SPI Rosehill Network Pty Limited
(ACN 131 213 691)

and

Rosehill Water Network Pty Limited
(ACN 132 481 077)

Application for a Network Operator's Licence

under the

Water Industry Competition Act 2006

PUBLIC VERSION

October 2008

LIST OF APPENDICES

Appendix 1 Introduction

AquaNet Sydney Pty Limited (AquaNet)[10] is the proponent of the Rosehill Recycled Water Scheme (the Rosehill Scheme). The scheme involves the construction of a treatment plant and distribution network to supply high quality recycled water initially to large industrial customers in the Rosehill-Camellia-Smithfield area of Sydney.

Sydney Water initiated a competitive tender process for the Scheme in late 2005 and, following three rounds of bidding, selected AquaNet as the successful tenderer with Veolia Water Australia Pty Ltd. Concurrently, the NSW Government commissioned IPART to investigate how water and wastewater services should be provided in the greater Sydney region. Acting on the recommendations from that investigation, the Government developed and enacted the Water Industry Competition Act 2006 (WIC Act). The WIC Act provides for the first time for direct private sector participation in the NSW water industry.

In August 2008 AquaNet entered into formal agreements with Sydney Water to implement the Rosehill Scheme. AquaNet, with its associated entities, will design construct own operate and maintain facilities including a treatment plant and distribution network. The scheme will deliver high quality recycled water to Sydney Water at the premises of seven foundation customers in the Rosehill-Camellia-Smithfield area of Sydney. The scheme will also make recycled water available to additional customers on or close to the route of the network, and to other customers as the network is extended and expanded over time.

The agreements provide for:

- *Water Treatment plant* – Veolia Water Australia Pty Ltd will construct, maintain and operate an advanced technology water treatment plant at Fairfield to produce up to 20 ML per day of reverse osmosis quality recycled water. Feed for the plant will be secondary treated effluent sourced from Sydney Water's Liverpool to Ashfield pipeline.

- *Recycled water network* – AquaNet will construct, maintain and operate a 20 km recycled water network and associated facilities to deliver recycled water from the treatment plant to the premises of seven foundation customers. The network will be laid through isolated gas mains where feasible[11]. Together, the foundation customers are expected to use an average of 12 ML per day of recycled water, displacing potable water presently supplied by Sydney Water. First deliveries are planned for early 2011.

- *Extension and expansion of the foundation network* – AquaNet currently intends to extend and expand the foundation network over time to serve adjacent areas including Parramatta, Westmead and Wetherill Park.

---

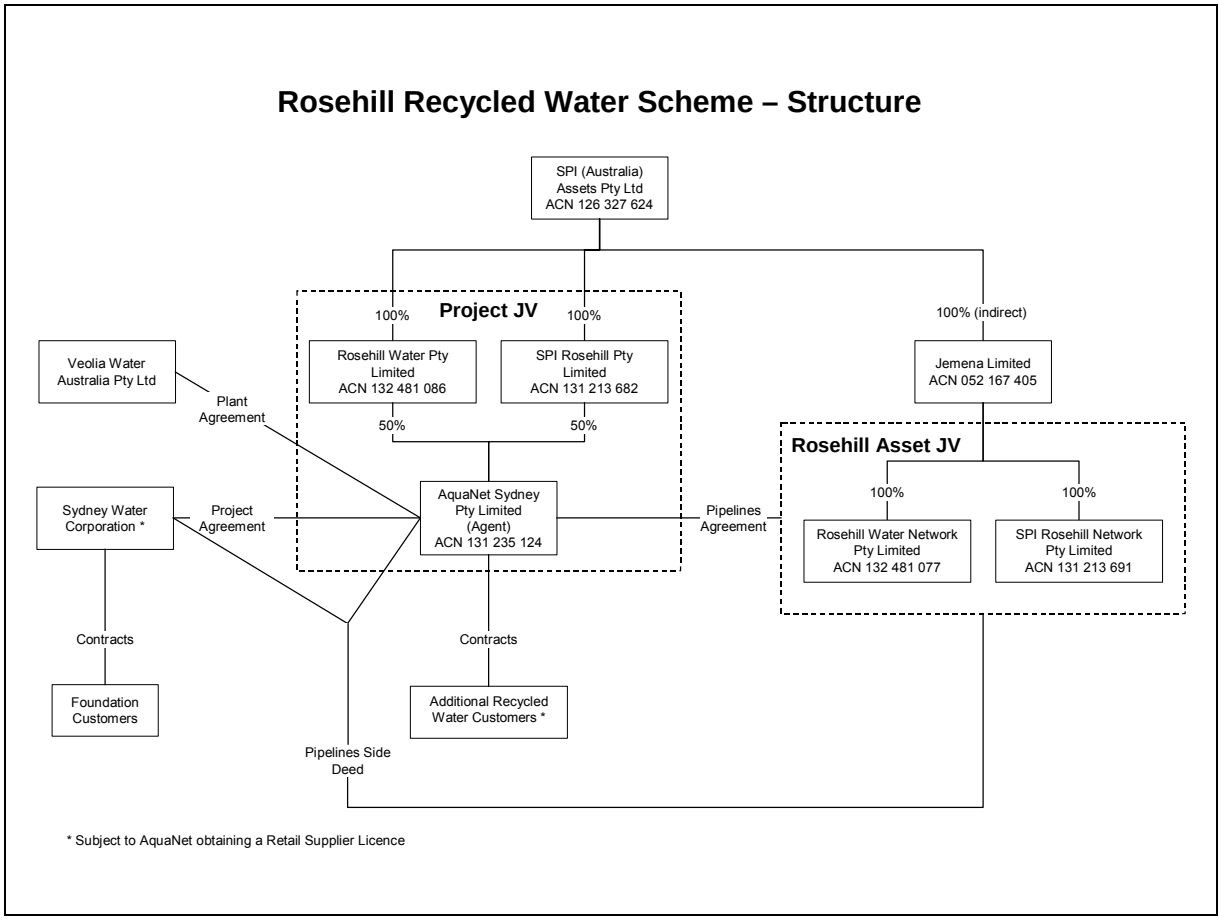
[10] AquaNet is agent for the Rosehill Project Joint Venture, an unincorporated joint venture made up of SPI Rosehill Pty Limited and Rosehill Water Pty Limited. Both of the Rosehill Project Joint Venture companies are owned 100% by SPIAA.

[11] Jemena Gas Networks (NSW) Ltd, the owner and operator of the principal gas network in NSW and an associate of AquaNet, owns gas mains that are isolated from and no longer form part of its "live" gas network. These isolated gas mains are available to be used as conduits for recycled water reticulation.

SPI Rosehill Network Pty Limited and Rosehill Water Network Pty Limited (together the Rosehill Asset Joint Venture – RAJV) will finance, plan, design, construct and commission, and then own, operate, maintain and repair the network and its associated works under a contract between those companies and AquaNet (the Pipelines Agreement). SPIAA through Jemena Limited owns 100% of both of the RAJV companies.

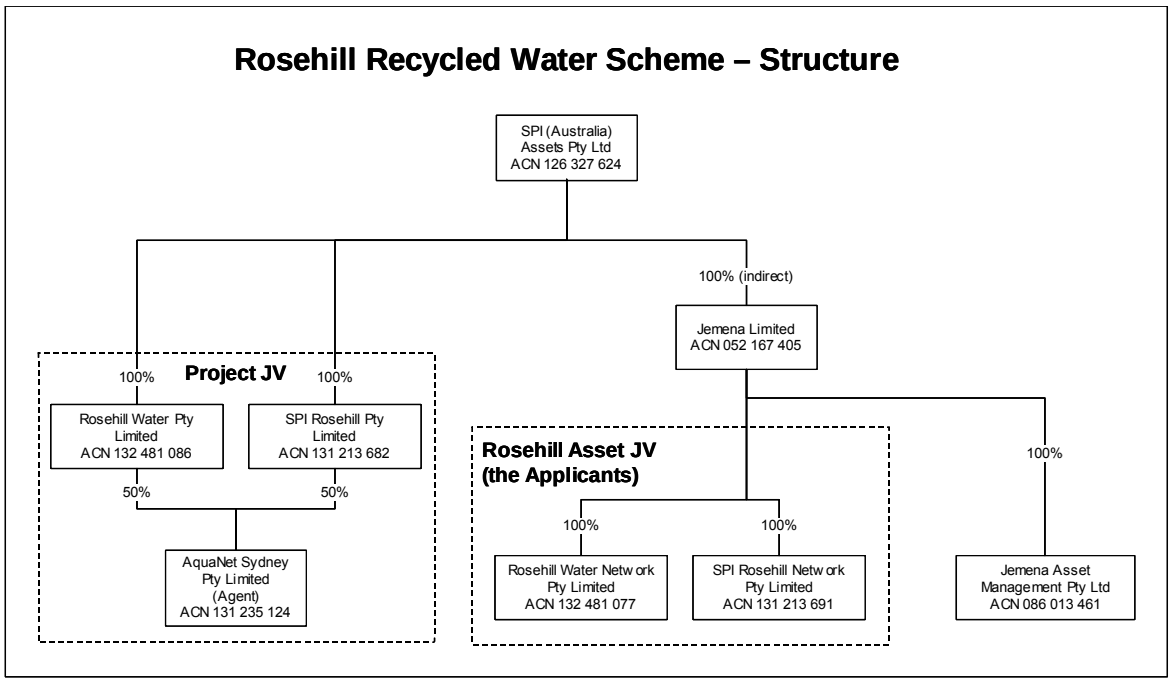
One of the conditions precedent in the agreements with Sydney Water is that AquaNet and its associated entities must obtain all necessary licences under the WIC Act. SPI Rosehill Network Pty Limited and Rosehill Water Network Pty Limited jointly make this application for a Network Operator's licence in that context.

The relationships described above are depicted in the following diagram:



Appendix 2 Who manages the applicant corporation? (Question 1(c))

We have provided details of the Directors and CEO of the Applicant corporations in responding to Question 1(c). As we have described in Appendix 3 (response to Question 1(e)) a number of other Jemena entities will be involved in delivering the Rosehill Scheme. Those entities and their relationships to the Applicants are shown in the following structure diagram:



In anticipation that the Tribunal may need to be assured of the standing of some or all of those other entities we provide information about the management of each of them below:

Directors and Chief Executive Officer of SPI (Australia) Assets Pty Ltd (SPIAA):

Name	Position	Address	Date of Birth
LIM Howe Run	Deputy Chief Executive Officer and Director [12]	Unit 46, 283 Spring Street, Melbourne VIC 3000	14 September 1965
CHIA Chee Ming Timothy	Director	7 Nassim Road, #01-01, Singapore 258374, Singapore	5 January 1950

[12] Mr Lim Howe Run was Deputy Chief Executive Officer of SPIAA at the time the former Chief Executive Officer, Mr Peter Magarry, retired in August 2008. Mr Lim Howe Run's formal position remains Deputy Chief Executive Officer for the time being.

Name	Position	Address	Date of Birth
Peter William MAGARRY	Director	30 Dudley Road, Wonga Park, VIC 3115	7 June 1949
QUEK Poh Huat	Director	18 Kingsmead Road, Singapore 267969, Singapore	7 August 1946
Dilhan Pillay SANDRASEGARA	Director	18 Ford Avenue, Singapore 268697, Singapore	10 June 1963
YAP Chee Keong	Director	11 Countryside Grove, Singapore 789966, Singapore	29 June 1960

Directors and Chief Executive Officer of Jemena Limited:

Name	Position	Address	Date of Birth
LIM Howe Run	Deputy Chief Executive Officer and Director[13]	Unit 46, 283 Spring Street, Melbourne VIC 3000	14 September 1965
Peter William MAGARRY	Director	30 Dudley Road, Wonga Park, VIC 3115	7 June 1949
YAP Chee Keong	Director	11 Countryside Grove, Singapore 789966, Singapore	29 June 1960
Ian Damien WELLS	Director	28 Amiens Street, Hampton, VIC 3188	24 September 1969

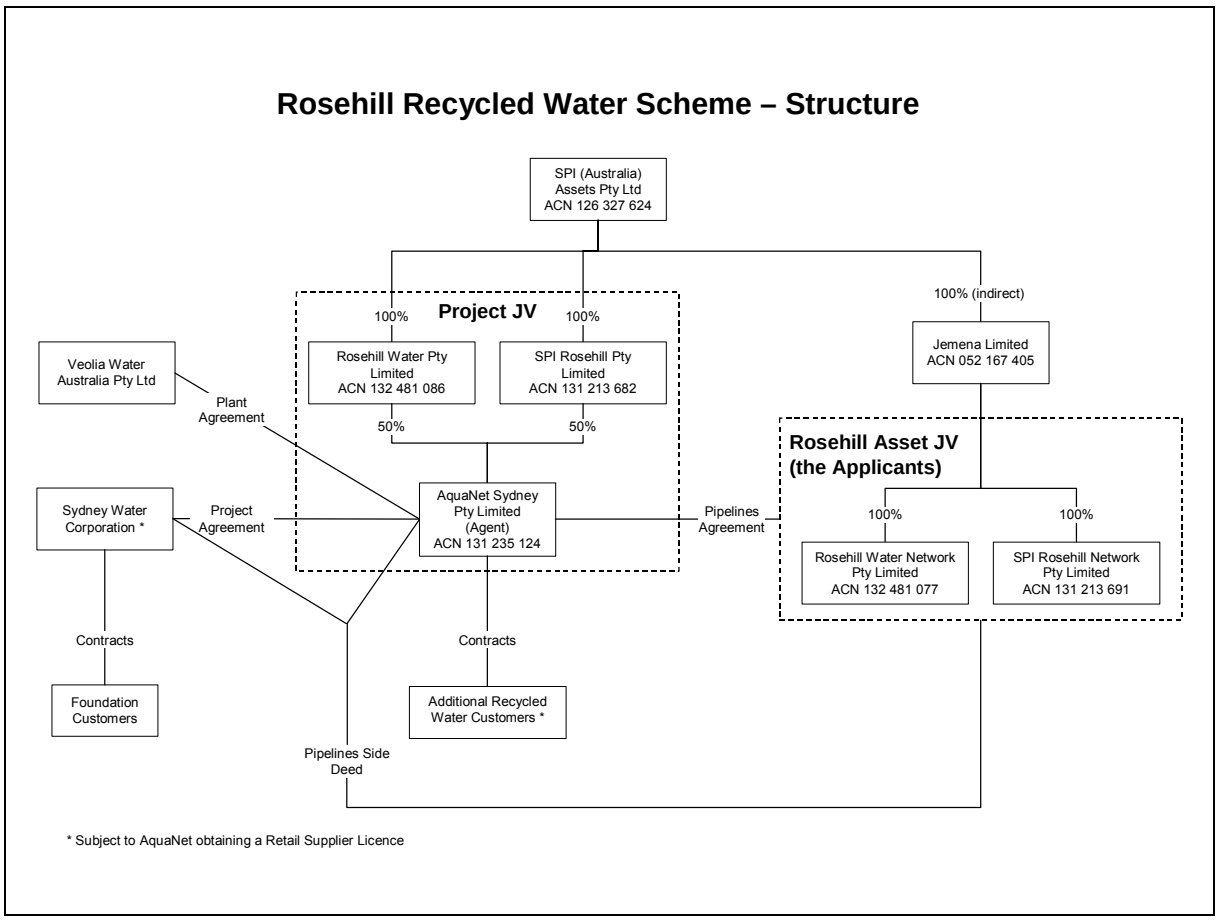
[13] A new Chief Executive Officer of Jemena Limited will be appointed with effect from 10 November 2008.

Rosehill Water Pty Limited, SPI Rosehill Pty Limited, AquaNet Sydney Pty Limited, and Jemena Asset Management Pty Ltd all have the same Directors:

Name	**Position**	**Address**	**Date of Birth**
LIM Howe Run	Director	Unit 46, 283 Spring Street, Melbourne VIC 3000	14 September 1965
Peter William MAGARRY	Director	30 Dudley Road, Wonga Park, VIC 3115	7 June 1949
YAP Chee Keong	Director	11 Countryside Grove, Singapore 789966, Singapore	29 June 1960

Appendix 3 Are any third parties providing services in relation to the activities to be authorised under the licence? (Question 1(e))

On 11 August 2008 AquaNet[14] entered into a Project Agreement with Sydney Water Corporation (Sydney Water), under which AquaNet will deliver the Rosehill Scheme. A number of entities will be involved with AquaNet in delivering the Scheme. The entities and the relationships between them are shown in the following diagram and described further below.



The recycled water treatment plant is to be constructed owned and operated by Veolia Water Australia Pty Ltd (Veolia) under a Plant Agreement dated 11 August 2008 between AquaNet and Veolia. Veolia will be making its own application for a Network Operator's licence to authorise it to undertake those activities.

In a separate Pipelines Agreement executed on 8 August 2008, AquaNet has contracted with the Applicants, Rosehill Water Network Pty Limited and SPI Rosehill Network Pty Limited (together the Rosehill Asset Joint Venture – RAJV), to finance, plan, design,

---

14 AquaNet is agent for the Rosehill Project Joint Venture, an unincorporated joint venture made up of SPI Rosehill Pty Limited and Rosehill Water Pty Limited. Both of the Rosehill Project Joint Venture companies are owned 100% by SPI (Australia) Assets Pty Ltd (SPIAA).

construct and commission the network, and then to own, operate, maintain and repair the network and its associated works.

The technical and economic lives of the plant and network will be longer than the initial term of each of the three agreements (Project Agreement, Plant Agreement and Pipelines Agreement) and AquaNet fully expects that operations will continue beyond that term.

Both of the RAJV companies are owned 100% by Jemena Limited (formerly Alinta LGA Ltd and, before that, The Australian Gas Light Company). Jemena Limited is in turn owned 100% (indirectly) by SPIAA.

The human resources, technical skills and expertise required to perform the Pipelines Agreement will be supplied from within the SPIAA group generally – referred to in this application as Jemena – and, for the most part, from within Jemena Limited and its various subsidiaries including Jemena Asset Management Pty Ltd. The Applicants expect that the Minister will consider it necessary for Jemena Limited to be specified in the licence so that it is authorised to undertake the licensed activities.

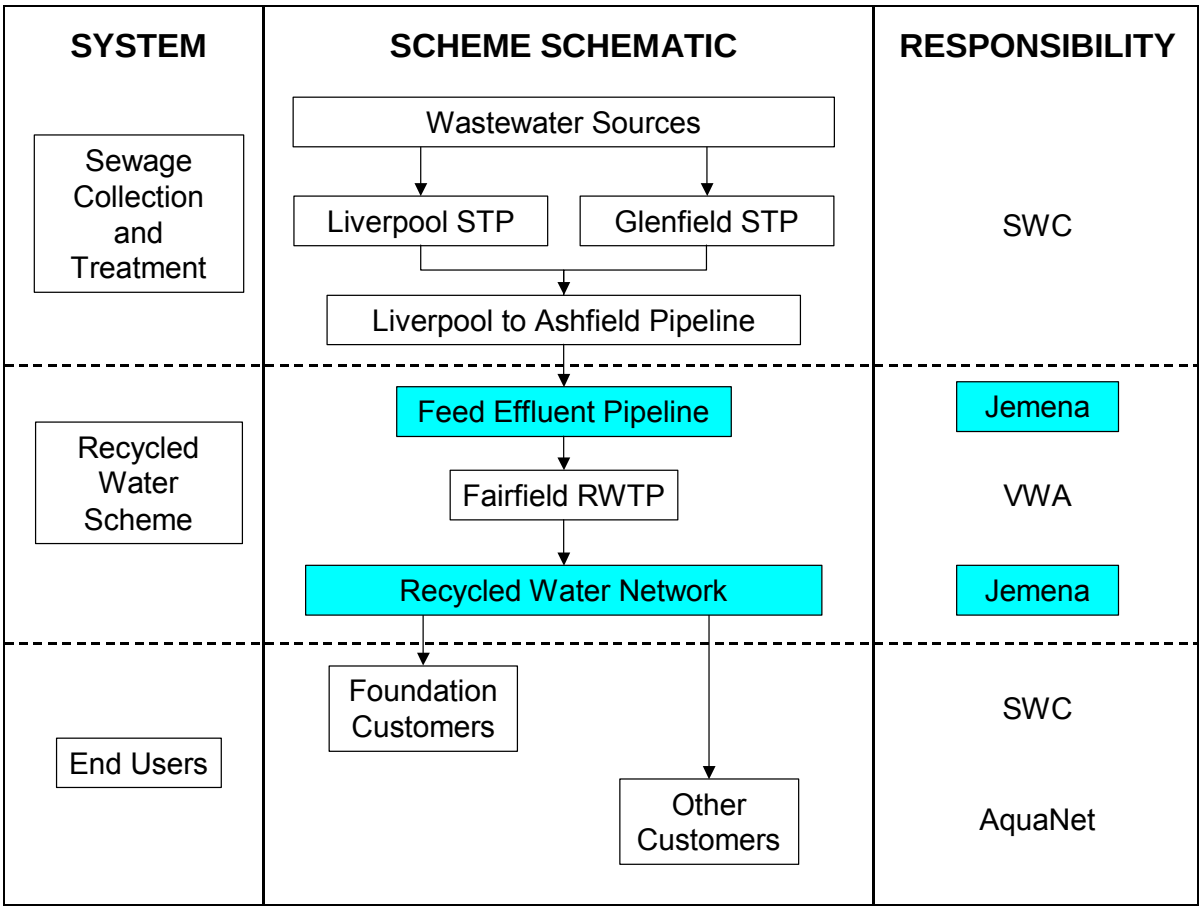
Appendix 4 What activity is to be licensed? (Question 1(f))

The Applicants seek a Network Operator's licence that authorises them jointly to construct, maintain and operate water industry infrastructure for non-potable water including:

- a recycled water distribution network as described in this application and as extended and expanded
- infrastructure ancillary to the Rosehill Scheme including the Feed Effluent Pipeline that will transfer secondary treated effluent between the point of connection to Sydney Water's Liverpool to Ashfield Pipeline and the boundary of the Fairfield Recycled Water Treatment Plant (Plant) to be constructed maintained and operated by Veolia Water Australia Pty Ltd

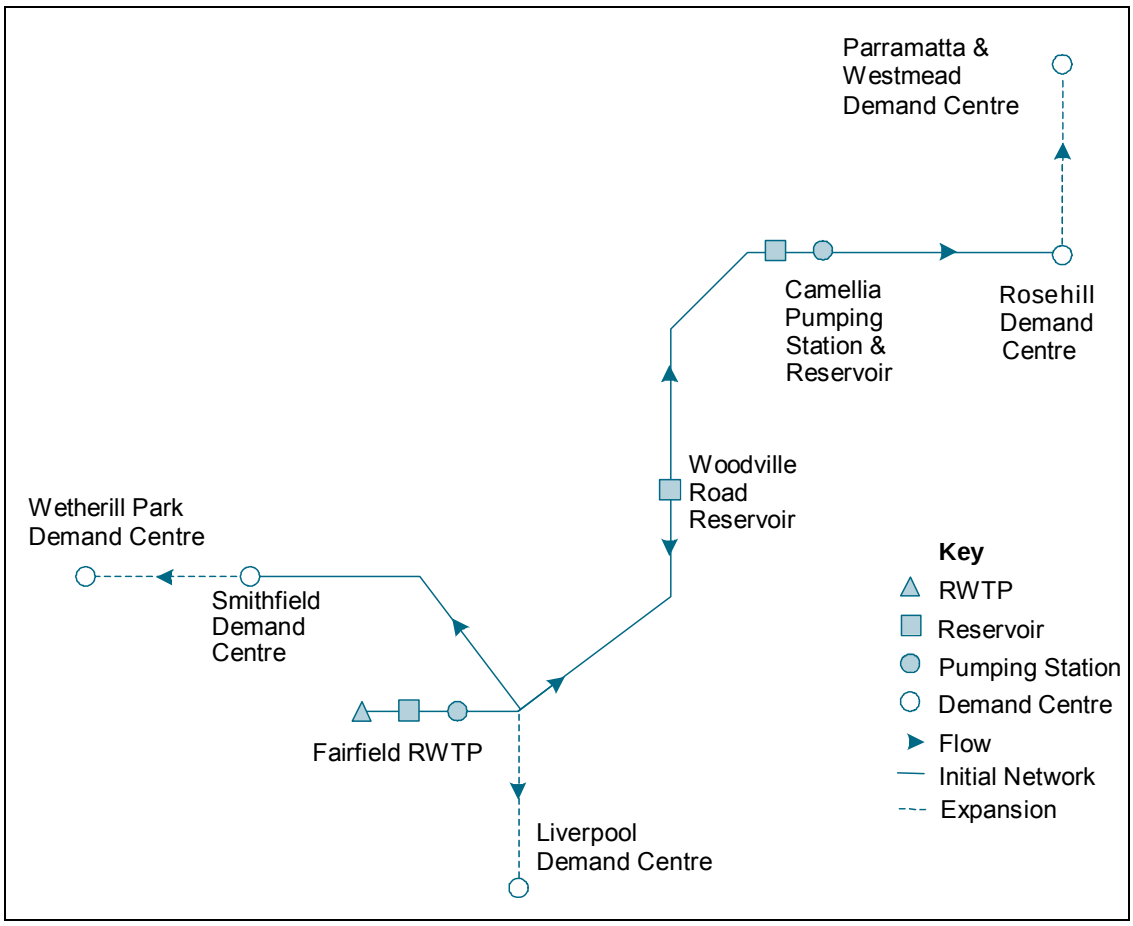
within the licence area (see Question 1(g))

The principal components of the Rosehill Scheme are depicted schematically below. The components to be covered by the licence are shaded in blue.



