Plan, the Licensee must provide a copy of the amended Plan to IPART at the same time that it provides a copy to the approved auditor engaged to prepare a report to the adequacy of the amended Plan, as required under the Regulation.	No requirement
Risk		Target for Full Compliance
This presents a low risk. Notification to IPART is required so that it can assess whether changes to the Plan are suitable for the services delivered under the Licence.		Evidence that, if there have been significant amendments to a Plan, IPART were notified in accordance with the requirements of this clause.
Evidence – Interview and Inspection		
David Vaughan:		

"The plans are also reviewed before each audit and a decision was made not to change the plans before this audit.".

Evidence - Documentation

- SGSPRN Infrastructure Operating Plan (Revision 3) dated 31 May 2016.
- SGSP Rosehill Network Pty Limited Water Quality Management Plan (Revision 5) dated 6 July 2016
- Audit Initiation Letter from IPART to SGSPRN dated 11 July 2017.

Summary of reasons for grade

There were no significant amendments made to the Plans during the audit period therefore there was no requirement to assess compliance with this clause.

Discussion and notes

The auditor asked whether the plans had been reviewed during the audit period and was advised by the Licensee that they had but no changes were made.

The auditor compared the dates on the most current plans with those noted in IPART's *Audit Initiation Letter* to confirm IPART is in possession of the most current plans. It is noted that IPART references the Revision 4 (dated 25 March 2015) of the *Water Quality Management Plan*, however the change log in the Plan states Revision 5 update was a result of "minor editing". It is also noted that the change log dates the report 6 June 2016 and the cover page dates the report 6 July 2016. It is recommended that the correct revision date for the *Water Quality Management Plan* is copied to the front page and change log and that a copy of this revision of the plan be submitted to IPART.

Table D.5 Network Operator's Licence cl.B10

Network Operator's Licence cl.B10	Requirement	Compliance Grade
	<p>The Licensee's Code of Conduct must set out the respective responsibilities of (i) the Licensee, and (ii) each licensed network operator, licensed retail supplier and/or public water utility that supplied water, provides sewerage services or constructs, maintains or operates any other water industry infrastructure in the Specified Area of Operations, the Licensee's Code of Conduct must at a minimum, provide for:</p> <ul style="list-style-type: none"> a) If the specified Water Industry Infrastructure is connected to any other water industry infrastructure, who is responsible for repairing, replacing or maintaining any pipes, pumps, valves, storages or other infrastructure connecting the Specified Water Industry Infrastructure to the other water industry Infrastructure; b) Who is responsible for water quality; c) Who is liable in the event of unavailability of water; who is liable in the event of failure of the Specified Water Industry Infrastructure; and d) Who is responsible for handling customer complaints 	Compliant

	<p>Within 6 months of the date on which this Licence is granted or by a later date specified by IPART (if any), the Licensee's Code of Conduct must be agreed in writing between the Licensee and the other licensed network operators, licensed retail suppliers and/or public water utilities referred to in clause 10.</p> <p>The Licensee must not contravene the Licensee's Code of Conduct to the extent that it makes the Licensee responsible or liable for the matters set out in it.</p>	
Risk	Target for Full Compliance	
<p>This presents a high operational risk. Confirmation of operational responsibilities is necessary to ensure all services delivered under the Licence are delivered safely and effectively.</p>	<p>A Code of Conduct is in place and sets out all the relevant responsibilities necessary to deliver the services required under the Licence.</p> <p>The Code of Conduct is agreed in writing by all relevant parties and is not being contravened by the Licensee.</p>	
Evidence – Interview		
Evidence - Documentation		
<ul style="list-style-type: none"> - <i>Amendment and Restatement Deed (Project Agreement)</i> between Sydney Water and Aquanet dated 17 June 2009. - <i>Amendment and Restatement Deed (Pipelines Agreement)</i> between SPI Rosehill and Rosehill Water and Aquanet dated 9 June 2009. - <i>Rosehill Recycled Water Scheme Operation Protocol Part A Effluent and Recycled Water Supply</i> between Sydney Water Corporation and AquaNet / Veolia current as at April 2015 (Controlled Document) - <i>Rosehill Recycled Water Scheme SGSP Rosehill Network Assets Support Agreement</i> between SGSPRN and Veolia dated 7 March 2014 - <i>Project Control Group Meeting Minutes</i> dated: <ul style="list-style-type: none"> o 20 July 2016 o 29 September 2016 o 24 November 2016 o 21 March 2017 		
Summary of reasons for grade		
<p>A single Code of Conduct document has not been established, however it is noted that the broader requirements the Licensee must include in the Code of Conduct are captured in project agreements / deeds with all relevant parties.</p>		
Discussion and notes		
<p>The auditor was not provided with a copy of the Licensee's Code of Conduct however notes that the broad requirements expected to be included in the Code of Conduct are captured in project agreements with Sydney Water, Veolia and other relevant parties. Previous audits note that these agreements have a term of 20 years from 10 October 2011 (unless novated or cancelled)</p> <p>Under the Sydney Water and Veolia agreements and <i>Pipelines Agreement</i>, quarterly Project Control Group meetings are required to be held. The auditor requested evidence that these</p>		

meetings were being held during the audit period and was provided the following examples that confirmed the appropriate items were discussed:

- 20 July 2016
- 29 September 2016
- 24 November 2016
- 21 March 2017

Table D.6 Network Operator’s Licence cl.B11

Network Operator’s Licence cl.B10	Requirement	Compliance Grade
	If the Licensee proposes to operate the Specified Water Industry Infrastructure to supply water for an end-use not set out in the most recent Water Quality Plan provided to IPART, the Licensee must notify IPART in writing at least 3 months before commencing the such operation.	No requirement
Risk		Target for Full Compliance
This presents a low risk. Notification to IPART is required so that it can assess whether the water to be supplied is suitable for the proposed new end-use.		In the event that the Licensee proposes to distribute water for a new end-use, evidence that it provided the requisite notification to IPART.
Evidence – Interview and Inspection		
David Vaughan: <i>“No new end-uses were proposed or commenced operation during the audit period”.</i>		
Evidence - Documentation		
Summary of reasons for grade		
There were no new end-uses proposed or commenced during the audit period, therefore there was no requirement to assess compliance with this clause.		
Discussion and notes		
The auditor asked whether any new end uses were proposed or commenced operation during the audit period and was advised that this had not occurred.		

Table D.7 Network Operator Licence cl.B12

Network Operator Licence cl.B12	Requirement	Compliance Grade
	If an Authorised Person ceases, proposes to cease, or receives notification to cease providing any of the services relating to the activities authorised by this Licence, the Licensee must provide IPART with written notice as soon as practicable but no later than 28 days before the date of cessation of the services. The written notice must include details of the how the services	No requirement

	previously undertaken by the Authorised Person will continue to be undertaken.	
Risk		Target for Full Compliance
This presents a low risk as it would be tied to cessation of operational services.		Notification is provided to IPART in accordance with the requirements of the clause
Evidence – Interview		
David Vaughan: <i>“There were no services ceased during the audit period”.</i>		
Evidence - Documentation		
Summary of reasons for grade		
There were no services relating to the activities authorised by this Licence that were ceased during the audit period, therefore there was no requirement to assess compliance with the clause.		
Discussion and notes		
The auditor asked if the Licensee ceased, proposed to cease or received notification to cease any of the services relating to the activities authorised by this Licence and was advised that this had not occurred.		

APPENDIX E – IPART AUDIT INITIATION LETTER