Type of technology

The following schematic diagram of the distribution network is referred to in the response to Question 1(f).



Infrastructure to be constructed including timing

The following tabulation of infrastructure to be constructed is referred to in the response to Question 1(f).

Summary of Key Components	
Fairfield Pump Station	
Installed Capacity	
Pumping Capacity	
Camellia Pump Station	
Installed Capacity - Initial	
Installed Capacity - Expansion	
Pumping Capacity - Initial	
Pumping Capacity – Expansion	
Reservoirs	
Woodville Rd Elevated Reservoir	0.7 ML
Fairfield Plant Recycled Water Tank	3 ML
Camellia Surface Reservoir	6 ML

Summary of Key Components	
Pipelines	
Pipeline Length	19.9 km
Pipe Material	
Design Basis	
Pipe Class	
Maximum Pressure	

Jemena will monitor and control the network from its existing Parramatta Control Centre on a 24 hour basis. Customer service and emergency response will also be managed from the Centre.

Foundation customers and top-up connection points will have intelligent magnetic flow meters to provide real time data that will be utilised by Jemena's SCADA system to monitor and control the recycled water network.

AquaNet will supply additional customers on an interruptible basis. The flow of recycled water to those customers will be controlled with remotely actuated valves. It is anticipated that the additional customers will have on site storage to accommodate demand peaks.

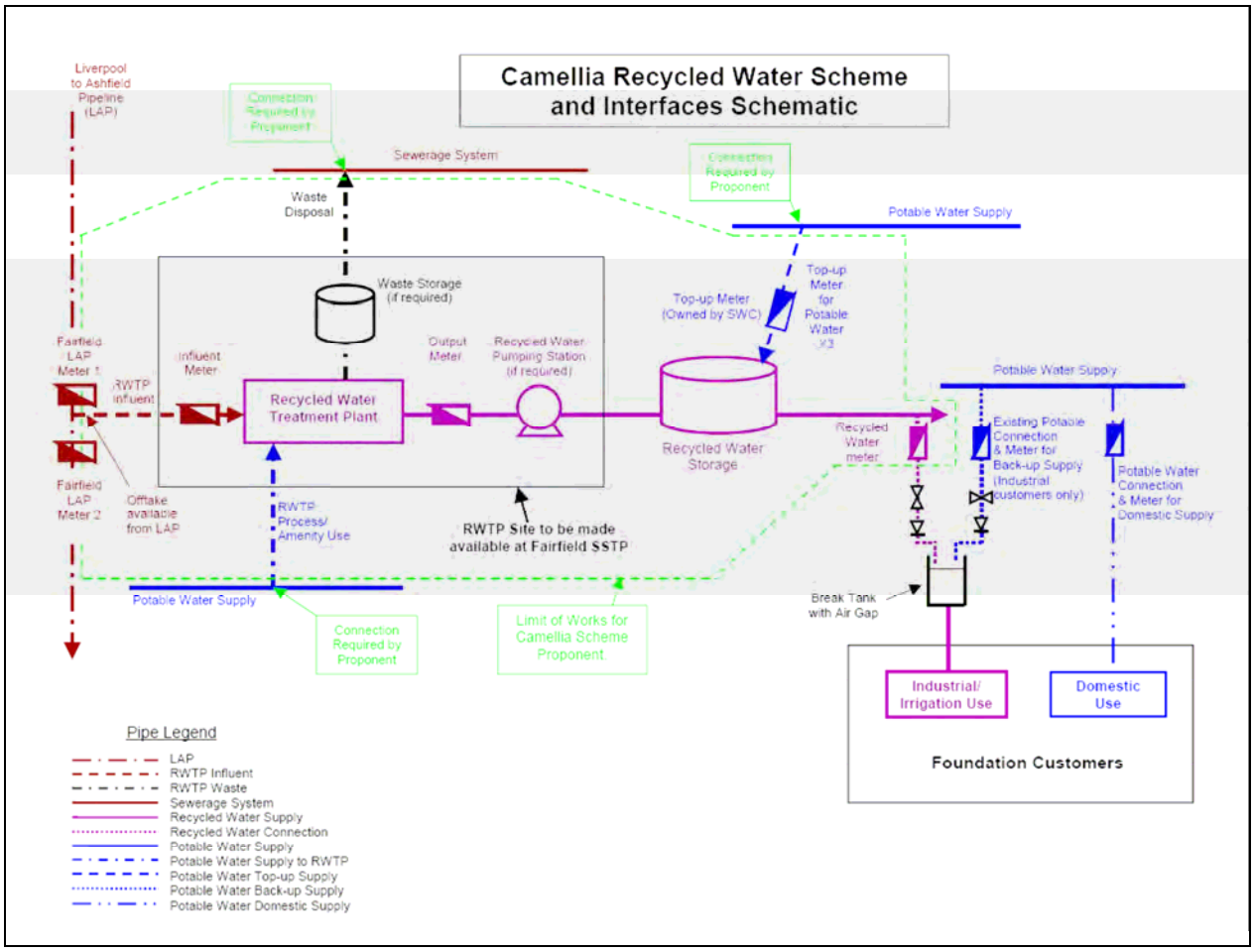
The timetable for construction of the network and related aspects of the Rosehill Scheme for which AquaNet is responsible includes the following milestones:

Milestone	**Milestone Date** [15]
Completion of Plant site remediation works	
Completion of detailed design	
Approval of functional design by Independent Verifier	
Completion of contract documentation	
Completion of tendering of contract packages	
Establishment of Site	
Completion of electrical works	
Completion of all civil works	
Connection to LAP	
Completion of system testing	
Completion of commissioning	January 2011

[15] Dates based on AquaNet obtaining a Network Operator's licence by mid-February 2009.

Appendix 5 Interconnections to the infrastructure (Question 1(h))

The Feed Effluent Pipeline and distribution network will connect with Sydney Water assets, the Recycled Water Treatment Plant (to be constructed, maintained and operated by Veolia Water Australia) and customer assets as shown in the schematic below.



The ownership of assets at the interconnection points can be summarised as follows:

The Applicants (as the RAJV) will own, operate and maintain the:

- RAJV Feed Effluent Pipeline – the section of the feed effluent pipeline from the extraction point on the LAP to the flange at the boundary of the Plant site
- Recycled Water Delivery Pipeline – the pipe from the outlet of the recycled water pumping station to the boundary of the Plant site
- RAJV Plant Trade Waste Discharge Pipeline – the section of the plant trade waste discharge pipeline from the boundary of the plant site to the Sydney Water sewer
- Storage Tank Output Meter – the flow meter located on the discharge of the recycled water pumping station

- Additional Customer Recycled Water Meters – each flow meter located on each additional customer's site measuring the volume of recycled water supplied to that additional customer

- Recycled Water Pumping Station – the recycled water pumping station to be situated at the Plant

Sydney Water will own, operate and maintain the:

- Liverpool to Ashfield Pipeline (LAP)

- Recycled Water Meter – each flow meter located on each foundation customer's site measuring the volume of recycled water supplied to that foundation customer

- Top-up meter and the water main connections up to the top-up meter located approximately one metre inside the property boundary – the top-up meter means any flow meter measuring the volume of top-up water (potable water supplied by Sydney Water)

- Sewer connections, as defined in the Sewerage Code WSA 02-2002 and the Property Development Connection requirements (Sewer) Guidelines

Veolia Water Australia will own, operate and maintain the:

- Veolia Feed Effluent Pipeline – the section of the feed effluent pipeline from the flange at the boundary of the plant site to the Plant

- Plant Trade Waste Discharge Flow Meter

- Veolia Plant Trade Waste Discharge Pipeline – the section of the plant trade waste discharge pipeline from the Plant to the boundary of the plant site

- Storage Tank (including all instrumentation of the Storage Tank) – the 3 ML storage tank located at the plant site to be used for storage of recycled water produced by the Plant

- Influent Meter – the Flow Meter to measure the volume of effluent extracted from the LAP

- Output Meter – the flow meter located on the inlet of the storage tank measuring the volume of recycled water produced by the Plant

- Other pipework to be situated within the boundaries of the plant site (except the pipework within the recycled water pumping station and the recycled water delivery pipeline)

The pipe from the storage tank to the flange inside the recycled water pumping station will be owned by Veolia Water Australia and operated and maintained by the RAJV.

Appendix 6 Who are the customers/end users? (Question 1(i))

Initially the Rosehill Scheme will deliver recycled water to the premises of seven foundation customers who will be supplied by Sydney Water. Those customers and their intended uses of recycled water are as follows:

Customer name and location	Type of Customer
[redacted]	Industrial and manufacturing
Visy Paper Pty Ltd Smithfield	
Marubeni Power Development Australia Pty Ltd Smithfield	
Basell Australia Pty Ltd Rosehill	
Boral Pty Ltd Camellia	
James Hardie (Australia) Pty Ltd Rosehill	
Sydney Turf Club Rosehill	Irrigation

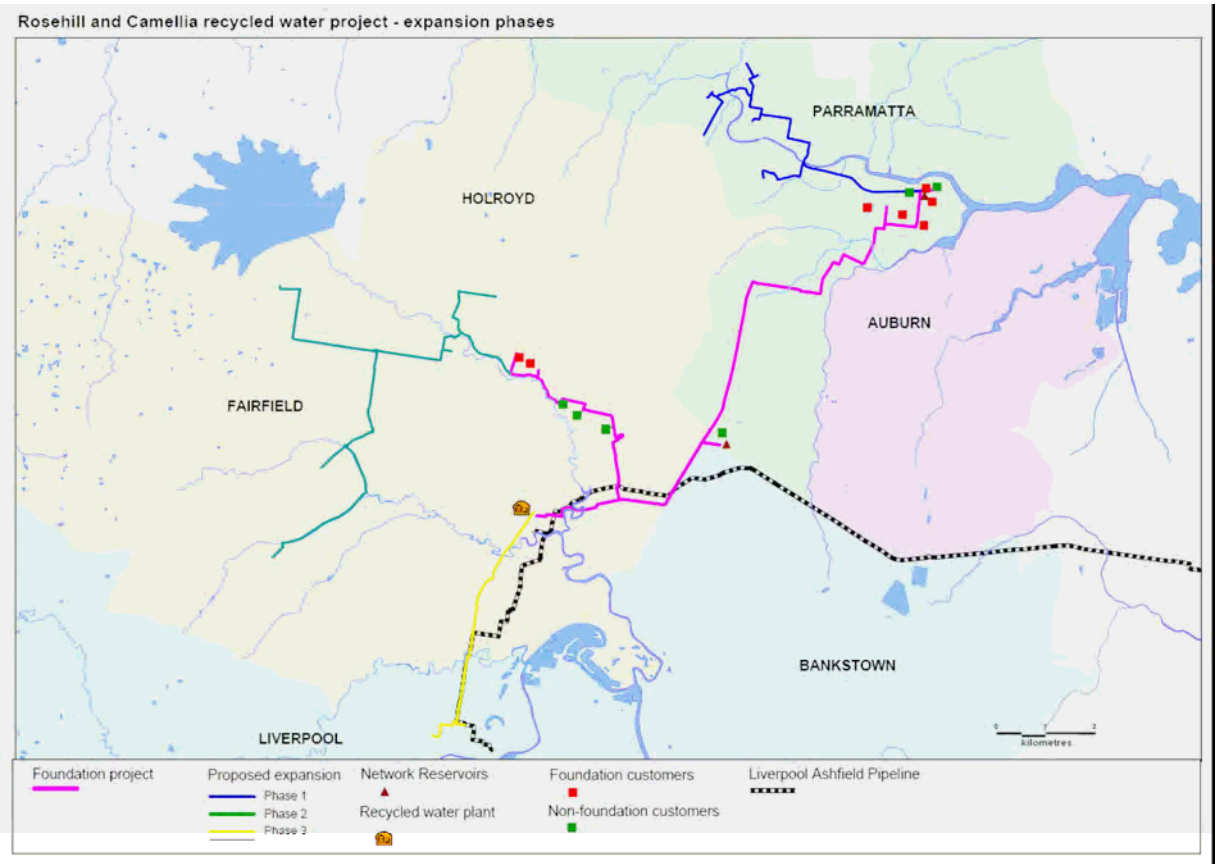
Sydney Water has entered into formal supply agreements with four of the foundation customers including Visy, Marubeni, and Sydney Turf Club. It is expected that agreements will be signed with the remaining three shortly.

Subject to it obtaining a Retail Supplier's licence (under a separate application), AquaNet expects to supply water to additional commercial and industrial customers on the route of the foundation network and as the network is extended and expanded. Individual residential consumers will not be supplied directly from the network.

AquaNet has established contact with a number of prospective customers beyond the foundation customers, and has entered into arrangements with 17 of them confirming their interest in the supply of recycled water.

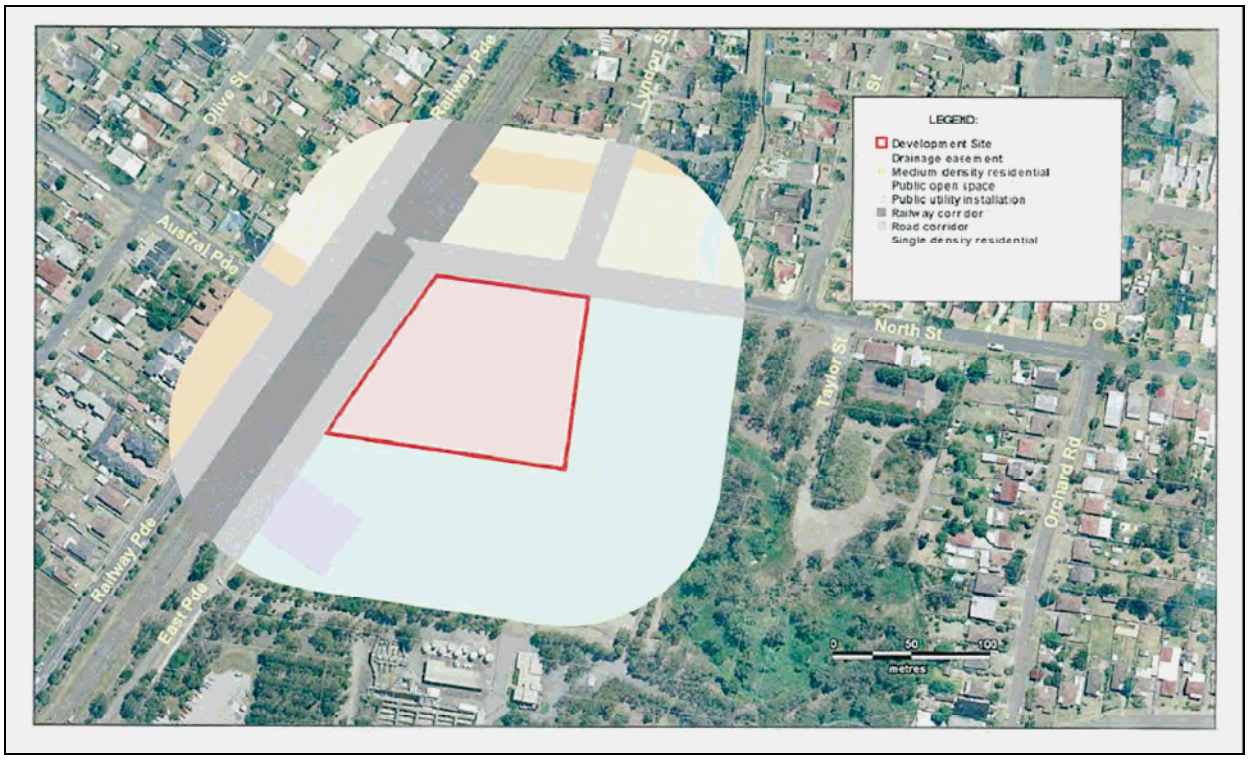
Appendix 7 What is the area within which you are seeking to carry out the activities to be licensed? (Question 1(j))

The recycled water treatment plant and the network that will serve the foundation customers and identified prospective customers in the three planned expansion phases for the Rosehill Scheme are located within the Bankstown, Fairfield, Holroyd, Liverpool, and Parramatta Local Government Areas as depicted in the following drawing:



Relevant non-pipe infrastructure comprises the recycled water treatment plant at Fairfield, and the network reservoirs as Woodville Golf Course and Rosehill. Drawings showing the locations of that infrastructure and adjacent land uses follow:

Recycled water treatment plant, Fairfield:



Network reservoir, Woodville Golf Course:

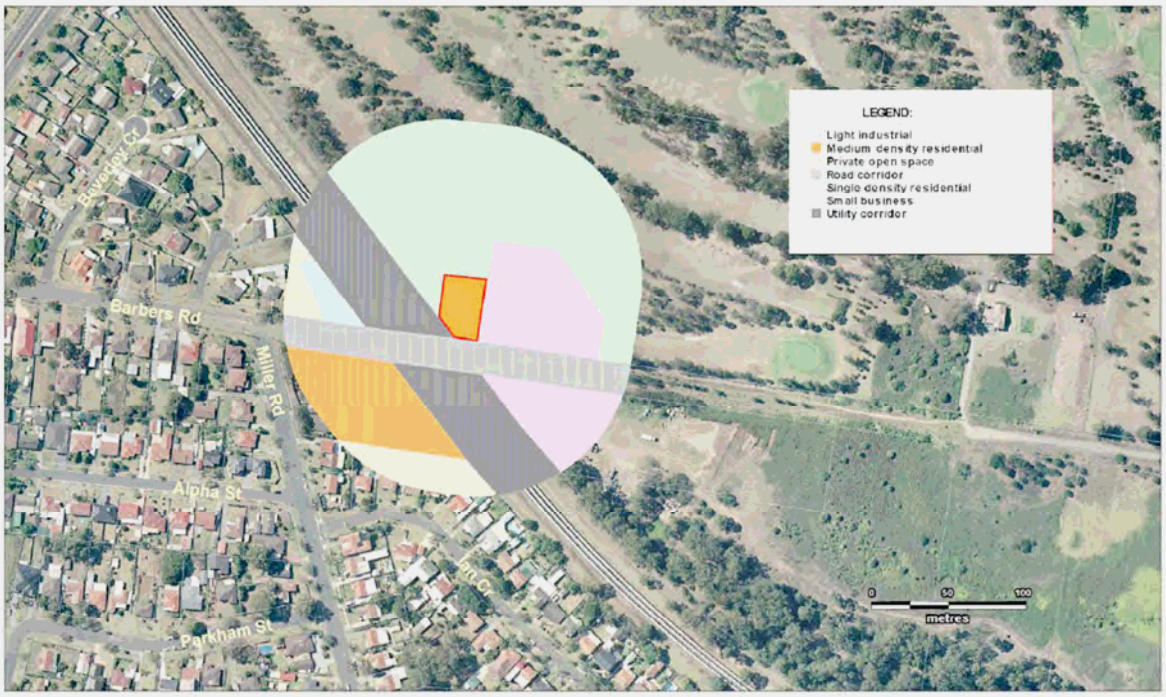


Figure Land use categories within 100m of the boundary of the proposed Woodville Golf Course reservoir

Network reservoir, Rosehill:

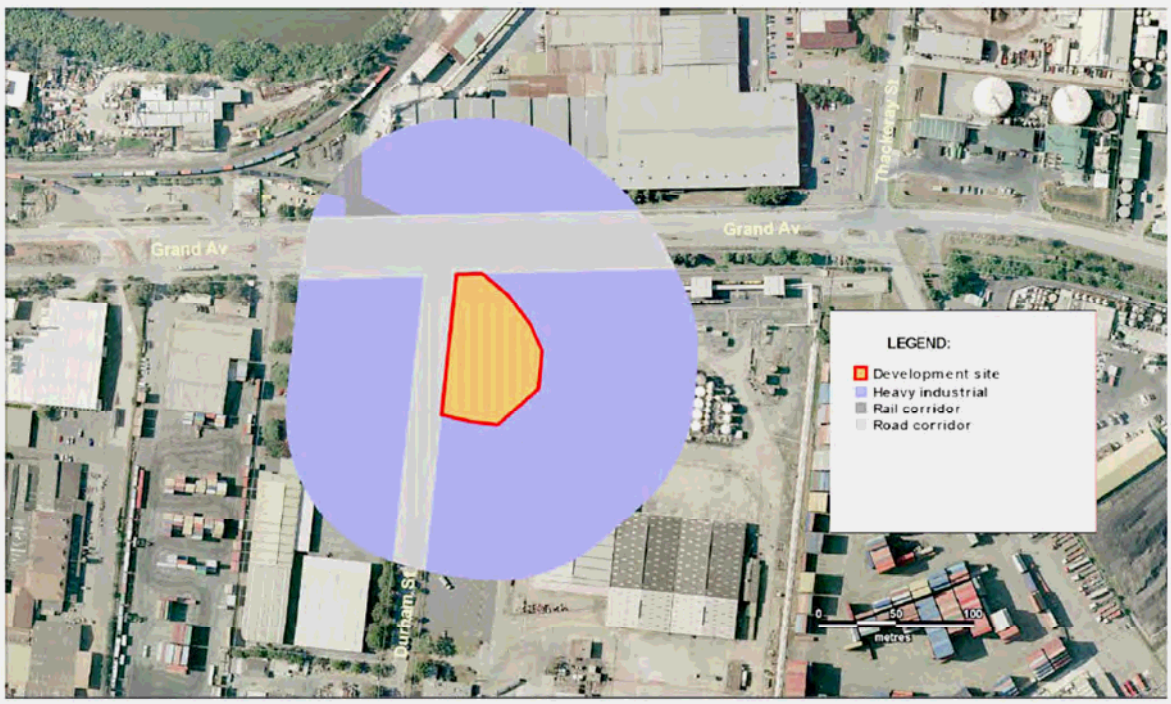
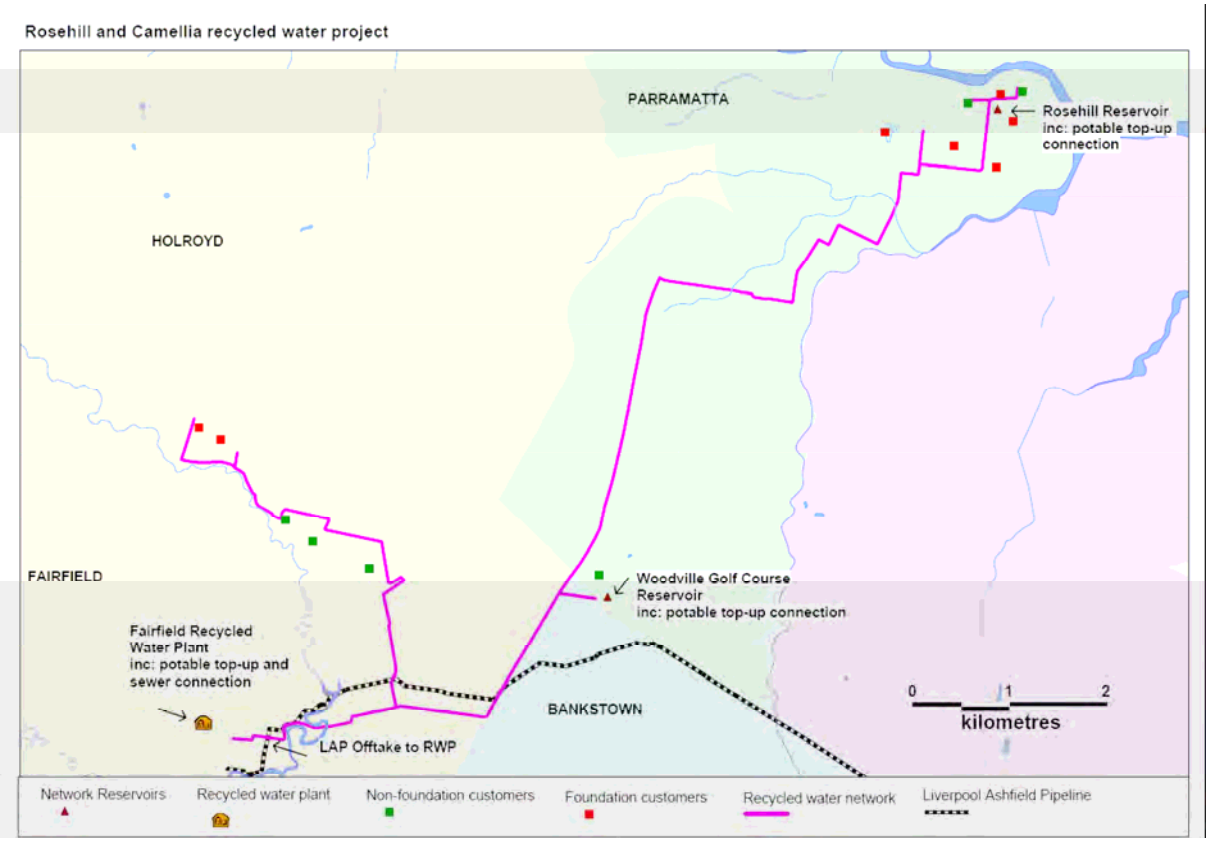


Figure Land use categories within 100m of the boundary of the proposed Rosehill reservoir

Appendix 8 What is the design of the infrastructure? (Question 2(a))

The location of the infrastructure that will serve foundation customers is shown on the following map:



Distribution System Design Criteria

The scheme has been designed to comply with WSA 03 – 2002_2.2 Sydney Water Edition. The following criteria have been met:

- Transfer mains have been sized for foundation customer peak daily demands and the anticipated growth in non-foundation customer demand
- Reticulation mains have been sized for foundation customer peak hourly demands and the additional expansion capacity required for non-foundation customers
- Peak demand for non-foundation customers has been based on an allowance of 1.5 times the Average Daily Demand (ADD). AquaNet's market development work obtained over the last two years has demonstrated that this is an appropriate factor when all the peak demands are averaged across the total network.
- The pipeline connecting the LAP to the Plant has been sized for to allow future maximum production of recycled water from the Plant

- The waste line from the Plant to the discharge sewer nominated by Sydney Water, located on the southern side of the Fairfield SSTP has been sized to transfer waste

- The Woodville Rd elevated reservoir has been sized to cater for operational fluctuations in diurnal demands in the network. Peak hourly demand for the foundation customers has been used to calculate this value as given in the Water Supply Code WSA 03.

- The treatment plant, network storage and top up arrangements are capable of supplying consecutive peak day events.

- The reservoir design provides a gross available volume of 6 ML storage at Rosehill and 3 ML at Fairfield. A dead volume of 0.25 m at the base of the tanks and freeboard of 0.25 m is assumed.

- The maximum pressure head in the distribution system occurs at the Fairfield Pump Station; this pressure head is required to transfer the recycled water to the system high point at the Woodville Rd elevated reservoir and to account for friction losses.

- The Fairfield Pump Station will use variable speed pumps controlled by the Woodville Rd reservoir level and system pressure measured at Marubeni.

- The Rosehill Pump Station will use variable speed drive pumps controlled on system pressure

- The use of variable speed drive pumps at Rosehill will allow turndown of pump motors to allow delivery of lower flows than average day demand.

Independent verification of process and design:

The AVA Water Consortium tender was verified by the Independent Verifier (Kellogg Brown & Root Pty Ltd) appointed by Sydney Water. The Independent Verifier's report is attached.

The AVA Water Consortium (at that time, Alinta and Veolia) submitted the report to Sydney Water in August 2007 in response to Sydney Water's request for tenders to deliver the Rosehill Scheme. References in the document to "AVA" or "AVA Water Consortium" should now be read as "Jemena and Veolia" and references to "Alinta" should be read as "Jemena".

INDEPENDENT VERIFICATION REPORT

Camellia Recycled Water Project - Tender Design Expanded Scheme

Prepared for:
AVA WATER CONSORTIUM
(Alinta Asset Management/Veolia Water Australia JV)
Level 14, 1 O'Connell Street
Sydney NSW, 2000

In accordance with:
Section 7.7.8 Verification of the *Request for Detailed Proposal for the Camellia Recycled Water Project*

Prepared by:

Kellogg Brown & Root Pty Ltd
ABN 91 007 660 317
Level 9, 201 Kent Street, Sydney NSW 2000
Telephone 02 8284 2000 Facsimile 02 8284 2200

23 August 2007

Limitations Statement

This report has been prepared by Kellogg Brown and Root Pty Ltd (KBR) for AVA Water Consortium ('the Client') in relation to the proposed Camellia Recycled Water Project Tender Design ('the Project') and subject to the terms and conditions and in accordance with the scope of services set out in the contract dated 23/02/2007 ('the Contract').

The information observations findings and conclusions in this report have been based wholly or partly in reliance upon data and information obtained from the Client, Government sources and/or from others identified in the report. KBR has relied upon such data and information and has assumed it to be complete and accurate. Except as otherwise stated in the Report KBR has not attempted to verify the accuracy completeness of currency of any such data and information. The passage of time, manifestation of latent conditions or impacts of future events may require re-evaluation of the findings, observations and conclusions expressed in this report.

Except as expressed in the Contract KBR gives no warranty or guarantee whether express or implied concerning the accuracy or fitness for purpose of the Report. This Report does not constitute and is not represented by KBR to be an opinion or recommendation concerning financial matters, the soundness of any investment, any legal position, any level of risk or about the success or failure of any activity. The Client is solely responsible for the level of reliance it places upon the application and use of this Report in the context of the many independent and variable factors required to be taken into account when making commercial or lending decisions.

This Independent Verification report is signed on behalf of the Kellogg Brown & Root Pty Ltd (KBR) Independent Verification team by the KBR Industry Director (Water) NSW David Abbey. Refer to Appendix A for details of the Independent Verification team's qualifications and experience.

Report Signatory:
David Abbey – MSc (Structures), BSc (Civil Engineering),
NSW Industry Director- Water KBR

Signed: Date: 23/8/07

1 Introduction

In late 2005 Sydney Water Corporation (SWC) called for expressions of interest to design, construct, commission and operate the Camellia Recycled Water Project. The tender evaluation and assessment program is now in Stage 2 with two short-listed tenderers.

Sydney Water proposes to develop the Project through a Design, Build, Own and Operate delivery process. The Returnable Schedule 6 - Technical Sufficiency, from the Request for Detailed Proposal (RDP) requires an independent verifier to provide a design verification report. Kellogg Brown & Root Pty Ltd (KBR) was contracted by AVA Water Consortium (AVA) to provide a verification report.

Based on comments from Sydney Water, the initial scheme has been modified to 25MLD. This report provides verification of the modified scheme.

2 Verification Methodology

The IV considers that the essential service was to assess the proposed design outlined in the revised schedule 6 against the requirements of the SWC Request for Detailed Proposal (RDP). Verification did not consist of a detailed check of the tender design, however the service will provide assurance to AVA and SWC that the proposed solution complies with SWC requirements.

The design is at concept level for tendering purposes. KBR have based their comments on the information provided by AVA.

The intent of this verification is to provide a 'high level' check on the proposed design and review of assumptions and design criteria ensuring that the design assumptions by AVA are reasonable and that the methodologies undertaken for risk, cost and timing are acceptable in meeting SWC requirements.

3 Information Reviewed

The following information was supplied for review:

- Revised Proposal: Camellia Recycled Water Project: - Returnable Schedule 6-Technical Sufficiency -Submitted to SWC on 29th June 2007
- The technical information reviewed as part of the IV report dated 14th April 2007 for the original Camellia Recycling Scheme
- Document No:B0223-MR-0000-01
- Operational costing model and P&IDs viewed at on Veolia's computers (23/08/07)
- Documents : D1A_No.2 REV 4, D1A_No.3 REV 4, D1A_No.4 REV 5 & D1A_No.9 REV 3,

4 Verification Findings

4.1 Review of response to SWC feedback

Clarify how the proposed treatment train will achieve the limits for ammonia alkalinity and total nitrogen and phosphorous as stated in the RDP

Ammonia &Total N

AVA has introduced a cationic ion exchange plant downstream of the RO plant. The IV concurs with the comment that the introduction of this unit operation will increase the ammonia removal achieved by the system.

Furthermore, AVA advise that the additional unit will ensure compliance with the total nitrogen & ammonia limits proposed by SWC.

Alkalinity

AVA advice that they have based their design on the understanding that the alkalinity value specified in Table 8.1 of the RDP document is not a target (Addendum 5). Consequently, the process train does not contain a specific process aimed at producing an alkalinity of <5mg/L. The IV concurs with the statement that despite no specific process it is expected that the plant will produce water with a reasonably low alkalinity. However, there is insufficient information for the IV to ensure that the plant will achieve an alkalinity of <5mg/L.

Phosphorous

AVA has noted that over 95% of the total phosphorous entering the plant should be as reactive phosphate. Furthermore, the IV notes that the introduction of a coagulation step will also reduce the phosphorous load on the membrane plant.

Rejection rates of phosphate, nitrate and ammonia outlined in Schedule 6 are typical for RO membranes. However, it is noted that the rejection rates are dependent on a number of conditions specific to the plant such as membrane types, membrane age, temperature and speciation of the ion. A detailed assessment on specific plant conditions has not been undertaken for this initial review.

Clarify why the trigger limits for Chlorine and TDS are inconsistent with the limits in the RDP

AVA have noted that the design has been modified to ensure that trigger limits for chlorine and TDS are consistent with the RDP

There are inconsistencies regarding the volume of the waste stream. Refer to Pages 21,27,31 53 and 98 of Schedule 6. Clarify the amount of UF waste stream volumes and total waste stream volumes

AVA has identified the daily UF waste stream volume as 2851Kl/day or 2908Kl/day including the chemically enhanced backwash and UF CIP.

AVA have advised that the Wastewater discharge for the 20ML/d plant can range from 8.2ML/day to 10.1ML/day depending on the ammonia concentration in the LAP. The high variation in waste volumes is due to the proposed dilution of the ammonia levels.

AVA advice that dilution will not be required when the concentration of the ammonia in the LAP is less than or equal to its 50%ile level of 28mg/l. Maximum dilution is expected when the ammonia concentration in the LAP is at its 90%ile value of 33mg/L.

Explain how waste flow to the sewer will be controlled to meet sewer capacity requirements.

The IV notes that volume and ammonia concentration limits are the limiting factors in meeting requirements. AVA propose to dilute the plant waste only when required to meet the requirements of the trade waste standards.

AVA also note that they do not anticipate that large on site storage of waste will be required to cater for sewage discharge restrictions caused by wet weather events since SWC has indicated that if wet weather events occur, effluent from the Glenfield STP will be diverted and thus the LAP will not have sufficient capacity to service the plant at 20ML/day.

The requirements for onsite wet weather storage was not verified in this initial review. However, AVA advice that there is sufficient storage space available if required.

In your Submission, you note that TDS would be measured before pH adjustment. Clarify how this measurement will comply with the RDP requirements for TDS of 50mg/L

AVA has adequately addressed this issue by locating the monitoring point for recycled water quality, including TDS, at the outlet of the chlorine holding tank. The chlorine holding tank is located down stream of chlorine dosing and pH adjustment.

In your Submission, no CCT is nominated in your process train. Clarify how you propose to comply with 1mg/L of free chlorine after 1 hour detention

AVA plan to introduce a chlorine holding tank with a 1 hour residence time prior to final storage. The tank size is 1050kL which is an adequate size to provide a detention time of 1 hour when operating the AWTP at 25ML/day.

4.2 Verification of plant process design - quality, quantity and reliability

Treatment Process Overview

The main unit operations incorporated in the treatment process as shown in Veolia's process flow diagram are; basket strainers, ultrafiltration (UF), reverse osmosis (RO), ion exchange and degasser, waste neutralization and disposal, storages (feed balance storage, RO feed balance, RO permeate collection, recycled water and RO clean in place (CIP) tank), chemical dosing (ammonia, hypochlorite, citric acid, sulphuric acid, sodium bisulphite and caustic soda).

The treatment process information provided is limited and consequently the IV's assessment is limited to the process overview. However, the level of technical design undertaken is considered satisfactory for a conceptual level design.

Basket Strainers

Basket strainers with a screen size of 500 micron are proposed to screen incoming effluent. This appears to be an appropriate technology selection for the protection of the UF membranes. The capacity of the units, material selection, instrumentation or control system was not verified in this initial review.

Ultrafiltration

A Memcor submerged Ultrafiltration system has been proposed. The technology selection appears to be an appropriate pre-treatment for the reverse osmosis system. The risks attendant with UF fouling and subsequent loss of flow to the RO is mitigated by the inclusion of a single fully redundant train, which lowers the design operating flux from 41 L/m^2h to 33 L/m^2h when in operation .

Coagulation prior to the UF process has been introduced which will also help reduce the risk of fouling in addition to the removal of some TOC/BOD. The proposed type of coagulant and approximate dosage rate appear to be appropriate for this application.

Reverse Osmosis

A two (2) stage reverse osmosis system consisting of Saehan membranes has been provided. The technology selection is an appropriate desalination system. The system has in total eight (8) RO trains and has been sized on a flux of 17.2L/m^2/h to provide a net permeate of 20ML/d. The system appears to be adequately sized for flow requirements of the network distribution design.

Ion Exchange and degasser

The AVA have introduced Ion Exchange (IX) to remove residual ammonia from the RO permeate. This technology is appropriate for the removal of ammonia from water, however; details provided to the IV are limited for this initial review. Data on resin type, capacity, selectivity and kinetics is required in order for the IV to comment on the IX plant.

Process flow diagrams indicate that the IX waste is recycled back to the coagulation tank, a review of the chemistry and mass balance is recommended to assess the risk of scaling & if the IX is adequately sized.

The 5% sulphuric acid used to regenerate the IX will be produced in-situ. Review of the energy balance around this operation is recommended to assess if this will have an adverse effect on resin life.

Waste Neutralization and Disposal

A waste neutralization and disposal system has been provided for the waste streams. This is considered an acceptable technology selection for the neutralization and disposal of the waste streams. Information on the capacity of the units, details of mechanical fit outs, size of units, material selection, instrumentation or control system was not provided for this initial verification.

Storage Tanks

AVA notes that the on-site chemical storage has been sized to provide 24 days consumption plus an additional 7 days to allow for chemical delivery lead times based on the 25ML/day plant capacity. The IV notes that the storage capacities appear to be sufficient.

Chemical Dosing

Generally the chemical dosing proposed appears satisfactory for the concept design of the RWTP. Information on dosing rates was not provided for this initial review.

Plant Size

The plant is designed for an average output of 20ML/d with a potential to expand to 25ML/d thereby satisfying the requirements of the distribution network design to ultimately meet customer demand. The concept design appears to provide sufficient treatment capacity based on installed membrane area and intermediate and final storage capacity to deliver the rated plant output.

Waste Disposal and Bypass

Estimates of waste generation are in the vicinity of 8 to10 ML/day. This ratio is dependent upon a request for the relaxation of the ammonia concentration limit. There is a proposed cross connection with the Liverpool to Ashfield Pipeline (LAP) that is sized to bypass the peak output of the RWTP for use during commissioning. Any out of specification recycled water will now be discharged to the sewer at the minimum plant operating rate.

RWTP Reliability

The IV cannot verify operating life expectancy of plant components as is not possible to comment on issues such as fouling management and membrane protection due to limited information on the level of instrumentation and data management.

The UF system consists of 5 trains with 1 standby train and the RO system consists of 8 trains with 1 standby train. The system appears to have adequate redundancy.

Interchange ability is provided for the RO process. The RO trains use standard element pressure vessels which can accommodate a range of RO membranes. The UF system will be limited to membranes supplied by Siemens.

4.3 Verification of the proposed distribution network design

AVA have designed the network with two distinct operating zones, southern Smithfield region and northern Camellia region. AVA has noted that this design philosophy allows increased reliability, with the ability to operate each zone independently. The three reservoirs (Fairfield RWTP clear water tank, elevated reservoir and Camellia reservoir) have been provided with potable water top-up, allowing for a total of 12.3ML/d to supplement the recycled water supply.

Verify Distribution Network Design

The head loss at some sections of the transfer mains is estimated by AVA at 7 m/km during peak flow periods, which exceeds the recommended level of WSA Water Supply Codes. However, despite the higher design head loss, the velocity remains within the WSA guidelines of 2m/s. AVA have noted that the design approach was to maximise the use of the 12" gas main along Woodville Rd. AVA consider this approach to be consistent with the intent of the code to provide an economic design.

AVA propose to use SDR 17 polyethylene pipe downstream of the Woodville reservoir. This pipe class is less than the minimum pipe class rating of PN16, recommended in WSA 03-2002. AVA have addressed the risk associated with this and have noted that the maximum operating pressure in this section will be much lower than the recommended maximum operating pressure of SDR 17 polyethylene pipe.

It is understood that preliminary hydraulic assessment has been conducted to optimize head loss and achieve desired performance along RW distribution network. The hydraulic assessment has not been verified in this initial review.

Verify Pipe Networks & Valve Selections

The network components and connection details appear to be in compliance with WSA03-2002 and WSA02-2002. The valve types offered appear to be appropriate under the WSA specifications however valve sizes are yet to be selected.

Pipe material selections offered are all plastic which are appropriate for recycled water systems. The predominant choice is PVC-O or GRP for trenched section and PE100 for directionally drilled and thrust bored sections. No jointing systems have yet been specified.

4.4 Verification of operation, monitoring and reporting protocols

Verify Flow Estimation (Inflow - Secondary Treated Effluent)

AVA have indicated that the RWTP inlet and waste discharge have been designed for capacities of 37 ML/d and 10ML/d respectively. These capacities are adequate for the design flows of the RWTP.

Verify Supply Reliability from Reservoirs

The sizing of the reservoirs at Woodville Golf Course and Camellia appear to be satisfactory and have accounted for

- operation volume that is 0.8 times the foundation customers peak hour demand
- A Dead volume of 0.25m at the base of the tanks
- and a freeboard of 0.25m

Verify Operation and Maintenance

Reservoirs

The operation and maintenance of Woodville Golf Course and Camellia Reservoirs without disruption to services is possible under the current configuration. The storage at twin compartments of Camellia Reservoir (storage capacity equivalent to a mean day demand) and potable water top up arrangements are expected to ensure the continuous supply of RW.

Water Supply Network

The water distribution network, pump stations, reservoir, actuated valve and metering stations will be fully automated and suitable for unsupervised control and operation.

The pump at the transfer pump station will be fitted with suitable instrumentation and will be controlled from the SCADA system sited in the Fairfield plant. Both the Camellia and Fairfield pump stations contain variable speed drives.

It is proposed that the pumping units at the Fairfield Pump Station will be controlled via the level at the Woodville Elevated reservoir with additional pressure feedback from the pressure transmitter at the Marubeni off take, while the pumping units at Camellia Pumping Station will be controlled by a pressure transducer at a remote location of the transfer main. Additional review of this arrangement is recommended.

AVA has indicated that the locations and discharge rates of the scour valve outlets to the sewerage system have been identified and approved by SWC.

Maintenance of Critical Mains and Mechanical-Electrical Components

The asset management plan presented by Alinta for periodic and preventative maintenance of critical RW mains, pumps, valves, motors and ancillary components appears to be satisfactory and in line with the asset management plan of major water utilities. There appears to be minimal disruption of services when a pumping unit is off-line for maintenance purposes at RWTP and Camellia Reservoir.

RWTP

There appears to be minimal disruption of RW production during maintenance of UF and RO units. The adjustment of flux rate at UF unit and inclusion of an additional RO unit appear to be adequate to undertake scheduled maintenance works without affecting the RW production.

SCADA System

The SCADA system and ancillary instrumentation and monitoring units appear to be satisfactory. The system will be designed to log a number of process parameters suitable for tracking the plant performance and also for development of O&M plan. Instrumentation to monitor inflow rate from LAP, waste generation and volume of RW production could not be verified

4.5 Verification of operating cost estimates

The methodology adopted in determining the operating cost appears to be satisfactory. The costs appears to be based on supplier quotes and in-house experience.

Appendix A - KBR Independent Verification team qualifications and experience.

The verification team for the revised scheme comprises the following IV Staff:

- Kanishka Banerjee - *MESc (Environmental), BE (Chemical)*
  Technical Input - Process engineering review.
  Experience - Kanishka has more than 12 years of experience in water and wastewater treatment and the chemical industry, specialising in the treatment of industrial and municipal wastewater.

- Brendan Halyburton - BE (*Chemical*) (Honours)
  Technical Input - Report co-ordinator, author and process engineering review.
  Experience - Brendan is a chemical engineer with 5 years experience in the mining, water and wastewater industry. He has experience with membrane based separation process and adsorption process such as ultrafiltration, reveres osmosis, nanofiltration and ion exchange.

- Martin Vries - MBA (Economics & Finance) , MSc (Civil & Coastal Engineering)
  Technical Input - Project supervisor.
  Experience - Martin has over 20 years of experience with a solid background in project management, business development, sales, production and business unit management He has an extensive knowledge in developing and implementing infrastructure related business strategies in Australia

Appendix 9 If applicable, what arrangements have been or will be made in relation to the construction of the infrastructure? (Question 2(b))

The timetable for construction of the network and related aspects of the Rosehill Scheme for which AquaNet is responsible includes the following milestones:

Milestone	**Milestone Date** [16]
Completion of Plant site remediation works	
Completion of detailed design	
Approval of functional design by Independent Verifier	
Completion of contract documentation	
Completion of tendering of contract packages	
Establishment of Site	
Completion of electrical works	
Completion of all civil works	
Connection to LAP	
Completion of system testing	
Completion of commissioning	January 2011

[16] Dates based on AquaNet obtaining a Network Operator's licence by mid-February 2009.

Appendix 10 Risk analysis and management (Question 2(c))

The following documents are attached:

- Risk Management Plan (Schedule 09.10g - Attachment (Risk Management Plan (Plant & Network)))
- Incident & Emergency Management Plan (Schedule 09.10f - Attachment (Incident & Emergency Plan (Plant & Network)))

The AVA Water Consortium (at that time, Alinta and Veolia) submitted the last two of these documents to Sydney Water in August 2007 in response to Sydney Water's request for tenders to deliver the Rosehill Scheme. References in the documents to "AVA" or "AVA Water Consortium" should now be read as "Jemena and Veolia" and references to "Alinta" should be read as "Jemena". The Plans were current at the time the tender was submitted. They are subject to revision and refinement to meet the requirements of the Project Agreement and the Independent Verification process.

AVA
Water Consortium

9.10g

RISK MANAGEMENT PLAN

(PLANT AND NETWORK)

CONTENTS

1. PLANNING

In accordance with the AS/NZS 4804 (Occupational Health and Safety Management Systems – General guidelines on principles, systems and supporting techniques) and AS/NZS 4360 (Risk Management) both Alinta and Veolia, the two companies forming AVA Water Consortium, have documented procedures for the identification, hazard/risk assessment and control of hazards/risks processes.

These procedures include all activities, products and services over which the organisation has control or influence, including activities, relevant relationships with contractors or suppliers.

2. RISK MANAGEMENT – OVERVIEW

Risk management is the term applied to a logical and systematic method of identifying, analysing, assessing, treating and monitoring health and safety risks associated with the activities undertaken by an organisation.

AVA recognises that they have legal and moral obligations to implement an effective risk management program and that risk management is an integral part of good management practice.

To assist in the implementation of an effective risk management program, AVA has implemented a risk management system that is based on and consistent with the principles contained in the Risk Management Standard AS/NZS 4360. The methodology for hazard identification, hazard/risk assessment and control of hazards/risks is also based on their operational experience and their commitment to eliminate workplace illness and injuries.

Underlying principles of the AVA risk management program is that all hazards and risks should be assessed and have adequate controls in place prior to any work commencing. Any additional hazards identified or changes in risk conditions during operations and maintenance activities should be reassessed and if required additional control measures should be implemented as appropriate.

3. RISK MANAGEMENT GUIDELINES

AVA will use simplified Risk Management Guidelines to identify, assess and control risks associated with the Camellia Recycled Water Infrastructure operations and maintenance.

The simplified Risk Management Guidelines comprise eight steps:

- Establish the context – what are we trying to achieve, what are the objectives
- Identify the risks – what can happen, how it can happen
- Analyse the risk without controls – what is the consequence if the risk happens and the likelihood of it happening
- Analyse the risks with controls – What controls are in place to prevent or mitigate the risk
- Evaluate the risks – Is the risk acceptable, do we need to reduce the risks further
- Treat the risks – what can we do to further reduce or exposure
- Monitor and Review – Develop action plans and monitor to ensure actions are completed
- Communicate – report risks and appropriate action plans to management

3.1. HAZARD IDENTIFICATION

Hazard identification is the process of identifying all situations or events that could give rise to the potential for injury, illness or damage to plant or property. To identify hazards and risks associated with operations and maintenance activities a number of methodologies will be used. These may include one or a combination of any of the following:

- Safe Work Method Statement (SWMS) / Job Hazard Analysis (JHA)
- Job-specific Hazard Identification & Risk Assessment
- Hazard inspections/surveys
- Hazard reports
- OHS systems audits
- Incident/accident records
- Job safety analysis
- Legislative requirements
- Reports by employees, supervisors
- Designers/Manufacturers/Suppliers recommendations

3.2. RISK ASSESSMENT

All risks associated with the project should be assessed using the simplified Risk Management Guidelines.

Step 1: To obtain a risk level, the potential consequence of the risk should be determined using the Risk Assessment Form. (refer to Appendix A) Once the highest level of consequence is determined a descriptor and consequence weight (score) can be allocated to the identified risk. Under most circumstances the highest consequence score obtained should be used.

Step 2: The next step is to determine the potential likelihood of the consequences occurring using the Risk Assessment Matrix. (refer to Appendix B) Once a description has been allocated to the likelihood of the risk a descriptor and likelihood level (score) can be allocated to the identified risk. The highest likelihood score should be used to assess the level of risk.

Step 3: Once this is done the Consequence and the Likelihood scores should be multiplied together and a risk severity can be determined.

Step 4: Required actions to prevent or mitigate the risks identified are contained in Risk Treatment Options in accordance with the Australian Standard AS 4360 – Risk Management - Including application of the hierarchy of control. A Cost Benefit Analysis can be undertaken if required.

3.3. HIERARCHY OF CONTROL

Hazard control is the process of determining and implementing appropriate measures to control risks and their consequences associated with that hazard. The control process must follow the control hierarchy, in order, as prescribed in most pieces of Health & Safety legislation.

The approach to hazard control is based on control methods from preferred (elimination), to least desirable (PPE) as follows:

- Elimination
- Substitution
- Engineering Controls
- Isolation
- Administrative Controls
- Personal Protective Equipment Controls.

4. OPERATIONS & MAINTENANCE HAZARD REGISTER

The AVA System Manager will establish the Hazard Register. The Hazard Register will be used to establish the means for setting priorities and developing controls to minimise potential hazards and risk associated with the operations and maintenance activities.

Hazards identified and risks assessed as part of the inspection and audit program will be entered onto the Hazard Register to facilitate consultation and communication on new issues. Hazards and their control measures entered in the Hazard Register will be discussed with site personnel during Toolbox Talks.

4.1. STANDARD OPERATING PROCEDURES / JOB HAZARD ANALYSIS

The AVA System Manager will ensure that Standard Operating Procedures are prepared for each maintenance activity process and hazard/risk minimisation strategies for the hazards identified are implemented. Where Standard Operating Procedures are not available a SWMS/JHA will be prepared.

4.2. STANDARD OPERATING PROCEDURES

Standard Operating Procedures or SWMS/JHA must include the following:

- Description of the work to be undertaken
- Description of what training is to be given to those doing the work
- Step-by-step sequence of doing the work
- Potential Hazards associated with doing each step of the work

- Safety controls to minimise each hazard
- All precautions to be taken to protect health and safety
- All H&S instructions to be given to persons involved in the work
- Identification of H&S legislation, codes or standards applicable to the work
- Names and qualifications of persons supervising and inspecting the work
- Describe H&S training necessary to commence the work
- Identify the plant and equipment that will be used to complete the work
- Details of inspection and maintenance checks of the plant and equipment

The System Manager will maintain a Register of Standard Operating Procedures / SWMS / JHA's.

4.3. JOB-SPECIFIC HAZARD IDENTIFICATION & RISK ASSESSMENT

Where Standard Operating Procedures are not available a SWMS/JHA will be prepared. The accountable person shall complete a Job-specific Hazard Identification and Risk Assessment Form. This form is to be signed by all members of the work crew to indicate an understanding of the hazards and issues involved in the days planned work activities.

5. ROLES AND RESPONSIBILITIES

The Operation and Asset Management Review Committee (OAMRC) shall:

- Establish and maintain an Operations and Asset Management Risk Register that identifies the critical high level risks associated with the Camaellia recycled water assets,and will ensure the monitoring and trending of these risks
- The Risk Register shall be reviewed, and new risks and risks ≥ "high" shall be validated
- Report monthly, the current high level risks to the AVA Risk Register and thence on to the Project Management Team
- Identify and monitor the effectiveness of existing risk controls, and recommend the implementation of additional controls as required

5.1. OAMRC CHAIR

The Chair of the OAMRC shall:

- Set the meeting date, time and agenda
- Ensure decisions and assessments are recorded and minutes of the meeting are produced in a timely fashion ensure that the Asset Management risk register is updated in accordance with the decisions of the OAMRC

- Elevate any significant changes to risk levels including increased risk levels and appropriate controls to the AVA Risk Register
- Prepare a monthly report for Sydney Water Corporation (SWC) on the decisions of the OAMRC relating to increased risk levels and appropriate controls
- Liaise with the AVA Risk Manager to ensure that all asset management risks and their controls listed on the AVA Risk Register are accurate and current.

5.2. SYSTEM MANAGER

The System Manager is responsible for ensuring the establishment of AVA's standards, practices, technical policies, regulatory risk and change management processes for existing and new clients are in place and adherred to AVA for assetsor for AVA Clients.

A key role of the System Manager is to manage the controls on the risks associated with their assets class. Prior to the OAMRC meeting each System Manager should ensure that the relevant monthly asset performance reports, incident/near miss reports, legislative compliance reports (and implementation of improvement plans) are reviewed to identify and assess any changes to the risk profile of the asset.

If a change to a risk or the risk profile (particularly an emerging or increased risk) is identified, the System Manager is responsible for ongoing risk management including reviewing and monitoring on a monthly basis:

- Changes to key technical legislation and standards
- Incident/near miss reports that have a significant impact on the safety and reliability of network assets legislative compliance yearly reports and implementation of improvement plans

6. ASSET PERFORMANCE REPORTS

Asset Issue Registers identify any emerging issues and help identify and assess any emerging / changing risk levels. This ensures the development of strategies and allocation of resources including:

- Manage any impacts identified in the review process to identify and assess any changes to risk levels of the asset as a result of these changes / incidents
- Review the effectiveness of current controls (that they are adequate to deal with any change to the risk profile or level) including prevention, mitigation and recovery and initiate corrective action where the exposure to the risks increases
- Identify and assess the new or planned controls and developing implementation plans to mitigate and monitor any increased risks (including the allocation of resources)
- Prepare a monthly risk assessment update report for OAMRC on the highest risks relating to the asset, any emerging issues, new or changed risk levels, effectiveness of current controls and proposed controls.

Note: If the issue is of a technical nature (ie a change to the approved materials listing or a Technical Policy) the System Manager is responsible for the overall review of the current technical policy / approved material and for preparing a report for Technical Policy Review Committee (TPRC) on change and proposed controls. This includes coordinating technical and expert input and conducting risk assessments on the proposed change.

7. OAMRC LEGISLATIVE CHANGE ASSESSMENT

Any changes (actual or pending) to Legislation, Regulations, Codes or Standards that impact on the risks or controls within the risk register shall be assessed by the System Manager and be reviewed by the OAMRC.

AVA team members who become aware of changes (or pending changes) should notify the System Manager of the impending change. The Change History Form is used to reflect changes.

The System Manager shall allocate a suitable person to undertake a risk assessment and report for the OAMRC, in accordance with the AVA Risk Management process.

7.1. CHANGE HISTORY FORM

Date	Revision	Change Description	Reason for Change
Eg: 1 – 7 – 07	1	DOP Part 3A Guidelines	Legislative Compliance

8. AVA RISK MANAGEMENT ACTION PLANNING

8.1. TREATMENT OPTIONS

Treatment Options	Actions Required	Tick Option(s)
Accept Risk	Extreme - must be approved by the AVA Directors	
	Very High - must be approved by the General Manager	
	High - must be approved by the Project Director	
	Moderate - must be approved by Senior Management	
	Low - must be approved by Site Management	
Monitor Controls	Controls currently in place are critical and therefore must continue to work. Develop plans/timetable in conjunction with Internal Audit and/or the Risk Manager to ensure appropriate and regular review/verification of controls occur either by Audit or by Management self assessment/exception reporting.	
Eliminate Risk	Usually not a viable option. However, if the risk is considered too high for the potential return then you may choose to not perform the task, thus eliminating the risk. It may be possible to convince others to perform the task independent of AVA and not via any contractual arrangement.	
Transfer Risk	Risk can be transferred by way of insurance or by way of various contracts, hedges etc. Usually such transfers bring about their own specific risks and if this options is chosen it should be in consultation with the appropriate internal specialists eg Legal, Insurance, Treasury etc.	
Enhance Existing Controls	Existing controls may in fact be sufficient to substantially mitigate risk. However, experience has shown that they are not working. This could be because of a minor problem such as new staff, lack of communication etc.	

Treatment Options	Actions Required	Tick Option(s)
Reduce Impact	Risk can be reduced by addressing one or both of the risk parameters - impact or likelihood. Impact is often capable of being reduced via such things as contingency planning or performing the task in a different manner or location. Likelihood is usually reduced by common controls such as training, policies & standards, various work practices etc	
Increase Risk	Economies, risk/reward and/or portfolio affect warrants taking a greater risk	

8.2. COST BENEFIT ANALYSIS (OPTIONAL)

Note that this is a guide only and while there may be some instances where this analysis can be used to justify actions and/or expenditure, it is envisaged that a more robust financial model and business case be used for larger requirements.

Treated Risk Level	Definition	Level
Impact Risk Level		
Likelihood Level		
Treated Risk Value		
Estimated Value at Risk	$	

Risk Level if Action Plans Adopted	Definition	Level
Impact Risk Level (re-perform page 1 steps assuming proposed actions in place)		
Likelihood Level (re-perform page 1 steps assuming proposed actions in place)		
Actioned Risk Value		
Estimated Cost of Action Plans	$	
Potential Risk Savings (Treated Risk level - Actioned Risk Level/Treated Risk Level X Estimated Value at Risk)	A $	
Estimated Cost of Action Plans	B $	
NET BENEFIT (a - b)	$	

	Name	Signature
Prepared by:		
Approved by:		
Date:		

9. KEY HAZARDS – HAZARD CONTROL PLAN

The Key Hazards action control plan covering task, activity, hazards, risks, risk rating and the Control Measures will be reviewed at preliminary precommissioning stage with all key people from the Recycled Water Plant, Distribution Network, Response Centre, Construction, SWC and AVA management present. This review with enforce actions and resources required at an early stage so that a smooth and safe hand over managed effectively.

10. HAZARDS CONTROL PLAN – SAMPLE

The following is intended as a sample only. The actual Project Hazard Control Plan will be prepared prior to Construction

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
Pre- Commissioning	Communications between Recycled Water Plant , Network Distribution and Response Centre	In adequate information for asset testing O&M key people not made familiar with assets	2 2	Ensure preparation planning meeting happens Ensure key people made available to familiarize themselves
Asset & O&M Hand Over	Limited Operating knowledge and skills	Danger in operating assets Safety and Environmental incidents	2 2	Ensure O&M Manuals and Training are made available to Technicians Ensure operating procedures are in place and key people trained
1. Programmed Maintenance	CONFINED SPACE	1. Overcome by hazardous / toxic gas	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Restricted ingress & egress	2	2. Use of trained Personnel
3. Renewals		3. Heat stress	3	3. Compliance with SWC "Safe Entry & Working in Confined Spaces"
4. Audits / Inspections		4.Fatigue	3	4. Provision of Exhaust fans for air flow in work space
				5. Monitor air quality
				6. Monitor space temperature
				7. Regularly change work team to prevent heat stress and fatigue
				8. Rescue equipment to be provided and in place
				9. Standby person to in attendance at all times

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	MANUAL HANDLING	1. Muscular injuries - Strains and sprains	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Skeletal injuries - fractures and back injuries	3	2.Training advising of correct techniques & procedures for lifting, pushing and pulling of equipment and material
3. Renewals		3. Crush Injuries	2	3. Use two men lifting procedure & provide appropriate mechanical aids to assist in work
4. Audits / Inspections				
1. Programmed Maintenance	NOISE & VIBRATION	1. Hearing damage	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Fatigue	3	2. I f possible remove source of noise / vibration
3. Renewals				3. Ensure all staff are provided with appropriate hearing protection
4. Audits / Inspections				4. Arrange to regularly change staff to prevent fatigue
1. Programmed Maintenance	DUST	1. Inhalation	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Skin contact - irritation	3	2. Clean area of all possible dust before commencing work
3. Renewals				3. Keep area as dust free as possible during work
4. Audits / Inspections				4. Wear appropriate respirator for lime
				5. Wear face shield when working in lime dosing tank area
				6. Wear appropriate gloves and long sleeve clothing

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	HAZARDOUS SUBSTANCES - CHEMICALS	1. Splash with chemicals	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Inhalation of chemical	2	2. Wear appropriate over clothing for working the chemical
3. Renewals				3. Wear appropriate respirator for the chemical being worked on
4. Audits / Inspections				4. Wear the appropriate safety footwear
				5. Ensure all MSDS are current showing safety precautions and hazards associated with the chemical
				6. All substances to be stored in appropriate containers with signs showing contents
1. Programmed Maintenance	ELECTRICITY [INCLUDING STATIC]	1. Electrocution	1	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Severe burns	2	2. Only qualified tradesperson to work on electrical equipment
3. Renewals		3. Electric shock	3	3. All leads to inspected regularly as per work Cover requirement
4. Audits / Inspections				4. The use of ELCB protection on leads and electrical tools
				5. Restricted access to high voltage areas. Barricades and signs to be used to prevent unauthorized entry
				6. Only authorized High Voltage operators to work on High Voltage equipment

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	GAS, FUMES AND FOUL AIR	1. Overcome gas or fumes	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Irritation to eyes and breathing passages	3	2. Provide adequate ventilation via fans
3. Renewals				3. Gas test before entry and monitor during work
4. Audits / Inspections				4. Use only qualified personnel to work in these areas
1. Programmed Maintenance	HOT SURFACES	1. Burns - major	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Burns - minor	3	2. Restrict access to areas where hot surfaces may occur
3. Renewals				Provide signage to warn personnel of danger
4. Audits / Inspections				3. Continually monitor temperature until at a safe level
1. Programmed Maintenance	HYDRAULIC PRESSURE	1. Broken bones	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Strains and sprains	3	2. Ensure all systems have been isolated and pressure removed
3. Renewals		3. Bruising	3	3. Double isolation where possible
4. Audits / Inspections		4. Property Damage	2	4. Work on this type equipment to have pre planning for shut downs

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	MOVING MACHINERY	1. Death	1	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Loss of limbs or digits	2	2. Provide adequate guarding for machinery
3. Renewals		3. Crush injuries	2	3. Barricade mobile equipment to prevent access
4. Audits / Inspections				4. Provide barricades and signage to advise personnel of danger
				5. Loose clothing not to be worn near machinery
1. Programmed Maintenance	PRESSURE / VACUUM	1. Broken bones	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Strains and sprains	3	2. Ensure all systems have been isolated and pressure or vacuum removed
3. Renewals		3. Bruising	3	3. Double isolation where possible
4. Audits / Inspections		4. Property Damage	2	4. Work on this type equipment to have pre planning for shut downs
1. Programmed Maintenance	RESTRICTED ACCESS	1. Strains and Sprains	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs				2. Ensure regular breaks for stretching and movement
3. Renewals				3. endeavour to reduce work time on these jobs
4. Audits / Inspections				4. Propose changes to remove these difficult situations from the plants

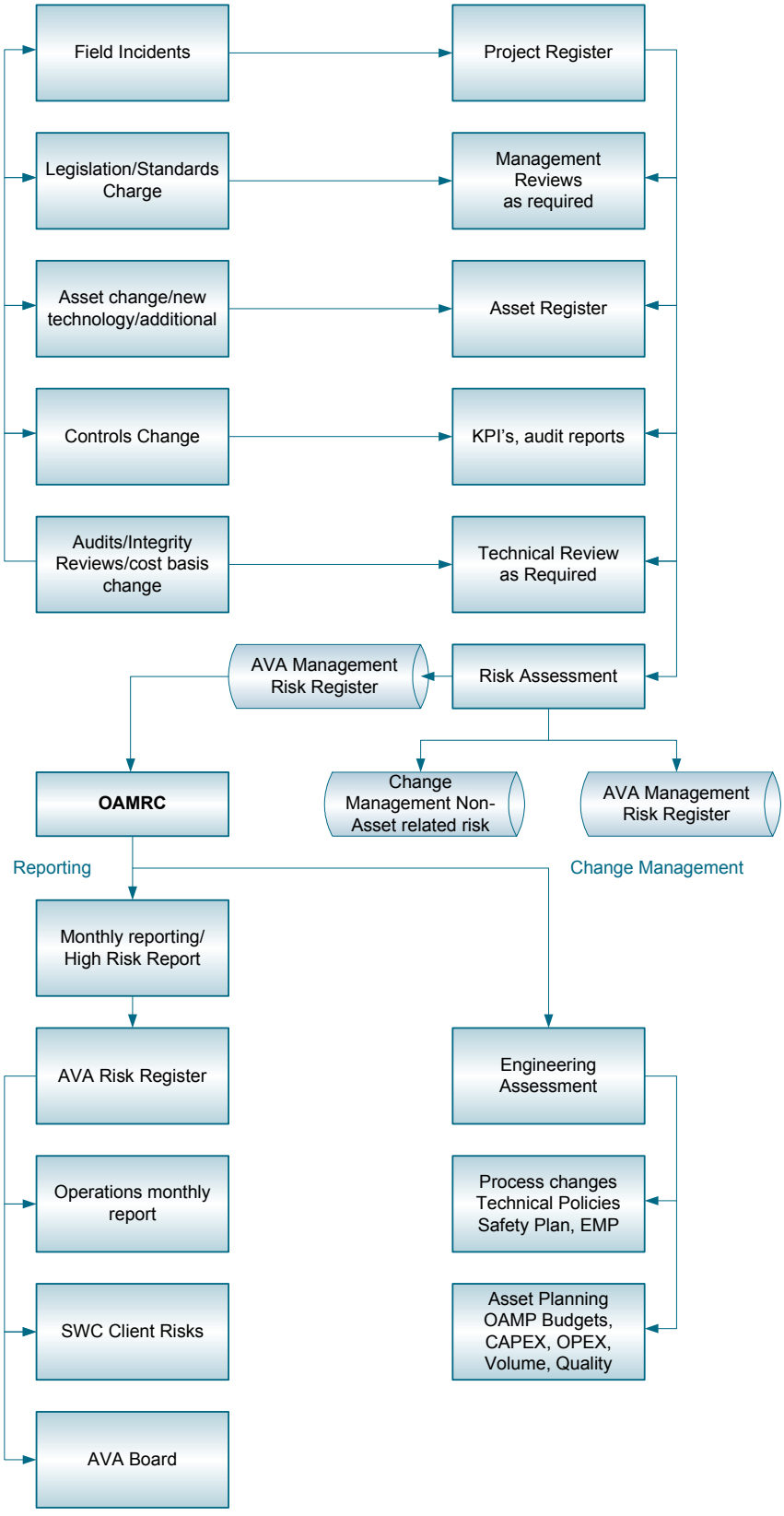
Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	TOXIC MATERIAL	1. Poisoning - death	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Inhalation of fumes / vapor	3	2. MSDS sheets to available adjacent to storage area
3. Renewals				3. Appropriate PPE as required by MSDS
4. Audits / Inspections				4. Training for all personnel required to work with these materials
1. Programmed Maintenance	TRAFFIC / VEHICLES	1. Injury to personnel	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Damage to property	3	2. Create traffic movement plan for site
3. Renewals				3. Appropriate barricading to be installed
4. Audits / Inspections				4. Use of qualified traffic control personnel
				5. Train all personnel to be aware of correct method of moving around site
1. Programmed Maintenance	UNDERGROUND AND OVERHEAD HAZARDS	1. Electrical shock	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Pressure release of liquid	2	2. Test for underground services before commencing work
3. Renewals		3. Damage to underground services	2	3. Obtain "permit to dig" before commencing
4. Audits / Inspections				4. Check for overhead hazards before using cranes and lifting equipment - power lines and service lines
				5. Use only qualified personnel to undertake this type of work

Draft 14/02/07 VO – Key Hazards				
Task / Activity	**Hazard**	**Risks**	**Risk Rating**	**Control Measures**
1. Programmed Maintenance	SLIPPERY AND UNEVEN SURFACES	1. Slips trips and falls	3	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs				2. keep alert when working in these conditions
3. Renewals				3. Provide appropriate safety footwear
4. Audits / Inspections				4. Barricade off slippery and uneven areas for normal access
				5. Area to be kept as clean as possible at all times
1. Programmed Maintenance	BITES AND STINGS	1. Severe bites and stings - allergic reaction	2	1. Prepare Work Method Statement, Permit to Work or Job Safety analysis for job to identify method & carry out LOTO as required
2. Breakdowns / Repairs		2. Minor bites and stings	3	2. Check area before commencing work for insects / spiders
3. Renewals				3. Wear appropriate gloves
4. Audits / Inspections				

11. JOB HAZARD ANALYSIS PLANNING

JOB HAZARD ANALYSIS for Job Planning		JHA No.: New ☐	Page of Revised ☐
Job:	**Location:**	**Leader:**	**Section:**
Required and/or Recommended Protective Equipment:			
Basic Job Steps In Sequence Order List the logical steps required to carry out the job (neither too broad nor too narrow). Is this the most efficient way to perform the job?	**Potential Hazards** Identify the personal environmental and/or business hazards involved with each step.	**Risk Assessment** Use the AVA Nomograph	**Control Measures To Be Employed** Specify how hazards are to be reduced to as low as reasonably practicable by elimination, substitution, engineering, applying administrative controls or by utilising protective equipment.

12. OPERATIONS RISK MANAGEMENT PROCESS



APPENDIX A: RISK ASSESSMENT FORM

AVA Water Consortium

Risk Assessment Form

Issue Description:	
Depot:	
Date:	

Risk Description				
Credible Consequences Summary ▪ Assets/ Profitability ▪ Business continuity ▪ Commercial ▪ Reputation/ Regulatory ▪ Environment ▪ Human Resources				
Controls in Place				
Consequence Descriptor		Consequence Score		A
Credible Likelihood				
Likelihood Descriptor		Likelihood Weight		B
Current Risk Score (A*B)		Current Risk Severity		

Treated Risk				
Treatment Description				
Revised Credible Consequences Summary				
Consequence Descriptor		Consequence Score		A
Revised Credible Likelihood				
Likelihood Descriptor		Likelihood Weight		B
Treatment Risk Score (A*B)		Treatment Risk Severity	Low	

Document:	Risk Assessment Form	Date:	30/03/2007
		Rev:	B

APPENDIX B: RISK ASSESSMENT MATRIX

Risk Matrix

Consequence	
Minor	0.5
Important	1
Serious	1.5
Major	4
Catastrophic	5

Likelihood	
Rare	1
Unlikely	2
Possible	3
Likely	4
Almost Certain	5

Risk Severity Levels	
Low	<1.5
Moderate	2.0 – 4.0
High	4.5 – 8.0
Very High	10.0 – 16.0
Extreme	20.0 – 25.0

Controls	
Most Satisfactory	0.8 – 0.95
Satisfactory	0.6 – 0.8
Warrants Attention	0.3 – 0.6
Unsatisfactory	0.1 – 0.3
Most Unsatisfactory	0 – 0.1

RISK MATRIX SCORES AND LEVELS

	Minor	Important	Serious	Major	Catastrophic
Almost Certain	2.5 Moderate	5.0 High	7.5 High	20.0 Extreme	25.0 Extreme
Likely	2.0 Moderate	4.0 Moderate	6.0 High	16.0 Very High	20.0 Extreme
Possible	1.5 Low	3.0 Moderate	4.5 High	12.0 Very High	15.0 Very High
Unlikely	1.0 Low	2.0 Moderate	3.0 Moderate	8.0 High	10.0 Very High
Rare	0.5 Low	1.0 Low	1.5 Low	4.0 Moderate	5.0 High

CONSEQUENCE

AVA
Water Consortium

9.10f

INCIDENT AND EMERGENCY PLAN

(PLANT AND NETWORK)

CONTENTS

1. INTRODUCTION

The purpose of this document is to outline the plan AVA will invoke in the event of an Incident involving the Recycled Water Treatment Plant or Network under AVA's management.

Should an Incident occur, this plan will provide the following:

- An efficient, safe and coordinated plan of action in response to a incident
- Detail and log the appropriate responses to an incident with the sole intention to control and minimise the impact severity to the Plant or Network
- Define the roles and responsibilities of all Incident response personnel. Log actions and monitor the location of all personnel involved in the Incident management
- Ensure effective communications are implemented and reporting of all vital information is completed as soon as practically possible
- Facilitate resumption of normal operations when appropriate
- Provide a basis for training personnel in the safe handling of incidents
- Create awareness in the workplace regarding Incident situations and how they are managed

1.1. GLOSSARY OF TERMS

1.1.1. AN INCIDENT

An incident is any event that has the potential to adversely affect the health and safety of employees, the community, the environment or the normal operation of the Plant and/or Network. It may include:

- Critical power failure
- Customer complaint
- Emergency evacuation
- Major damage
- Major fire
- Spillages

1.1.2. INCIDENT LOG

This plan utilises several logs to document the actions of key personnel activities during the course of an Incident. The Response Centre at Parramatta is responsible for collating these logs during an Incident, disseminating this information and creating a central Incident Log. AVA will utilise a software (computer) application to effectively communicate the status of an Incident to nominated stakeholders during the course of an Incident. The Incident Log is available "on line" for real-time written communication that provides simultaneous access to multiple viewers.

1.1.3. INCIDENT MANAGEMENT STRATEGY

This is a documented strategy that AVA has created to outline a variety of response protocols. Within this document are comprehensive descriptions of the Incident Classifications, titles for Incident Personnel Roles and their respective responsibilities. It is within this document that the basis for training of personnel is derived and practically completed.

1.1.4. INCIDENT RESPONSE MANUAL

This is a document that is created by professional personnel in the management of AVA assets. This document contains information that may assist with an effective decision making process for management of Plant or Network Incident. It contains technical data, asset characteristics and properties, pipeline information, Plant information and operating pressures etc.

2. PURPOSE

The purpose of this plan is to:

- Reduce the risk of incidents occurring
- Reduce the impact of incidents on AVA personnel, clients and customers, the community, the environment and AVA assets & systems
- Promote and support the maintenance of effective incident management processes

This plan is intended to provide guidance to the operations team on the correct response to an incident that occurs on, or near to, the Plant or Network. This plan is not intended to be a voluminous set of instructions but more a document that gives insight into and guidance on the various aspects of incident management, before, during and after any incident that may occur on or around the operating facility.

This document is to be used in conjunction with the SWC incident management and reporting requirements. It also strongly relates to the Plant and Network Stakeholder Management Plans – Schedule 9.10i and the overarching Project Management Plan Schedule 9.1.

3. SCOPE

This plan applies to the operation and maintenance of the Plant and Network, for the Camellia Recycled Water Project.

3.1. ABBREVIATIONS

AVA	AVA Water Consortium
CEO	Chief Executive Officer
CMP	Crisis Management Plan
CMT	Crisis Management Team
CRWP	Camellia Recycled Water Project
COO	Chief Operating Officer
EPA	Environmental Protection Authority
IMT	Incident Management Team
Veolia	Veolia Water Australia (VWA)

GMO	General Manager Operations
IMP	Incident Management Plan
IRT	Incident Response Team
MSDS	Material Safety Data Sheet
SCADA	Supervisory Control and Data Acquisitions or Integrated Instrumentation Control Automation & Telemetry System
SPS	Sewage Pumping Station
SWC	Sydney Water Corporation

4. BACKGROUND

The aim of this plan is to ensure alignment with specific incident management plans and consistency with all other incident management plans and practices.

These key principles, which underpin AVA's approach to crisis and incident management, include:

- **Risk Analysis**
  The identification of hazards and risks which could impact AVA and/or Sydney Water Corporation (SWC) through various customer, community, environmental and operational implications.

- **Prevention**
  The planning and documentation of prevention and mitigation activities for all major hazards, and allocation of responsibility for their implementation.

- **Preparedness**
  The development, implementation and review of specific incident management plans and processes to manage identified risks, the training of staff, and establishment of facilities to ensure AVA can respond effectively to an incident.

- **Response**
  The issue of warnings and establishment of processes for effective notification of incidents, and mobilisation of resources to combat the incident or threat.

- **Recovery**
  The return to normal operations, management of debriefs, and implementation of lessons from the response process.

These principles are supported by:

- A commitment to the safety of all AVA employees, contractors, agents and visitors

- Adoption of an all hazards approach and consideration of the total impacts of an incident or crisis; and

- Adoption of the following priorities when combating an incident / crisis

  - Protection of human life and welfare
  - Maintenance and safety of the system.
  - Protection of the environment
  - Protection of assets, commercial arrangements, reputation, and image

4.1. THE HAZARDS AND THREATS

An integral part of effective incident management is the prior identification of all hazards which can reasonably be expected to initiate, or contribute to, an incident. This involves identifying hazards of two different types:

- The hazards arising from the scheduled materials and other hazardous materials associated with the facility; and
- Other types of hazards and threats (as listed below) that could impact upon the operation of the facility

The key hazards and threats that will typically result in the activation of this incident management plan include a potential or actual:

- Communication and control failure (SCADA, SCADA hardware and software)
- Accident resulting in serious injury or fatality to staff, contractor or member of public
- Loss of power supply or other critical community infrastructure (e.g. telephone, water etc)
- Major storm / flood events (including lightning strike, hail storm, severe wind storm etc)
- Earthquake
- Raw water quality problems
- Treated water quality problems
- Treated water quantity failures
- Failure of Recycled Water Plant
- Pipeline failures
- Pumping station failure
- Failure of valves / gates / penstocks
- Major equipment failure affecting plant operation
- Fire outbreak
- Chemical leaks, spills or release
- Bush fire
- Non-availability of chemicals and spare parts
- Inability of contractors and suppliers to provide required service
- Drought
- Long term industrial dispute

- Damage due to terrorist attack
- Vandalism affecting plant operation
- Other criminal activity (e.g. theft, extortion, kidnap, sabotage, protest group action, etc)
- Any other incident that affects AVA's ability to deliver service

4.2. THE CONSEQUENCES

Inclusion of the consequences in the Incident Management Plan can enable the Integrated Operations Team to better plan for mitigation of any incidents.

Key consequences that may arise from an incident are:

- Interruption of service to our customers
- Threat to life, health and safety
- Threat to the environment
- Customer complaints
- Threat to our business operation and contract validity and viability
- Threat to community infrastructures
- Damage to private or public property
- Threat of prosecution or fine
- Threat of litigation
- Threat to our business's public image

It is important that the Integrated Operations Team is aware of these consequences and well trained and prepared to respond to such outcomes from any incident, to minimise or mitigate the extent of the incident consequences.

4.3. RESPONSE CENTRE (NORTH PARAMATTA)

The notification of a potential Incident should be directed to the Response Centre on 131 909 or 132 909. Upon receipt of the notification, the Response Centre will initiate the Incident Response Plan to effectively and safely manage the Incident.

For all Incidents involving the Camellia Recycled Water Project, the Response Centre will assume the role of Incident Management Centre. This will ensure there is one central point of communication and dissemination of information to relevant stakeholders. The Centre's responsibilities include and may not be limited to:

- Confirm that an Incident exists
- Implementation of the "Incident Response Plan"

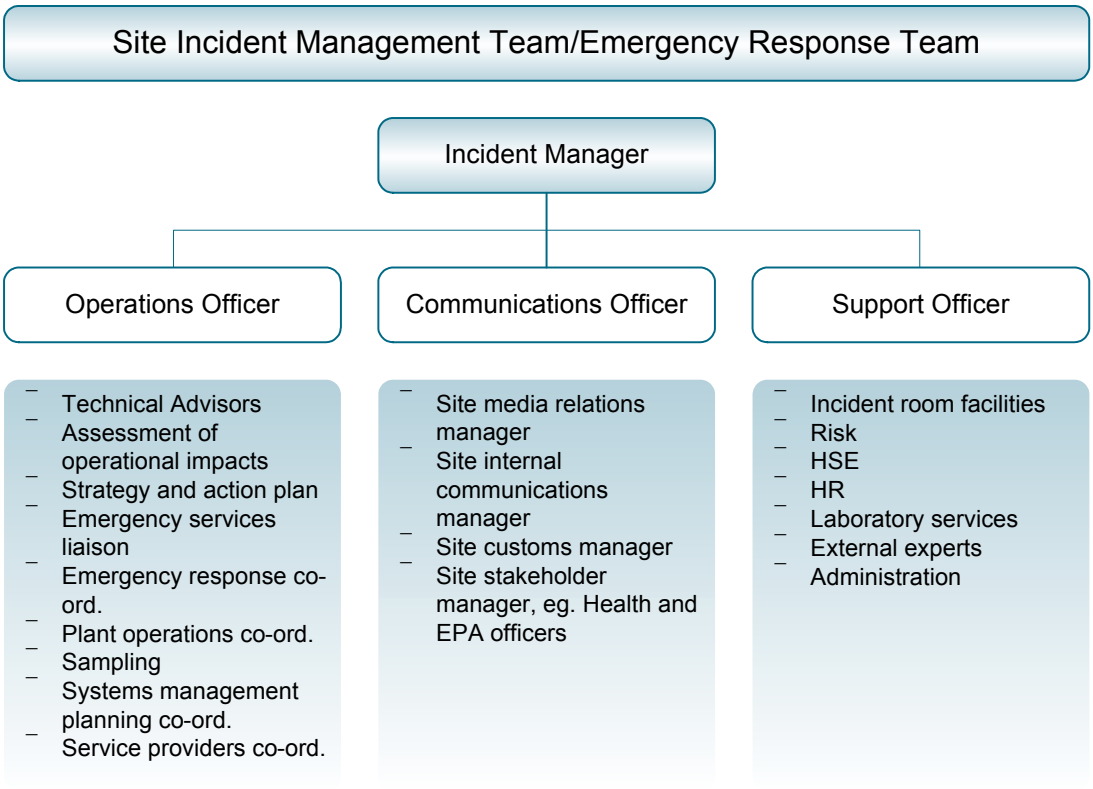
- Notifying key personnel to initiate and implement repair procedures as directed by the Incident Management Team (IMT)
- The initial notification to relevant statutory authorities of the Incident
- The communication of decisions and actions (via logs) to the Centre; and
- Implement all necessary actions required to ensure the safety of people, the environment and control the Incident until normal operations can take place.

5. ORGANISATIONAL STRUCTURE

The following diagram indicates the structure and roles of the Site IMT, which is directly responsible for managing all aspects of operational and/or technical response to an incident which threatens safety of personnel and/or the community, threatens the integrity or ongoing safe operation of the facility, or threatens the environment, including:

- Assessment of operational implications and development of an overall site response strategy
- Handling site communications with media, the customer, stakeholders, internal staff, etc
- Provision and coordination of technical support, resources and materials required to bring the incident under control

For general working methods and individual roles and responsibilities, see following sections.



6. RESPONSIBILITIES

6.1. INCIDENT MANAGER

Performed By: System Manager

Reporting To: AVA Project Control Group

Responsibilities: Coordination of AVAs response to a *Major Incident* at an operating facility

- Provide high level coordination of IMT activities and ensure the response is managed with the following priorities:
  - Protection of human life
  - Maintenance of site and process safety
  - Protection of the environment, assets, commercial arrangements, and image
- Ensure swift approval for any specialist resources required by Incident Management Team
- Consider the following aspects of the incident:
  - All impacts
  - Back up support personnel
  - Resources Coordination
  - Financial/budget requirements
- Liaise with state level external agencies
- Coordinate request for State/Federal support to AVA
- Coordinate resources between AVA business units and facilities
- Coordinate resources from contractors when across AVA coordination is required
- Coordinate communication, information and financial matters
- Support personnel managing major or multiple incidents when issues arise which require corporate level resolution
- Coordinate the provision of hazard intelligence and AVA situation reports
- Coordinate AVA support units such as Media, Risk and Insurance, Legal, OHS&R
- Provide regular updates and briefing sessions for the Project Control Group
- Protect morale of staff and welfare of IMT
- Ensure team operating rules and decision-making processes are defined and the major issues to be addressed are identified and agreed

- Assess need for senior management presence at the incident site, and action as appropriate
- Ensure Site Incident Log is maintained - log sheets, incident notification forms and Incident Manager handover briefing form are included in this manual.
- Oversee Incident debrief after stand down and approve final debrief report

6.2. OPERATIONS OFFICER

Performed By: Operations Supervisor / Network Supervisor

Reporting To: Incident Manager

Responsibilities: Management of all operations directly related to the resolution of a *Major Incident*

- Determine scale of incident and initial response required
- Establish clear command and communications
- Coordinate all AVA and contractor teams on site
- Supervise and ensure operations are implemented as directed by the Incident Manager
- Liaise with external agencies on a plan of action for all damages to be repaired with the minimum disruption to SWC
- Liaise with AVA and external expert technical personnel on site
- Provide update information to the Incident Manager to ensure information flow to AVA stakeholders is maintained
- Control access to site for all AVA employees and contractors
- Up/down grade incident as situation changes and advise Incident Manager of appropriate action
- Assist Incident Manager in determining longer term response strategy
- Determine needs and request additional resources
- Provide or facilitate the arrangement of specialist technical advice to the Site Response Team
- Expedite internal and external resources required to assist site response
- Monitor and address any additional resource or support requirements of the Site Team
- Maintain a Site Incident Log and provide effective management of the Incident Room information boards and logs - log sheets, incident notification forms and Incident Manager handover briefing form are included in this manual.
- Act as IMT contact for Emergency Services and site specialist resources

- Brief and update IMT on site response developments
- Ensure any media, community or stakeholder interaction on site is directed to and managed by Incident Manager or Communications Officer
- Coordinate engineering expertise and input
- Ensure safety and welfare of all personnel
- After incident is declared over, participate in Incident Debrief

6.3. COMMUNICATIONS OFFICER

Performed By: AVA representative

Reporting To: Project Control Group

Responsibilities: Coordination of all aspects of communications in relation to management of response to a resolution of a *Major Incident*

- Ensure that clear communication channels have been established
- Act as site communications coordinator for:
  - Media – ensuring approval is received from Head Office prior to any release of information or direct contact with the media
  - SWC liaison
  - Internal AVA communications with Head Office and staff
  - Key stakeholders e.g. Health, EPA, WorkCover or Workplace Health and Safety, etc
  - Community liaison
- Develop key messages to be used during the incident and determine the requirement for, and timing of, press releases and media interviews
- Provide media liaison (with Head Office and SWC approval) and control
- Handle all incoming calls
- Provide reports to corporate stakeholders
- Ensure effective information and data collection and distribution
- Advise on the communications implications and coordinate customer, internal, government / regulatory and media communications in relation to the incident
- Facilitate communications support to the Site response team
- After incident is declared over, participate in Incident Debrief
- Coordinate Emergency Services as required

6.4. SUPPORT OFFICER

Performed By: Plant / Network Operator

Reporting To: Incident Manager

Responsibilities: Management of provision of facilities, support services and materials during a Major Incident

- Ensure the required facilities, services and materials are available to combat the incident
- Coordinate activation of Incident Room
- Estimate future service and support capabilities
- Coordinate specialist support and provision of technical advice to IMT from advisers such as:
    - Specialist Engineering
    - Industrial Relations
    - Legal
    - Financial
    - Insurance
    - OH&S
    - Human Resources
    - Risk
    - Environment
    - Laboratory Services
    - IT
    - Relatives response
- Assess and manage effective deployment of specialist resources and personnel
- Monitor welfare of all staff and arrange for specialist resources (e.g. counsellors, masseurs, etc) if necessary
- Set up and maintain central records system for collation and storage of all incoming information and date
- Coordinate shift change-overs
- Ensure that suitable meal breaks and rest periods are adhered to

- Ensure that quality of food and drink is suitable and appropriate for the staff, particularly in a prolonged event
- Ensure information is stored for post incident reviews
- After incident is declared over, participate in Incident Debrief

7. INCIDENT DEFINITIONS

An incident is defined as an occurrence, which will cause or have the potential to cause any of the following:

- An interruption of service to our client / customers (see also Physical Threats)
- A threat to life, health and safety
- A threat to the environment
- A serious customer complaint (quality, quantity, duration, damage, social inconvenience)
- A threat to our business operations (infrastructure, staffing, major suppliers, contract termination)
- A threat to community infrastructure (electricity, gas, telephone, rail, road, footpaths)
- A threat to public or private property
- The theft or vandalism of AVA property.
- The requirements for urgent action under legislation
- A threat to our business's public image or reputation
- A threat to the financial viability of the business
- A threat of prosecution or fines
- Physical threats to the operating facility potentially affecting performance such as:
  - Flood
  - Fire
  - Storm (wind, hail, lightning, torrential, cyclone rain etc)
  - Major spill or chemical release
  - Loss of power, water, gas, telephone
  - Major asset or equipment failure
  - Criminal activity (e.g. sabotage, terrorist act, etc)
- Loss of operating staff due to industrial dispute, serious widespread illness, external group action (e.g. protest group blockage)

7.1. INCIDENT CATEGORIES

Incidents are categorised based on the level at which they can be readily managed with consideration as to their potential to grow. They are not categorised on their current status and/or level of impacts.

The escalating levels of incidents that may be experienced in the daily operations of AVA can be defined as follows:

7.1.1. MINOR INCIDENT

An event causing or with the potential to cause any of the following:

- Minor interruption to services
- Minor interest by the local media
- Minor damage or injury

can be managed as part of routine operations under the control of either a Site Manager or Incident Manager. Minimal assistance and input may also be required from Communications Coordinator and/or functional support/specialists.

7.1.2 MAJOR INCIDENT

An event causing or with the potential to cause any of the following:

- A serious injury
- An interruption to services for more than 4 hours
- An impact on a large employer or industry
- An interest by major daily newspaper, radio or TV
- A demand for action by Regulatory Authorities (eg. EPA, WorkCover)
- Interest by environmental interest groups
- A threat to community infrastructure
- A threat to public, private or the Company's property
- A threat of fines, prosecution or litigation

which requires off site coordination through an incident headquarters with support from Communications Coordinator and or functional support/specialists.

7.1.2. CRISIS

An event causing or with the potential to cause any of the following (the top 5 are those which are a mandatory trigger of AVA's alert procedure):

- Death or serious risk of injury to a person (employee, third party)
- Serious impact on the environment caused by the malfunctioning of a facility or a service
- Serious act of wilful misconduct (threat, blackmail, attack)
- Possibility of legal action taken by a third party against the reputation of AVA
- Possible impact on AVA's parent companies
- Threat to public health and continuity of supply
- A significant impact on business operations and continuity
- A threat to AVA operations
- A threat to the financial viability of AVA
- Adverse attention by national media and financial institutions
- A regulatory authority to direct the actions of AVA under their legislative authority
- Litigation threatened or initiated against AVA

which requires the mobilisation of a Crisis Controller and Crisis Management Team with support from Communications Coordinator and or functional support/specialists.

7.2. EMERGENCY FINANCIAL ARRANGEMENTS

During a declared incident, procurement of necessary resources is to be carried out by the nominated Incident Manager by the most expeditious means available, which may not allow sufficient time to follow the Procurement Policy.

There may be insufficient time for the development of a written brief, a detailed specification, the calling of tenders or the implementation of a normal evaluation and selection process.

In such circumstances, prior verbal approval must be obtained from the AVA Representative or delegate, followed by subsequent written confirmation of the approval. A full report covering all details of such procurement is to be made as soon as practicable after the event, and retrospectively covering approvals obtained.

Exceptional operating costs are to be segregated and documented to enable claiming of reimbursements during natural disasters under State / Commonwealth Natural Disaster Relief Funding Arrangements.

8. INCIDENT PREVENTION AND PREPAREDNESS

A number of initiatives shall be used at the operating facility to prevent incidences that could affect the ability of plant and equipment to deliver services to customers, cause injury to people or damage to equipment or the environment. Initiatives for the identification and control of hazards should include:

- Planned inspections of the operating facility
- Appropriate and regularly refreshed training
- Appropriate incident management arrangements with Contractors
- Comprehensive Induction training for new staff and all contractors and visitors
- Suitable Work Permit System
- Preventative measures and corrective actions

8.1. WORKPLACE INSPECTIONS

Workplace inspections of the operating facility shall be carried out to ensure satisfactory working condition of all equipment, detection of any hazards and proper adherence to all site standards and conditions. More specifically inspections shall include (but not be limited to):

- Walk through operating facility inspection
- Frequent inspection of process and control equipment in the operating facility and major nearby assets (e.g. inlet pumping station and pipework, penstocks and valves etc)
- Periodic calibration of water quality / dosing level monitoring equipment
- Preventive maintenance of plants and equipment
- Regular planned OH&S inspections to ensure that the identified hazards are controlled as effectively, efficiently, and expediently as possible
- Site perimeter inspections (i.e. site security assurance)
- Auditing of Work permits and Daily Safe Work Plans

Any adverse findings shall be reported and addressed immediately. The Operations Supervisor shall be notified if there are wider implications of any findings from plant inspections (e.g. security threats, longer term operational implications, inappropriate contractor performance or behaviour, etc) so that higher level action may be taken to address the situation if necessary.

In the process of normal daily operations and planned inspections, all AVA operators and contractors shall ensure that improvement notes are completed and returned to the Supervisor in the event of anything deemed to require action being found. A register of improvement notes or requests shall be kept and progress of rectification against this list shall be checked on a regular (not more than monthly) basis by senior operations staff. This will help to ensure that the catalyst for incidents, in many cases, is removed.

Other processes that should ensure that the potential for incidents is minimised include (but not limited to):

- Mechanical and electrical preventative maintenance
- Daily procedure check sheets (e.g. chlorine equipment chemical delivery and dosing etc)
- Training e.g. manual handling, SCBA, self rescue, personal protective equipment etc
- Quality assurance and audits
- Operational awareness
- Vigilance

This operating facility will have a comprehensive set of Incident Response Plans, which provide detailed instructions on how to respond to specific operational incidents. A full set of Incident Response Plans will be developed prior to the start of the project.

8.2. INDUCTION TRAINING

All new employees and contractors commencing work with AVA on operating facilities will receive a formal Induction. This induction process involves safety and incident management issues and other items including geographic information, contractor arrangements and requirements. No new AVA operations personnel shall be allowed to carry out unsupervised tasks unless the appropriate induction and site specific training has been undertaken. Site inductions are to be carried out for all new staff, contractors or visitors.

The Operations Supervisor will introduce new staff to the contents of this Plan, with induction training being organised for new starters prior to commencement of active duties on AVA facilities.

8.3. TRAINING AND DEVELOPMENT

Incident Management Training shall be provided as a minimum for those who will assume the following roles:

- Site Manager – usually the Operations Manager
- Incident Manager – usually the Supervising Operator
- Key Incident Team roles in the areas of operations, planning, logistics and support

This training is intended to enable AVA employees to:

- Effectively manage incidents within the operating facility
- Effectively coordinate incident response with our customers and other contact agencies
- Recognise the diversity of functions within incident management
- Describe the concept of comprehensive incident management
- Obtain a perspective of their own role and functions
- Accept the roles and functions of other organisations during major incidents

Training shall be provided to all existing and new staff, with refresher and scenario training being provided at scheduled appropriate intervals (period between refresher / scenario training should be no greater than 12 months). Incident Management Training is an integral part of operational staff training and development program and will be competency based to ensure the principles and concepts of effective incident management are well and truly understood and absorbed by operations staff and their managers.

Scenarios will be used as a regular tool for training staff in, and reviewing this Plan. It is the responsibility of the Operations Manager to organise the preparation and conduct of scenarios based on both the hazards, plans and procedures identified in this Plan.

8.4. INCIDENT MANAGEMENT ARRANGEMENTS WITH CONTRACTORS

All contractors involved in the operation and maintenance of AVA's assets will be effectively integrated into the management of incidents.
The following arrangements will be made for critical contractors to effectively support AVA during incidents:

- 24 hour contact arrangements for contractors
- Priority telephone access through to critical contractor contact numbers
- Mobile communication from contractor management personnel to their field staff
- 24 hour contact arrangement for contractors to obtain spares, repairs and additional equipment
- Preparedness by major contractors to provide a liaison officer to AVA incident control points
- Involve major contractors in scenario training and exercises
- Regular briefing on incident management plans, exercises for long term contractors on work sites
- Submission of incident management plan for major work or contracts
- Briefing on criticality of assets
- Invitation to participate in incident debriefs

8.5. SCENARIOS

Arrangements will be made for the Operations Team as well as the AVA Management Team to conduct regular scenario exercises and training. However, this plan will be tested at least once a year through actual incidents or scenarios.

In addition, AVA would participate in inter-agency scenarios, if requested, where there are deemed of benefit to AVA and its operations staff.

Inter-agency scenarios may include major floods, bushfire events, spillage events, rescue events, etc.

The scenarios will be used to achieve beneficial process and people outcomes. Some examples of beneficial process outcomes include:

- Reviewing existing processes, plans and procedures
- Increasing awareness of processes, plans and procedures
- Identifying resource shortfalls/limitations
- Improving ability of coordination
- Clarifying roles and responsibilities
- Exercising processes, plans and procedures
- Increasing cooperation between operating personnel and external resources
- Increasing awareness of proficiencies and needs

Some examples of beneficial people outcomes include, among others:

- Motivating staff members
- Developing team work
- Developing skills
- Providing opportunities to apply skills in unusual situations
- Developing problems/issue resolution strategies
- Developing analytical skills
- Developing leadership skills
- Improving individual performance
- Improving individual and team OHS&R behaviour and performance

It is recommended that the following incident management program be followed by the Operations Team:

Exercise/training type	To be undertaken by:	Frequency
Minor Incidents Drills and testing of alarms and evacuation processes	Operations Team lead by Supervising Operator	2 per annum (minimum)
Major Incidents Desktop exercise to test interfaces and understanding	Operations Team led by Operations Supervisor	1 per annum

9. INCIDENT MANAGEMENT

9.1. MINOR INCIDENT

Managed by: Supervisor or above

Report immediately to: System Manager

Actions:

- Ensure that all staff and contractors are safe
- Deal with the incident immediately to limit any impact on staff, the plant, the community or the environment
- Ensure the best qualified operator or contractor responds to the incident (e.g. for small fire employ operator with most recent fire fighting training, for minor mechanical breakdown use contract fitter etc)
- Notify the Response Centre as soon as possible. Response should take precedence over notification unless operator or contractor is unsure of correct response
- Ensure normal incident notification and reporting procedures are followed

9.2. MAJOR INCIDENT

Managed by: Site Incident Management Team with external assistance as required

Report immediately to: AVA Project Control Group

Remember: It is always better to over-react to an incident. An incident can be de-escalated with much less impact (e.g. stand-down of a fire service who has been called to the site) than can an incident that has got out of control due to indecisive action by the plant personnel.

In the event of an incident requiring the extensive use of specialist external resources, then the Operations Team, led by the Supervising Operator, shall provide a technical support role and physical response role as required by the specialist service provider. The Operations Team shall ensure that the external resources are assisted to safely carry out their response e.g. they don't stray into areas of the plant that are dangerous to them or their equipment.

Actions:

- Activate the Site Incident Management Team (if necessary)
- Ensure that all staff and contractors are safe
- Deal with the incident immediately to limit any impact on staff, the plant, the community or the environment to the extent of the capabilities of the Operations Team. Do not risk injury by going beyond the Team's capabilities. Evacuate site if necessary to maintain safety of staff, contractors and visitors
- Advise Response Centre at North Parramatta

- Ensure the best qualified external resources are called to respond to the incident by calling 000 (e.g. for large fire ensure the local Fire Service is quickly dispatched to the plant. For a major toxic chemical spill ensure HAZMAT Team is called to the site immediately)
- In the event of a fire, toxic chemical spill or other incident that may impact on the surrounding community, ensure early evacuation procedures are activated. This will, more than likely, be handled by the Police or Fire Service
- For a major plant failure that can be dealt with by staff and contractors, the IMT should quickly assess the actual or potential impact of the incident and develop an overall response strategy to minimise the impact of the incident
- Instructions for response to major incidents are available for the majority of potential events. The plant's set of Incident Response Plans will provide guidance on the steps to take to deal with the technical aspects of the incident. Refer to the plant's IMS Document Register for the relevant specific IRP
- Notify AVA representative as soon as possible and assess need for any specialist external support
- The IMT shall handle all aspects of communications during the major incident. They shall keep the Head Office (COO, CEO and support staff) and SWC informed as well as notifying appropriate government departments, authorities, relatives of injured workers, contractor groups and pressure groups. The media should only be dealt with after approval from Head Office. Tips on handling the media are outlined in Section 10 – Client, Stakeholder and Media Handling of this document.
- The IMT shall coordinate specialist internal (e.g. legal, insurance, OHS&R, risk, media, government liaison, etc) and external resources (e.g. Emergency Services, specialist contractors etc) to ensure an efficient response to the incident
- Ensure a detailed log of the incident is maintained
- Ensure normal incident notification and reporting procedures are followed

After the incident is brought under control and clean up can begin it is essential that an incident debrief is carried out. Feedback from the debrief shall be used to improve this Incident Management Plan and the individual Incident Response Plans, as well as training packages for operations personnel and contractors.

9.3. CRISIS

For all incidents with the potential to be a crisis, refer to the AVA Incident and Security Management Plans.

Corporate crises can be defined as physical or non-physical emergency incidents which:

- Seriously injure or harm multiple people or expose them to risk
- Cause substantial physical damage to property or the environment
- Attract sustained negative media attention nationally
- Impact seriously on the health, business activity or amenity of the community in general

- Seriously damage AVA's ability to conduct business and/or expose the organisation to liability or legal action
- Seriously damage the organisation's reputation and brand, profitability, or shareholder value

9.4. GENERAL WORKING METHODS

After the Incident Management Team has been mobilised and their individual roles confirmed, and the Incident Headquarters facilities and equipment activated and tested; the following general working methods and response actions will be required to be undertaken by all members of the Incident Management Team. The methods adopted and actions taken include:

- Commence and maintain group logs and information boards – log sheets, incident notification forms and Incident Manager handover briefing form are included as Attachments to this Plan
- Ensure the all key officers have been briefed and ongoing communication protocols established and implemented
- Establish and maintain regular liaison with a designated operator at the incident site
- Ensure appropriate functional support / specialists have been briefed and are operational.
- Determine and continually review operating rules and decision-making processes for the IMT, including support resources
- Under the direction of the Incident Manager, conduct regular reviews (every 2 hours or better) and assess the issues identified, provide updates and progress reports on actions taken, and contribute to the development and implementation of the overall response strategies
- Ensure that all members of the IMT reconvene as and when major new developments occur to be briefed on the latest situation
- Establish and continually reassess the requirements and expectations of stakeholders, regulators, community groups and interested parties including ongoing communication requirements and strategies at executive, operational and technical levels
- Continually monitor the response performance and requirements of SWC
- Monitor the morale and welfare of the IMT and AVA staff and ensure all necessary support, counselling, and relief is organised
- Develop, continually review and implement communications with staff regarding the emergency
- Make arrangements for team member breaks every four hours, and, in the event of prolonged emergency, relief shifts every twelve hours
- Ensure that support arrangements such as staff provisions, materials, transport and accommodation, are effectively organised through the Support Officer

These team working methods and response actions are complimented by detailed roles and responsibilities for each of the IMT members set out in the following pages.

9.5. INCIDENT RESPONSE PLANS

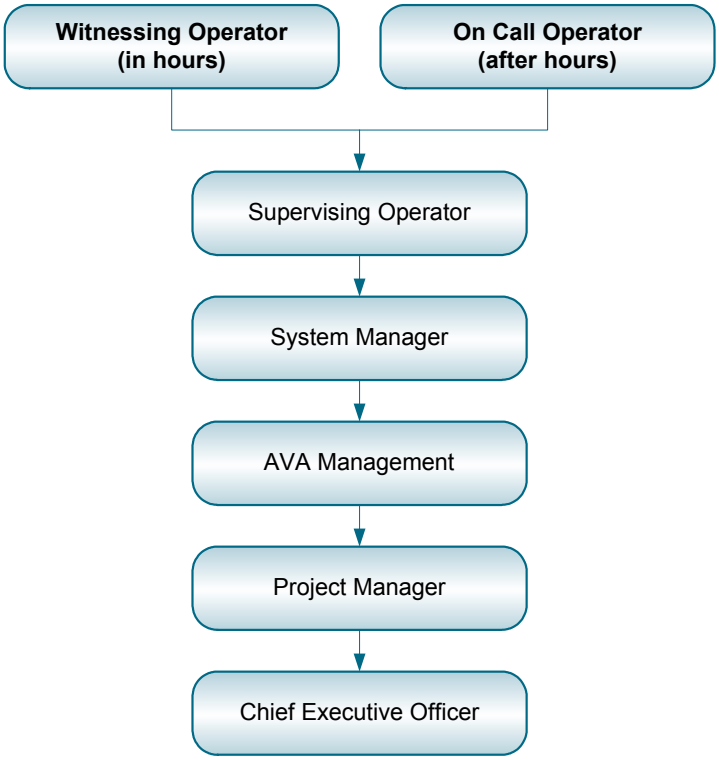
This operating facility will have a comprehensive set of Incident Response Plans which provide detailed instructions on how to respond to various different operational incidents.

9.6. INCIDENT ESCALATION

At the onset of the incident and as it develops, the Operations Supervisor, System Manager and, in the case of more severe incidents, the AVA Representative shall decide the level of an incident and when it has escalated to the next level. The escalation trigger table in the following section may be useful in determining if an incident has escalated and a higher level of response is required. The incident escalation process is given as an Attachment.

9.7. INCIDENT REPORTING CHAIN

In the event of an incident occurring on or around the operating facility, the following chain of command shall apply. As incident severity increases, responsibility for key decision-making will lie with those further along (in seniority) the chain of command within AVA. SWC shall also be kept informed of developments and will have a role to play in the decision-making process.



9.8. MOBILISATION AND EARLY ACTIONS

In the event of the Incident Management Team being activated to respond to a major incident, it is crucial that the team is mobilised quickly and some key immediate actions are carried out.

10. CLIENT, STAKEHOLDER AND MEDIA HANDLING

When an incident occurs at the operating facility, there will be mandatory reporting requirements and courtesy notifications. The Project Agreement with SWC has requirements to report incidents to SWC Operations Managers and Contract Administrators. These requirements must be adhered to. This would normally be required for more serious incidents that have the potential to affect the proper function of the plant. However it is not unreasonable to notify SWC even in the event of minor incidents. This promotes open and honest communications and enhanced trust between the parties. Refer to the Stakeholder Management Plan (SMP) for details of Stakeholders.

The main stakeholders other than SWC that may require notification depending upon the severity of the incident are:

- WorkCover/Workplace Health and Safety
- EPA
- State Health Department
- Local Council
- Recycled water customers
- Local community
- Media
- Suppliers and Contractors

Some of these notifications are mandatory (e.g. EPA, WorkCover, Health) while others are more courtesy but should be encouraged to foster an environment of trust. The following principles should be used as a guide in dealing with stakeholders in the wake of an incident:

- The welfare of the public is our number one priority
- Communicate openly, honestly, and regularly with staff, customers and all key stakeholders, treating them as we would wish to be treated ourselves
- Consider the consequences of planned actions from the perspective of all stakeholders, but with public welfare as the overriding concern
- Demonstrate concern, from the top, for all affected parties, and for rectifying the issue
- As a priority, do whatever is reasonable to take control and resolve the situation swiftly
- Base decisions on facts not speculation and develop appropriate key messages
- No surprises; ensure relevant managers are fully briefed in advance, and that staff are briefed of developments before they hear them in the media
- Build close working relationships with stakeholder groups and get to know contacts face to face. Listen carefully to their points of view so we can respond to their concerns

11. RECOVERY

11.1. DEBRIEF INSTRUCTIONS

- Formal debriefs will be conducted for all major incidents
- Informal debriefs will be conducted for routine incidents
- The Incident Debrief process involves a four-stage approach

11.1.1. INCIDENT INVESTIGATION

Information is gathered from all personnel involved in the incident by carefully working through the whole scenario to ensure the correct sequence of events is recorded. All events within the incident should be recorded chronologically.

In the case of a serious incident, where potential exists for prosecution or litigation, an assessment will be made to determine whether a formal investigation will be undertaken.

11.1.2. ANALYSIS PHASE

Information gathered is analysed to obtain an understanding of factors which led to the incident, its causes and lessons to be learnt. Such analysis would normally take place in a debrief workshop with input from the Operations Team as well as external experts.

11.1.3. RECOMMENDATION PHASE

Actions are then recommended which will minimise risk of re-occurrence or impact of such incidents. These actions or outcomes should also be used to critically review this Incident Management Plan and individual Incident Response Plans.

11.1.4. IMPLEMENTATION PHASE

The recommendations coming out of the debrief process should be submitted to the AVA Management for approval and an implementation program devised and executed as soon as possible.

The Incident Manager will normally manage stages 1, 2 and 3.

The System Manager will assign responsibility for management of Stage 4 to an individual (probably a member of the affected Operations Team). Recommendations that can be implemented as part of normal plant project work or part of the daily work plan should be carried out as a matter of priority. If some or all of the recommendations apply to all AVA operating facilities then the Project Manager Operations should oversee progress of program implementation. Progress of the Implementation stage should be reported on during normal Operations Team production meetings. The Chief Operating Officer may also wish to be informed of progress of implementation of recommendations.

The implementation phase for each debrief will contain actions designed to share the lessons learnt from the incidents across AVA operating facilities.

11.2. DEBRIEF REPORT FORMAT

It is suggested that the Debrief Report be layout in the following format:

- **Event** Title, Date of Occurrence, Date of Debrief
- **List of Attendees** - Their normal work position, and their role in the incident
- **Description of Incident** including location, each event in chronological order and their impact, as well as the overall impact of the incident on personnel, the community, the plant, the environment and the Company
- **Issues and Recommendations** - Issue Summary, Recommended Actions or Proposed Course of Action, Person Responsible for Following Up Action and, if applicable, the Time Frame to follow up. This section should cover as a minimum:
    - Overall speed / effectiveness of response
    - External perceptions
    - Personnel – well-being and welfare – training
    - Equipment
    - Processes and procedures including availability and usefulness of a relevant specific Incident Response Plan
    - Deficiencies - lessons learned
- **Distribution -** Distribution should be to all Debrief attendees. Distribution outside the debrief attendees should be discussed at the debrief and approved. A list of all who will receive a copy should be listed on the distribution list. The AVA Project Manager and, if requested, the Project Director should receive a copy of all debriefs
- **Annexes** - Annexes should include the Time Log (usually the Incident Manager's Log) or an event schedule of the Incident

11.3. CRITICAL INCIDENT STRESS DEBRIEF

Any incident that involves the death or serious injury of an employee or other traumatising event may require the provision of counselling or critical stress debriefing. This is to allow a traumatised witness to discuss the impact that the event has had on them and provide the counsellor with an opportunity to give valuable advice in how to overcome the stress the person is feeling. Counselling services can be obtained through community groups such as the Salvation Army, the Family Support Service and Lifeline.

11.4. SHARING OF DEBRIEF OUTCOMES

It is crucial that any lessons learnt from the incident and subsequent debrief process are shared across AVA. As such the Project Manager shall ensure that the findings of the debrief are distributed to all Operations Teams and instructions given to implement on any recommendation that may minimise the risk of a similar incident occurring at other operating facilities.

11.5. RESTORATION AND RECONSTRUCTION

Any restoration, reconstruction and/or clean up required after the incident has been declared over, shall be carried out as soon as resources and funds allow. All restoration and clean up work is to dealt with in the following order of priority:

- Work that ensures the safety of personnel and the community
- Work that restores plant process and the protects the environment
- Work that protects the Commercial performance of AVA

12. ATTACHMENTS

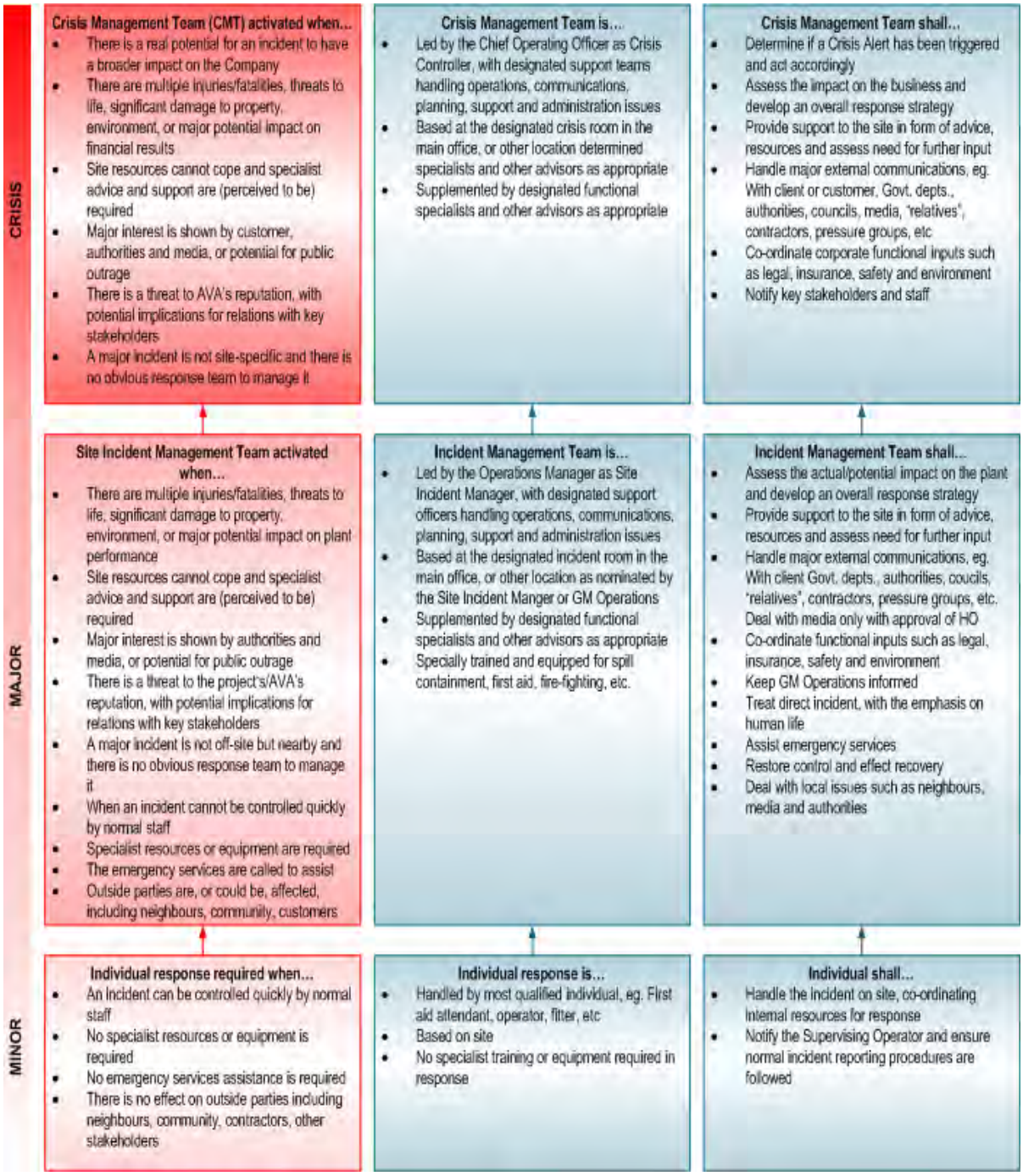
Incident Escalation Process

Site Incident Management Team Escalations

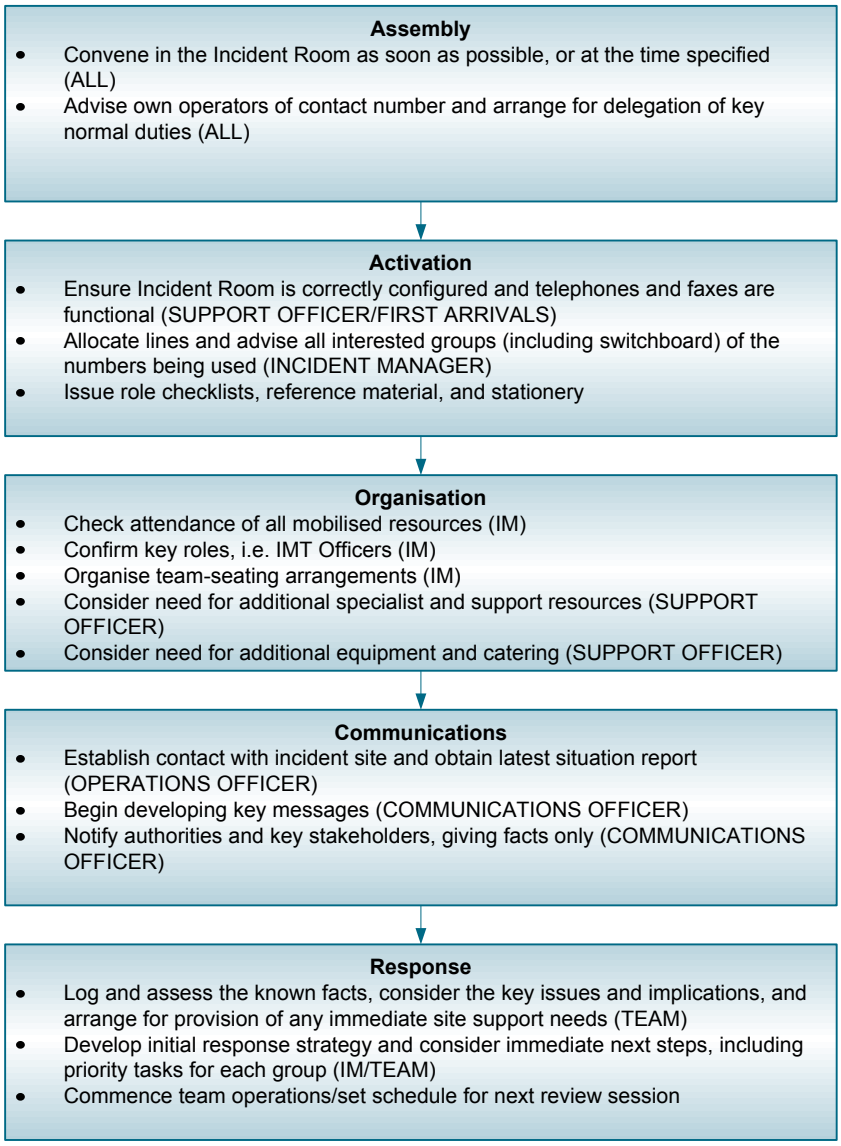
Incident Manager's Hand-Over Brief

Incident Report Form

12.1. INCIDENT ESCALATION PROCESS



12.2. SITE INCIDENT MANAGEMENT TEAM ESCALATION



12.3. INCIDENT MANAGER'S HAND-OVER BRIEF

Location:
Original Site Manager:
Situation (Brief Outline)
Potential Hazards/Safety Problems
Technical Actions To Date **How Shut Off - (List actions including location of valves or pumps opened/closed)**
By-pass/Alternate Service By
Impact on Customers/Industry to Date
Other Agencies/Authorities Involved and Tasks

Departing Incident Manager Details		
Contact details	**Telephone:**	**Mobile:**
On site at		
Departed at		
Will Return at		
Information passed to Client and stakeholders		

12.4. INCIDENT REPORT FORM

Example Incident Report Form:

PLEASE FAX COMPLETED FORM TO HR WITHIN 24 HOURS

Location

Site:..... Date:..... Report No.:.....

Company: AVA ☐ Alinta ☐ GWA ☐ Other:.....

Details of Injured Person

Give Names:..... Surname:.....

Residential Address.....

.....

Home No.: ..... Mobile No.:.....

D.O.B:..... Sex: Male ☐ Female ☐

Basis of Employment

Full Time ☐	Casual ☐	Work Experience ☐	Member of Public ☐
Part Time ☐	Contractor ☐	Volunteer ☐	Self Employed ☐

Type of Incident

Near Miss ☐	First Aid Injury ☐	Medical Treatment ☐	Lost Time Injury ☐
Disease ☐	Notifiable Injury/Illness ☐	Notifiable Event ☐	Property Damage ☐

Notify Statutory Authority: Yes ☐ No ☐

What is the Injury or Illness?

Nature of work injury or work-caused illness:.....

.....

.....

Injury or Illness and Accident Details

Date of Injury ..... Time of Injury ..... am/pm

Date of Employer Notified..... Time ..... am/pm

Date Ceased Work ..... Time ..... am/pm

Date Resumed Work ..... Time ..... am/pm

Medical Treatment: Yes ☐ No ☐

Time Lost to Date ..... Yes ☐ No ☐

Describe how the injury occurred: .....

.....

.....

Description of injury, e.g. laceration left arm: .....

.....

.....

Previous related injuries: .....

.....

.....

Address where incident occurred: .....

.....

Incident Likely to Become Claim: Yes ☐ No ☐ Unsure ☐

Is Employee Currently?

At work, performing normal duties ☐ At work on reduced hours ☐

At work, normal hours, performing suitable alternative duties ☐ Off work ☐

Circumstances of Injury

Whilst at work ☐ Travelling to or from work ☐

Away from work during a recess period ☐

Treating Doctor or Hospital

Name of treating doctor or name of hospital if hospitalised: .....

.....

Telephone No.: ..... Facsimile No.: .....

Address of treating doctor or hospital.....

..... Postcode:.....

Name of Injured Person:	**Name of supervisor/principal contractor:**
Print Name:.....	Print Name: .....
Signature:	Signature:.....
Date:	Date:.....

Appendix 11 How will you protect public health, water quality and the environment? (Question 2(f))

The following documents are attached:

- Rosehill Recycled Water Scheme Preliminary Risk Assessment Risk Register
- Rosehill Recycled Water Scheme Preliminary HACCP Analysis

Rosehill Recycled Water Scheme Preliminary Risk Assessment Risk Register

Risk Category	Assessment Category	Risk Title	What could go wrong?	Describe the impact if this negative event eventuate.	Do you own this risk? If not, then who is the owner?	Location or Name the application used	Likelihood 5 = Almost certain 4 = Likely 3 = Moderate 2 = Unlikely 1 = Rare	Consequence 4 = Extreme 3 = Major 2 = Moderate 1 = Minor	Inherent Risk Level = Likelihood x Consequence	Current Risk Rating	Describe how existing control activities can mitigate the likelihood or consequence. *(NB: More than 1 controls attached to one risk is allowed. Insert new row to separate control activities)*	Is it a Preventative or Monitoring control?	Control Frequency (Continuous, Daily, Weekly, Monthly, Quarterly, Half-Yearly, Yearly)	Is it a key control? (Y/N) (Critical control)	Is it an automatic (system or application) or manual control?	Who is the owner of this control?
Public Health	Water Quality - chemical	Ammonia	Legionaire's disease infection resulting from poorly disinfected cooling tower water (ammonia in recycled water exceed specification of 1 mg/L (raw sewage can contain up to 40 mg/L)	Cooling tower disinfection processes compromised. - one or more cases per year of legionaire's disease	WRP		3	3	9	High	Existing WWTP do not have any ammonia remoal Reverse osmosis will remove 80% of ammonia	Preventative	Continuous	Y	Automatic	
											Ion exchange remove additional ammonia to reach <1 mg/L of ammonia in recycled water	Preventative	Continuous	Y	Automatic	
											Chlorination -dose to free chlorine setpoint break - some ammonia	Preventative	Continuous	N	Automatic	
Environmental	Water Quality - Chem	Phosphorus	High phosphorus in Rosehill racecourse dam could cause proliferation of blue green algae (around 9 mg/L in raw sewage)	High level of algae could block up irrigation system - blue green algae toxins could cause health impacts on ingestion	WRP		2	2	4	Medium	No P-removal at WWTP Reverse Osmosis - 99% removal	Preventative	Continuous	Y	Automatic	
Public Health	Water Quality - Biological	Viruses	Pathogenic viruses present in raw sewage can cause illness when ingested. Exposure assessment revealed the maximum log removal required for viruses from raw sewage is 6.5.	Ingestion of recycled water through exposure to use of recycled water in industry and irrigation	WRP		4	3	12	High	WWTP Delivery of diversion system to ensure only secondary treated effluent is discharged into LAP Montoring on LAP - can decide to take or not based on surrogates such as SCAN	Preventative	Continuous	Y	Automatic	
											Microfiltration	Preventative	Continuous	Y		
											Reverse Osmosis	Preventative	Continuous	Y		
											Chlorination at plant - residual 0.7-5 mg/L, 95 percentile 3 mg/L.- 1 hour contact time	Preventative	Continuous	Y		
Public health	Water Quality - Biological	Viruses in pipeline	Contamination occur in treated recycled water pipeline, mains break, huge amount of dirt - pumped system - pressure system	Illness caused in population exposed to water used in industry and irrigation	Aquanet/Jemena		1	3	3	Low	Maintaining chlorine residual In pipeline Backflow prevention and air gaps at customer end					
Public Health	Water Quality - Biological	Bacteria	Pathogenic bacteria present in raw sewage can cause illness when ingested. Exposure assessment revealed the maximum log removal required for viruses from raw sewage is 5.3	Illness caused by ingestion of pathogens in recycled water through exposure to use of recycled water in firefighting, industry and irrigation			4	3	12	High	WWTP Delivery of diversion system to ensure only secondary treated effluent is discharged into LAP Montoring on LAP - can decide to take or not based on surrogates such as SCAN	Preventative	Continuous	Y	Automatic	
											Microfiltration	Preventative	Continuous	Y		
											Reverse Osmosis	Preventative	Continuous	Y		
											Chlorination at plant - residual 0.7-5 mg/L, 95 percentile 3 mg/L.- 1 hour contact time	Preventative	Continuous	Y		
											Treated water spec requires protoxzoa indicators to be <1/50 L.	Monitoring	Monthly	N		
Public health	Water Quality - Biological	Bacteria in pipeline	Regrowth or Contamination occur in treated recycled water pipeline (short retention, covered storages and plastic pipes reduce inherent likelihood	Illness caused in population exposed to water used in idnustry and irrigation	Aquanet/Jemena		2	3	6	Medium	Maintaining chlorine residual - chlorine boosting in pipeline (this does not impact entire pipeline)	Preventative	Continuous	N	Automatic	
Public Health	Water Quality - Biological	Protozoa	Pathogenic protozoa present in raw sewage can cause illness when ingested. Exposure assessment revealed the maximum log removal required for viruses from raw sewage is 5.1.	Illness cause by Ingestion of protozoa in recycled water through exposure to use of recycled water in industry and irrigation			4	3	12	High	WWTP Delivery of diversion system to ensure only secondary treated effluent is discharged into LAP Montoring on LAP - can decide to take or not based on surrogates such as SCAN	Preventative	Continuous	Y	Automatic	
											Microfiltration	Preventative	Continuous	Y		
											Reverse Osmosis	Preventative	Continuous	Y		
											Chlorination at plant - residual 0.7-5 mg/L, 95 percentile 3 mg/L.- 1 hour contact time (not for cryptosporidium)	Preventative	Continuous	Y		
											Treated water spec requires protozoa indicators to be <1/50 L.	Monitoring	Monthly	N		
Public health	Water Quality - Biological	Protozoa in pipeline	Contamination occur in treated recycled water pipeline (refer to virus assessment) - covered storages would prevent recontamination	Illness caused in population exposed to water used in idnustry and irrigation	Aquanet/Jemena						Maintaining chlorine residual In pipeline	Preventative	Continuous	Y	Automatic	
Public health	water Quality Chemical	Heavy metals	Ingestion of heavy metals could lead to long term health effects.	Levels in treated waste water generally below health guideline values for drinking water - no risk at levels of exposure assessed			1	1	1	Low	Reverse osmosis removal >99% for all heavy metals (divalent)	Preventative	Continuous	Y	Automatic	
Public health	water Quality Chemical	Organic micro pollutants (herbicides, pesticides, pharmaceuticals, hormones, THMS)	Ingestion of micro pollutants could lead to long term health effects.	Levels in treated waste water generally below health guideline values for drinking water - no risk at levels of exposure assessed			1	1	1	Low	Reverse Osmosis	Preventative	Continuous	Y	Automatic	
Environmental	Water Quality - chemical	Salinity	High saline water is irrigated onto racecourse	High salinity in irrigation water can lead to sodificatioin of soil and limit plant growth			3	2	6	Medium	Reverse Osmosis removes TDS	Preventative	Continuour	Y	Automatic	
Environmental	Water Quality - chemical	Boron	Boron > 1 could impact certain plants used by irrigation customer	Boron can impact grasses used in golf courses					0	Low						

Rosehill Recycled Water Scheme Preliminary Risk Assessment Risk Register

How do you rate the effectiveness of the current control? 1.5 = Very Effective 2 = Effective 4.5 = Ineffective 9 = Very Ineffective 0 = No Control	Likelihood 5 = Almost certain 4 = Likely 3 = Moderate 2 = Unlikely 1 = Rare	Consequence 4 = Extreme 3 = Major 2 = Moderate 1 = Minor	Mitigated Risk Level = Likelihood x Consequence	Mitigated Risk Rating	Accept? (Y/N)	If the mitigated risk level is rated high or extreme and is accepted, justification must be provided and required Senior Management's approval.	Describe the action to be taken to further mitigate (likelihood or consequence) and ensure that the mitigated risk level is within the Company risk appetite.	Action by Name	Action Due Date	Action Status	Likelihood 5 = Almost certain 4 = Likely 3 = Moderate 2 = Unlikely 1 = Rare	Consequence 4 = Extreme 3 = Major 3 = Moderate 2 = Minor	Projected Risk Level = Likelihood x Consequence	Projected Risk Rating	Comments
1.5	1	3	3	Low	Y								0	Low	
1.5	**1**	2	2	Low									0	Low	
1.5	1	3	3	Low									0	Low	
1.5	1	3	3	Low									0	Low	
	2	3	6	Moderate											
1.5	1	3	3	Low									0	Low	
	2	3	6	Moderate											
1.5	1	1	1	Low			Obtain records of salt rejection properties of membranes and supplier specification						0	Low	
1.5	1	1	1	Low			Obtain records of salt rejection properties of membranes and supplier specification						0	Low	
1.5	1	2	2	Low									0	Low	
			0	Low									0	Low	

Rosehill Recycled Water Scheme Preliminary HACCP Analysis

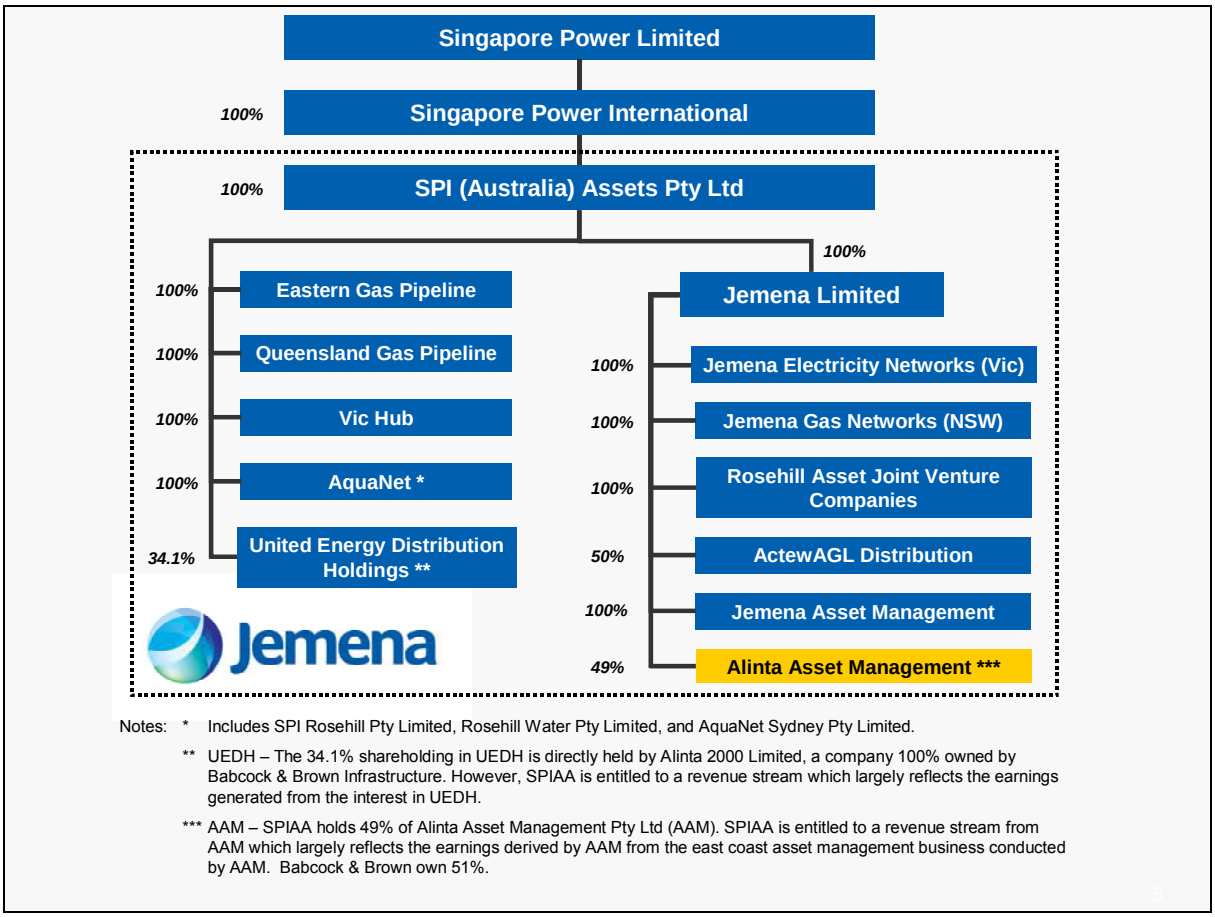
WATER QUALITY MANAGEMENT & CCP ANALYSES												
Activity or Process Step	Decision Tree					CCP/QCP	Potential Hazards	Monitoring	Critical Limits	Corrective Actions	Supporting programs	Records
	Q1	Q2	Q3	Q4	Q5							
Wastewater Treatment	Y	Y	Y			CCP	BOD	(DO)				
Diversion of untreated and poorly treated wastewater	Y	Y	Y			CCP	Wet weather event causes Micro organisms, organic pullutants, heavy metals.					
Treated wastewater offtake on LAP online measurement and shutdown at WRP	Y	Y	N	N		QCP	Micro organisms, organic pullutants, heavy metals					
Chemical dosing (chloramine)	N			N		No	Free chlorine and chloramine - not a health hazard					
Micro filtration	Y	Y	Y			CCP	Bacteria and Protozoa and viruses					
Reverse Osmosis	Y	Y	Y			CCP	Ammonia, phosphorus, organic pollutants, heavy metals, micro organisms					
Ion exchange	Y	Y	Y			CCP*	Ammonia. (may not be health or environmental hazard)					
Chlorination and 1 hour retention	Y	Y	Y			CCP	Bacteria and Protozoa and viruses	Monitoring on distribution system				
Treated recycled water offtake point monitoring	Y	Y	N	N		QCP	Ammonia, phosphorus, organic pollutants, heavy metals, micro organisms					
Distribution line chlorine boosting	N						Bacteria and Protozoa and viruses					
Irrigation practices												
Discharge - unintentional							Erosion from mains breaks					
Storage in lakes							Ammonia, phosphorus, nitrogen,chlorine					
Cooling tower uses												

Appendix 12 Do you have prior experience in the construction, maintenance and operation of water infrastructure or a utility business? (Question 2(g))

Relevant industry experience

Jemena is an established and experienced owner, manager and operator of infrastructure in the gas and electricity industries. It owns manages and operates or provides asset management and operational services to electricity distribution networks in Victoria; gas transmission pipelines in Victoria, NSW and Queensland; and gas distribution networks in NSW the ACT and Victoria. Jemena also has considerable experience in providing construction services to the water infrastructure industry in NSW.

Jemena's ownership structure and the principal infrastructure assets in that structure are shown in the following diagram:

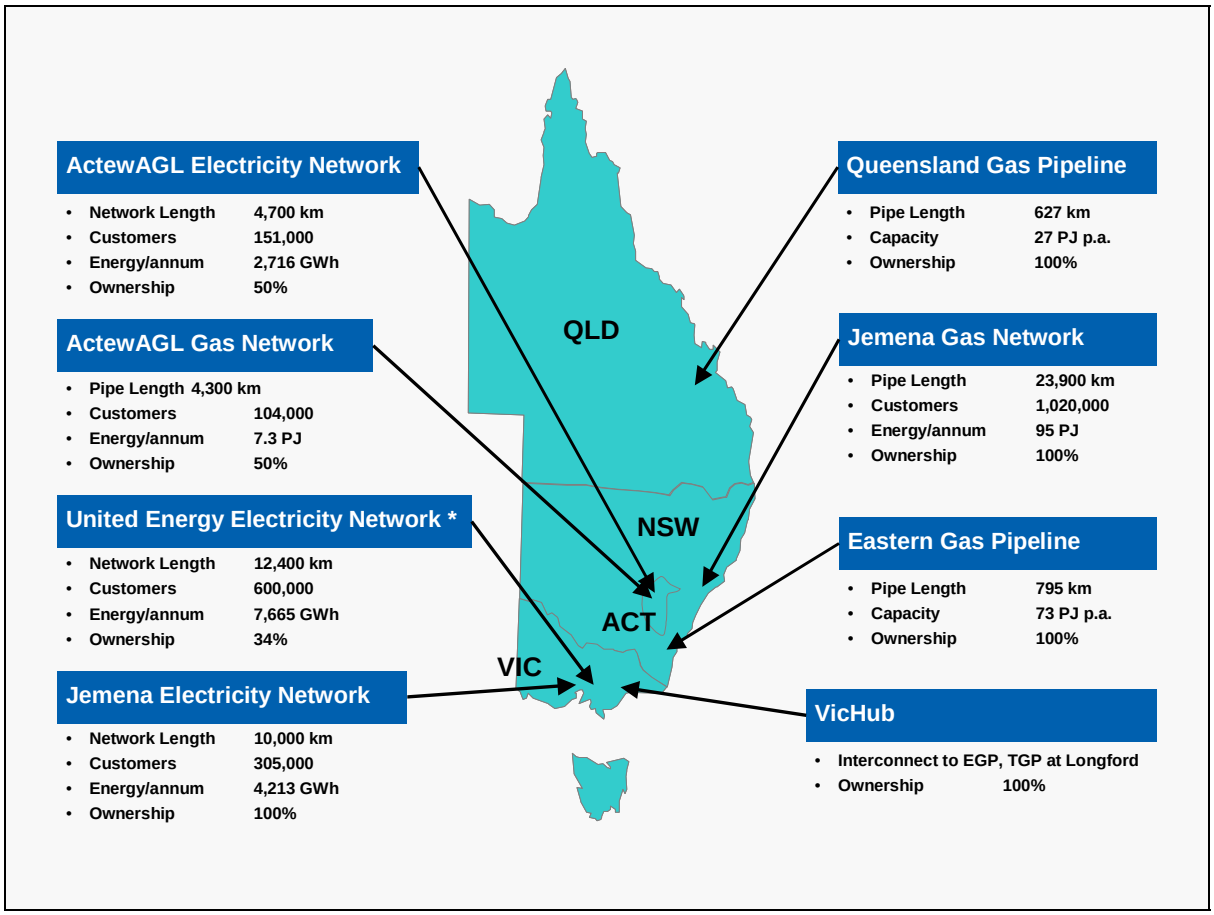


Notes: * Includes SPI Rosehill Pty Limited, Rosehill Water Pty Limited, and AquaNet Sydney Pty Limited.

** UEDH – The 34.1% shareholding in UEDH is directly held by Alinta 2000 Limited, a company 100% owned by Babcock & Brown Infrastructure. However, SPIAA is entitled to a revenue stream which largely reflects the earnings generated from the interest in UEDH.

*** AAM – SPIAA holds 49% of Alinta Asset Management Pty Ltd (AAM). SPIAA is entitled to a revenue stream from AAM which largely reflects the earnings derived by AAM from the east coast asset management business conducted by AAM. Babcock & Brown own 51%.

The locations and basic statistics on the infrastructure assets in which Jemena has an ownership interest are shown on the following diagram:



* UEDH – The 34.1% shareholding in UEDH is directly held by Alinta 2000 Limited, a company 100% owned by Babcock & Brown Infrastructure. However, SPIAA is entitled to a revenue stream which largely reflects the earnings generated from the interest in UEDH.

Jemena provides asset management and operational services through Jemena Asset Management and Alinta Asset Management, to all of the above assets except the ActewAGL Electricity Network. Jemena Asset Management services the Jemena Gas Network, the Jemena Electricity Network and ActewAGL Gas Network as well as the Central Ranges Pipeline in NSW. Alinta Asset Management services the Eastern Gas Pipeline, the Queensland Gas Pipeline, VicHub, and the United Energy Electricity Network, as well as the Multinet Gas Network in Victoria and the Tasmanian Gas Pipeline which runs between Victoria and Tasmania.

Jemena has over 2,500 employees who manage infrastructure assets for both internal (100% owned) and external infrastructure clients. Jemena manages annual capital expenditures of over $500m and incurs annual operating and maintenance expenses of over $700m in relation to the assets under management.

Recent major projects undertaken by Jemena:

Jemena has extensive experience with projects and operations of the scope and scale of the Rosehill Scheme.

Client	Project Description	Completion Date
Delta Electricity (Colongra Power Station)	**Colongra Gas Pipeline** Scope: Jemena to design, build and operate the laying of 9km of 1067mm (42 inch) steel gas line to store sufficient gas for 5 hours operation of Colongra gas fired Peaking Power Station. Special Features: includes compressor station and delivery (decompression) station ($30M), first 42inch gas pipeline in Australia, first pipe designed for this fatigue service life in Australia - (more stringent weld defect size than AS2885.2, Tier1) and constructed in designated mine subsidence area.	Design and procurement February to June 2008 Installation July 2008 to March 2009
Santos	**Central Trunk** *Project Management ,Engineering, Design and Construct by Alinta, AGL Gas Networks* Several kilometres of repairs, augmentation and replacement of 1050mm (36 inch) steel gas line.	1990, 1992, 1998, 2006, 2008
Alinta Gas Networks, Gorodok, Eastern Gas Pipeline	**Mallaty Creek** Alinta project managed the replacement of a 200m section of 1150mm (36 inch) steel gas line.	2007
Alinta Asset Management (internal contract)	**Sydney Primary Loop** Starts at West Hoxton and finishes at Marrickville, includes 4 river crossings, min. depth 1.2m, max depth 6.0m (apart from river crossings), successfully managed construction in dense urban environment.	Completed February 2008 (duration for two years design and construction)

Water industry experience:

Jemena has, since 2000[17], successfully completed a number of construction contracts for Sydney Water.

Client	Project Description	Completion Date
Sydney Water Corporation	**Wet Weather Overflow Reduction Program Managing Contractor** The Wet Weather Overflow Reduction Program aim is to reduce the high frequency of wet weather overflows discharging into waterways in Cronulla beaches, Georges River, Blackwattle Bay, Circular Quay and Darling Harbour, highly visible from a public perspective and separate combined sewer and stormwater systems. Alinta is managing the define, design and construction phases of combined sewer separation work at Blackwattle Bay and CBD and sewer amplification, storage and sewer pumping station amplification works at Cronulla, Peakhurst and Penshurst.	March 2008

[17] Jemena Asset Management was formerly Alinta Asset Management (3) Pty Limited and, before that, Agility Management Pty Limited, a business established by The Australian Gas Light Company in 2000.

Client	Project Description	Completion Date
Sydney Water Corporation	**Watermain Renewals** Construction of watermains of varying size (100-450mm) PVC/DICL pipe in over 40 council areas within Sydney.	2 + 2 year contract (option 1 completed 2007)
Sydney Water Corporation	**Watermain Renewals A to E**	Completed August 2006
Sydney Water Corporation	**Watermain Renewals E, F and G**	Completed November 2005 and December 2006
Sydney Water Corporation	**Watermain Renewals Sydney and Illawarra**	Completed 2005
Sydney Water Corporation	**Rehabilitation of 17 Access Chambers and Sewer Diversion** The project included the refurbishment and upgrade of 17 access chambers (ranging in depth from 2 to 14 metres), reconstruction of one chamber, replacement of two chamber lids and locating and filling of one chamber. A sewer bypass was installed on a 450mm rising main to assist in the completion of the work. Alinta developed detailed management plans to mitigate potential impacts and risks to local community and other asset owners including Auburn Council, Energy Australia, RTA, Optus, Telstra, AGL, Sewerfix and Sydney Water. SPS 477 was shut down to facilitate the installation and subsequent abandonment of the rising main bypass. There were no lost time injuries and no environmental incidents during the project. No complaints were received from council or community.	Completed 2004
Sydney Water Corporation	**Greaves Creek Water Supply Upgrade** The project involved the provision of a new water supply main from the existing water filtration plant at Cascade Dam, Katoomba to connect into the Greaves Creek water supply system at Blackheath (~7km). Scope of works included the civil, mechanical, electrical and control components related to the construction of a 300mm-diameter pipeline and upgrading of an existing pumping station. Environmentally the area was very sensitive requiring constant liaison with Sydney Water's environmental group as well as NSW National Parks and Wildlife. Alinta employed a local bush regeneration consultant to assist us in the project. Sydney Water commended Alinta on its approach.	Completed June 2004

Client	Project Description	Completion Date
Sydney Water Corporation	**Watermain Renewal – The Kingsway Miranda Trunk Main** Construction of a 5km 375mm DICL watermain along The Kingsway and Taren Point Road in Miranda, NSW. The work also involved 40 complex interconnections and disconnections of existing watermains ranging in size from 100mm to 600mm and RTA concrete road construction. A key project requirement was high-level traffic management to ensure minimum disruption to the community. Work was carried out at night to minimise traffic disruption to major arterial roads, to allow unhindered access to local hospitals and busy shopping complexes.	Completed November 2002

Jemena has also recently acquired the business and assets of the CLM Excavations Group, now trading as CLM Infrastructure Pty Ltd (CLM). Through this acquisition, Jemena has access to CLM's extensive experience and capabilities as an established contractor to infrastructure industries, including the water industry. That experience includes the following projects:

Client	Project Description	Completion Date
Sydney Water Corporation	**Networks Alliance** Upgrade and renewal of sewer and water reticulation and trunk mains, including design, program management, quality / OHS&R, environmental and community management, restoration and commissioning. (CLM is an Alliance Stakeholder)	2005-2006 2006-2007 2007-2008 2008-2009
Macquarie Goodman	**Eastern Creek Sewer Carrier** Construction of a 6km sewer carrier servicing the Eastern Creek Industrial Precinct adjacent to the M7/M4 motorway interchange.	April 2006
Elderslie Consortium	**Elderslie Sewer Pump Station** Construction of Pump Station, Rising Mains & Gravity Mains for Elderslie Subdivision.	February 2006
Sydney Water	**Watermain Amplification – Blacktown, Turramurra & Rhodes** Installation of DICL & SCL watermain in roadways, footpaths, underboring of railway lines & major roads.	December 2005
BHP Billiton	**Mallaty Creek Bridge Crossing** construction of a 36m long truss bridge across a creek in Appin to support the 1200mm Macarthur Water Main which feeds Campbelltown.	October 2006
Sydney Catchment Authority	**Woronora Dam Environmental Outflows** Construction of two large environmental release concrete chambers in protected National Park, installation of two valves approximately 13t each, and related civil/electrical ancillary works.	October 2003
Boral	**Boral Estate, Greystanes** Relocation of existing trunk watermain to allow for new residential subdivision.	July 2003
Networks Alliance	**Illawarra Trunkmain** Construction of new trunk main through existing residential areas.	Under construction

Qualifications and experience of Directors and CEO

The directors of AquaNet, SPIAA and other entities in the Jemena group that are involved in delivering the Rosehill Scheme are listed in response to Question 1(c) (see Appendix 2). The qualifications and experience of the Directors of the Applicants and Jemena Limited (on the basis that it will be specified on the licence) are:

Name	**Position**	**Qualifications and Experience**
LIM Howe Run	Deputy CEO and Director of both SPI (Australia) Assets Pty Ltd (SPIAA) and Jemena Limited, and Director of each of the Applicants[19]	Howe Run is Managing Director, Strategic Investments for Singapore Power Limited and Deputy CEO of SPIAA and Jemena Limited. He is responsible for the management of Singapore Power group's overseas investments. Prior to his appointment as Managing Director, Strategic Investments for Singapore Power Limited and Deputy CEO of SPIAA and Jemena Limited, he has held various positions in risk management, asset management and business development within the Singapore Power group. Mr Lim holds a Bachelor of Engineering (Mechanical) degree from the National University of Singapore. He is also an alumni of the Harvard Business School, USA.

[19] Mr Lim Howe Run was Deputy Chief Executive Officer of SPIAA at the time the former Chief Executive Officer, Mr Peter Magarry, retired in August 2008. Mr Lim Howe Run's formal position remains Deputy Chief Executive Officer for the time being. A new Chief Executive Officer of Jemena Limited will be appointed with effect from 10 November 2008.

Name	Position	Qualifications and Experience
Peter William MAGARRY	Director of both Applicants and of Jemena Limited	At the time of his retirement from executive management on 31 August 2008, Peter was the Chief Executive Officer of SPIAA. He had assumed that role since September 2007. Prior to that, he was the Acting Chief Executive Officer of the former Alinta Limited (Alinta) from January 2007 until August 2007. His previous role was that of Chief Operating Officer of Alinta. Peter joined Alinta in 2003 when he was appointed General Manager of the former Alinta Asset Management business. Prior to joining Alinta, Peter was General Manager of TXU Networks. He has over 35 years experience in the energy industry in Australia. Peter holds an Australian Institute of Company Directors' Diploma, as well as an Associate Diploma in Electrical Engineering (Power) from Queensland Institute of Technology. Peter retired as Chief Executive Officer on 31 August 2008, however he remains a Director of a number of Jemena Group Companies including the Applicants and Jemena Limited. Although Peter retired as the Chief Executive Officer of SPIAA on 31 August 2008, he remains a director of a number of SPIAA's subsidiaries, including the Applicants and Jemena Limited.

Name	Position	Qualifications and Experience
YAP Chee Keong	Director of both Applicants and of Jemena Limited	Chee Keong is responsible for providing financial strategy and leadership throughout the Singapore Power group. This includes overseeing the corporate finance, treasury, financial management, tax planning and risk management functions. He is also responsible for corporate planning and strategic investments. Prior to joining Singapore Power Limited, Chee Keong worked with multinational, listed and private companies as Chief Financial Officer and in other senior management positions. Chee Keong has a Bachelor of Accountancy degree from the National University of Singapore and is a Fellow of the Institute of Certified Public Accountants of Singapore.
Ian Damien WELLS	Director of Jemena Limited	Prior to his appointment as Chief Financial Officer of SPIAA, Ian was the Group Manager Planning and Investment Analysis of the former Alinta Limited (Alinta). In this role he was intimately involved in assessing Alinta's growth opportunities and executing and implementing the company's corporate transactions. Before joining the Alinta in 2004, Ian was Chief Operating Officer at healthcare provider IPN Ltd. and a Senior Finance Manager at Mayne Nickless Ltd. Ian has extensive financial experience including financial and management accounting and mergers and acquisitions. He holds a Bachelor of Business in Accounting and is a CPA.

Qualifications and experience of key personnel:

Linda Gyzen, General Manager, AquaNet

Linda has worked for the Jemena (formerly Alinta and before that, AGL) Group of Companies for 24 years in various management roles involving responsibility for commercial management and market development. Relevant roles include:

- 2008 – present: General Manager, AquaNet
- 2005-07: Manager Business Development (Agility/Alinta/Jemena)
- 1997-05: Manager Commercial Asset Management (Agility)
- 1993-97: Manager Contract Market, Manufacturing (AGL)

Education and Affiliations

- Bachelor of Chemical Engineering (First Class Honours), University of Sydney 1985
- Business Management Certificate, Australian Institute of Management 1989
- Diploma of Corporate Management, Institute of Chartered Secretaries and Administrators 1996
- Member, Australian Water Association
- Member, Australian Institute of Energy
- Member, Infrastructure Partnerships Australia

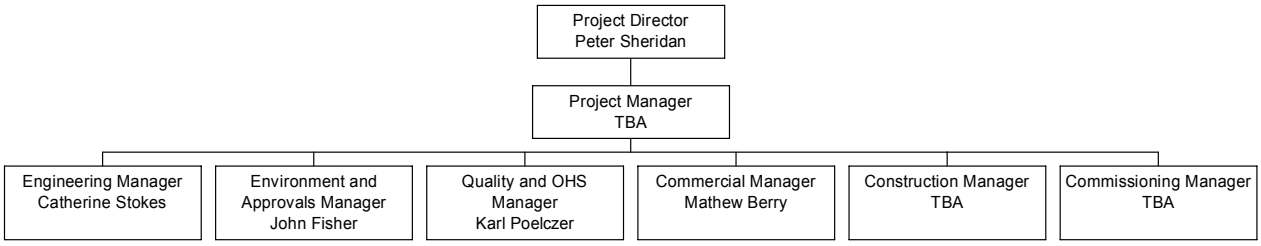
Don Plowman, Chief Operating Officer, SPIAA

Don Plowman, has been the Chief Operating Officer of SPIAA since August 2008. Prior to that he was Chief Operating Officer of Alinta Asset Management (from January 2007), and before that, General Manager Asset Services, Alinta Asset Management. Don has had a varied career in senior management roles in a number of Energy companies including roles as a Network Manager, and Asset Manager for Gas as well as Electricity Assets and experience in large scale business transformation projects. Don also has extensive experience in the implementation of large scale IT projects in the energy, mining and agribusiness sectors as an independent Project Director. Don holds a Bachelor of Engineering (Elec), and an Executive Diploma in Business Administration.

Rosehill Scheme management structures:

The resources required to construct maintain and operate the network for the Rosehill Scheme will be supplied from within the SPIAA group generally – referred to in this application as Jemena – and, for the most part, from within Jemena Limited and its subsidiaries in particular. Jemena Limited is a wholly owned subsidiary of SPIAA. High level organisation charts for the design, construction and commissioning phase and the operational phase of the Scheme follow.

Network design, construction and commissioning phase



Qualifications and experience of named personnel follow:

Name	Expertise & Experience
Peter Sheridan	**Project Director**
	• 26 years' experience in the multi-disciplined engineering field in project development, project delivery and business management roles • Development and leadership of the project team in delivering the project • Overall project delivery through management of scope, budget, schedule staffing, communications, procurement, and risk management • Project Manager on Sydney Primary Loop (Alinta) worth $90 million, responsible for development from concept designs, Board Approval, project mobilisation and delivery
Catherine Stokes	**Engineering Manager**
	• Over ten years' experience in the water and wastewater industry • Five years at Jemena/Alinta/Agility working in Asset Management and Infrastructure Development. Engaged on the Rosehill recycled water scheme and associated recycled water projects since 2005 as project/design engineer and currently Project Manager • Experience in identifying and implementing appropriate Asset Management strategies to maintain or improve asset integrity and performance throughout the asset lifecycle • Responsible for development and coordination of Asset Management Plans for all NSW gas network assets • Previous employment in the areas of water treatment, wastewater treatment, biological and chemical process improvement and distribution network design • Extensive field and laboratory experience in the investigation of water quality issues • Extensive technical knowledge of water and wastewater treatment processes

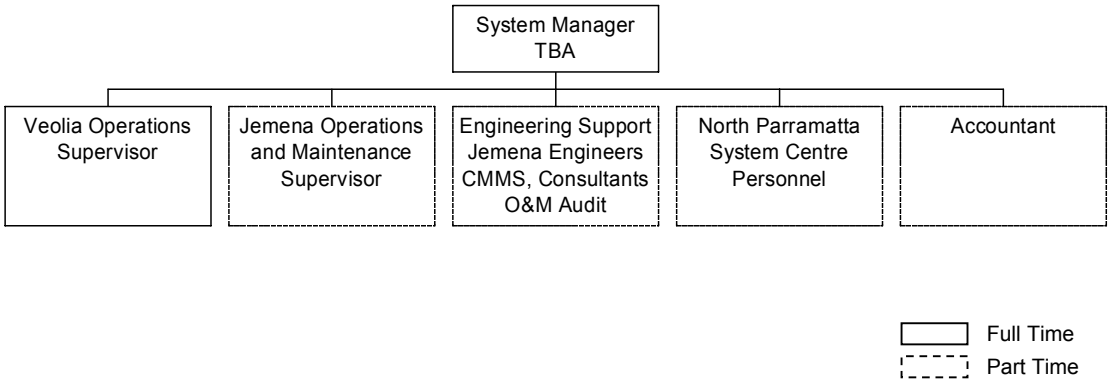
Name	Expertise & Experience
John Fisher	**Environment & Approvals Manager** • Four years with Alinta/Agility building experience in the NSW gas industry as Environmental Engineer, currently working on the Sydney Primary Loop Project • Previously engineering consultant with Patterson Britton & Partners, with specific practice in flood modelling, floodplain management and GIS development • Prepared EIAs for a variety of construction projects and operational and maintenance activities associated with gas assets across NSW, including the Sydney Primary Loop Project, Appin Mine Subsidence Mitigation Project and the Lane Cove River Primary Main Relocation • Environmental impact assessment • Environmental management planning and systems • Regulatory compliance • Risk assessment • Project control

Name	Expertise & Experience
Karl Poelczer	**Quality and OHS Manager**

	• Over 20 years' experience in the water and wastewater industry including project management, construction and technical knowledge of water and wastewater processes
	  • Sydney Water: major works such as STP/SPS Refurbishment, major pipelines, tunnels and tunnel stabilisation, stormwater canal construction, water and sewer reticulation, retrofit/subdivider developer contracts
	• Providing leadership and direction on multi-disciplined electrical, mechanical and associated civil projects in Australia and overseas
	  • Colongra Lateral Pipeline Project: Quality Assurance, Safety and Environmental Management throughout design, procurement, construction, commissioning, handover and Asset Management strategy
	  • Sydney Primary Loop Project: part of the Senior Management Team and Quality Assurance, Safety and Environmental Management services
	  • Cross City Tunnel Project: part of the Senior Management Team, and Quality Assurance, Safety and Environmental Management services
	  • Power Station Projects, Australia: Quality Assurance, Safety and Environmental Management
	• Development and implementation of Company/Project Management Systems
	• Experienced in identifying and implementing Asset Management Strategies
	• Water Engineering and Environmental Technology Projects in Austria and member of Standards Institute Trenchless Technology Committee in Vienna, Austria
	• Excellent written communication skills
	• Demonstrated experience in working as part of an Integrated Project Team

Mathew Berry	**Commercial Manager**
	• Worked in the gas industry for twelve years. • Over 10 years experience in commercial asset management, IT business systems and project work • Provided analysis during the 2000 and 2005 NSW Gas Network Access Arrangements. • Responsible for the management of the commercial team, including gas access contract manager, sales manager and contractors. • Implementation of business policy and change management with Gas Market Company, energy retailers, upstream gas suppliers and internal stakeholders.

Asset management and operations phase:

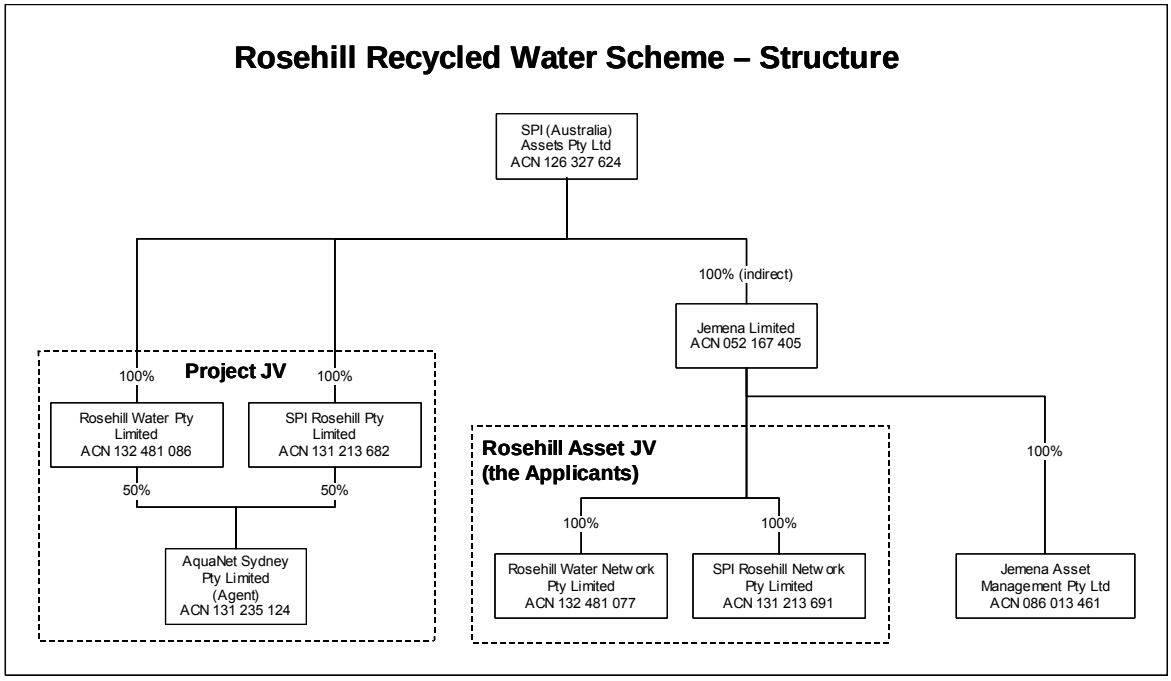


Appendix 13 What is the structure of the applicant corporation? (Question 3(b))

The following structure diagram shows:

- the corporations that own the Applicants, or hold an interest in them and
- other related entities that are relevant to the activities to be licensed.

Neither of the Applicants owns or has an ownership interest in any corporation.



Appendix 14 What is the applicant corporation's financial history? (Question 4(a))

The following documents are attached:

- Special Purpose Financial Report for Alinta LGA Limited (now Jemena Limited) for the 15 months ended 31 March 2008.
- Moody's Credit Opinion on SPI (Australia) Assets Pty Ltd and including Jemena Limited, dated 26 August 2008.

Alinta LGA Limited

ABN 95 052 167 405

Special Purpose Financial Report for the 15 months ended 31 March 2008

Alinta LGA Limited ABN 95 052 167 405
Special Purpose Financial Report
for the 15 months ended 31 March 2008

Contents

Directors' report

The Board of Directors of Alinta LGA Limited ("the Company") has pleasure in submitting its report together with the financial report on the consolidated entity (referred hereafter as "the Group") consisting of the Company and the entities it controlled at the end of or during the fifteen months ended 31 March 2008 ("the period"). The accounting period has been changed to align with the ultimate parent entity.

Directors

The following persons were directors of the Company during the financial year and up to the date of this report (unless otherwise stated):

Mr Peter William Magarry - (appointed 31 January 2007, resigned 31 August 2007, re-appointed 19 May 2008)

Mr Ian Damien Wells - (appointed 31 January 2007, resigned 31 August 2007, re-appointed 30 May 2008)

Mr Yap, Chee Keong - (appointed 31 August 2007)

Mr Lim, Howe Run - (appointed 31 August 2007)

Mr Peter Bruce Hordern - (appointed 31 August 2007, resigned 19 May 2008)

Ms Yasmin Broughton - (appointed 31 January 2007, resigned 31 August 2007)

Principal activities

The Company is based in Australia and owns and operates natural gas and electricity infrastructure assets, as well as an asset management business.

Operating and financial review

Overview of company

Alinta LGA Limited, incorporated and domiciled in Australia, is a proprietary company. Its registered office is at 321 Ferntree Gully Road, Mount Waverley VIC 3149.

Review of operations

The net profit after tax of the consolidated entity for the fifteen month financial period ended 31 March 2008 was $272,685,000 (six months ended 31 December 2006: Loss of $2,208,486,000).

Shareholders funds were $1,252,905,000 at 31 March 2008 (six months ended 31 December 2006: $2,371,381,000).

Significant change in the state of affairs

During the period, the company has undergone a number of ownership changes as follows:

Sale of the Alinta Group

On 9 January 2007, Alinta announced it had received a draft proposal outlining an incomplete non-binding Management Buy-Out. Subsequently, the Alinta Board sought "expressions of interest" from other parties with respect to bids for possible sale/restructuring of the Group and engaged Carnegie Wylie & Company and JP Morgan to manage the bid process for the Group.

On 30 March 2007 the Alinta Board announced that Alinta had signed a Scheme Implementation Agreement under which a consortium of Babcock & Brown and Singapore Power International would acquire the Alinta Group for a total consideration valued at $15 per Alinta share.

Directors' report (continued)

Significant change in the state of affairs (continued)

Sale of the Alinta Group (continued)

In a letter to Alinta shareholders dated 11 April 2007, the Alinta Board announced that it intends to recommend that Alinta shareholders vote in favour of the proposed scheme of arrangement, in the absence of a superior proposal and subject to an independent expert concluding, and continuing to conclude, that the proposal is in the best interests of Alinta shareholders. The Alinta Board also stated that meetings of Alinta shareholders to approve the scheme of arrangement are expected to be held in August 2007.

Alinta shareholders voted in favour of the bid and the takeover became effective on 1 September 2007.

Debt forgiveness

During the period, intragroup debt forgiveness transactions were entered into with related parties. The total amount of debt forgiven was $1,370,275,000. These transactions were treated in accordance with their substance and were classified as transactions with owners and the balance was taken directly to equity.

In the opinion of the Directors there were no other significant changes in the state of affairs of the Company during the period.

Likely developments and expected results of operations

At the date of this report, other than the matters discussed above, there are no developments in the operations of Alinta LGA Limited that in the opinion of the Directors, are likely to significantly impact the Company in the future.

Dividends

There have been no dividends paid or proposed during the period and the directors do not recommend the payment of a dividend in relation to the 15 months ended 31 March 2008.

Environmental regulation and performance

The operations of the Company are subject to environmental regulations under both Commonwealth and State legislation in relation to assets in which the company has an ownership interest. The Directors are not aware of any significant breaches during the period covered by this Report.

The Company aims to control the impact of its activities on the environment and to the greatest extent possible, ensure that its operations, and those of its subsidiaries, are conducted in accordance with existing legislative requirements.

The Company has not incurred any liability (including any rectification costs) under any environmental legislation.

Insurance of officers

Alinta Limited and SPI (Australia) Assets Pty Limited (SPIAA) have paid premiums during the period in respect of contracts insuring against liabilities and expenses incurred by directors or officers of SPIAA including for Alinta LGA Limited and its controlled entities. However, the policy prohibits disclosure of the terms and conditions of the contract and as such they have been omitted.

Auditor's independence declaration

A copy of the auditor's independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 4.

Rounding of amounts

The Company is of a kind referred to in ASIC Class Order 98/100 dated 10 July 1998 (updated by CO 05/641 effective 28 July 2005 and CO 06/51 effective 31 January 2006) and in accordance with the Class Order, amounts in the financial report and Directors' Report have been rounded to the nearest thousand dollars, unless otherwise stated.

Directors' report (continued)

Auditor

KPMG continues in office in accordance with section 327 of the *Corporations Act 2001*.

On behalf of the directors.

Peter Magarry
Director

Melbourne

23 July 2008

Appendices p. 107

Auditor's independence declaration

As lead auditor for the audit of Alinta LGA Limited for the period ended 31 March 2008, I declare that, to the best of my knowledge and belief, there have been:

(a) no contraventions of the auditor independence requirements as set out in the *Corporations Act 2001* in relation to the audit; and

(b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Alinta LGA Limited during the period.

KPMG
Michael Bray
Partner

Melbourne
23 July 2008

KPMG

Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

To: the directors of Alinta LGA Ltd

I declare that, to the best of my knowledge and belief, in relation to the audit for the financial period ended 31 March 2008 there have been:

(i) no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and

(ii) no contraventions of any applicable code of professional conduct in relation to the audit.

KPMG

Michael Bray
Partner

Melbourne

23 July 2008

Income statements

	Notes	Consolidated 15 months ended 31 March 2008 $'000	Consolidated 6 months ended 31 December 2006 *Restated $'000	Parent 15 months ended 31 March 2008 $'000	Parent 6 months ended 31 December 2006 *Restated $'000
Revenue from sale of goods		246,923	217,584	-	57,393
Revenue from services		858,254	194,003	1,197	190
Income from intragroup recoveries		-	-	62,455	14,725
Interest income	4	75,430	309,324	80,304	306,004
Dividend income	5	10,529	96,206	10,529	195,986
Net foreign exchange gains		36,408	-	63,460	-
Net gain on disposal of the investment in Wattle Point Wind Farm		33,504	-	81,050	-
Net gain on distribution of the APT investment		43,493	-	43,493	-
Other income	6	31,549	67,636	25,402	170,950
Share of profits of equity accounted investees		45,813	63,476	-	-
Employee benefits expense		(35,009)	(50,452)	(4,667)	(12,646)
Labour costs		(180,747)	(106,654)	(16,273)	(10,736)
Depreciation and amortisation expense		(97,960)	(51,179)	(8,428)	(4,980)
Materials and services		(383,379)	(42,344)	(63,031)	(72,792)
Finance costs	7	(323,770)	(234,831)	(403,663)	(177,182)
Net foreign exchange losses		-	(3)	-	(67,541)
Net loss on disposal of the investment in Cawse power generation assets		(31,873)	-	(11,426)	-
Other expenses		(198)	(150,214)	-	(3,111)
Profit/(loss) before income tax		328,967	312,552	(139,598)	396,260
Income tax benefit/(expense)		(56,282)	652,428	64,477	19,225
Profit/(loss) from continuing operations after income tax		272,685	964,980	(75,121)	415,485
Profit after income tax of discontinued operations		-	100,000	-	-
Loss on sale of discontinued operations, net of tax		-	-	-	(51,159)
Costs relating to the de-merger schemes of arrangement		-	(3,273,466)	-	(3,069,931)
Profit/(loss) relating to discontinued operations, net of tax		-	(3,173,466)	-	(3,121,090)
Profit/(loss) attributable to shareholders of Alinta LGA Limited		272,685	(2,208,486)	(75,121)	(2,705,605)

The above income statement should be read in conjunction with the accompanying notes.

* Refer to Note 2(g).

Balance sheets

	Notes	Consolidated 31 March 2008 $'000	Consolidated 31 December 2006 *Restated $'000	Parent 31 March 2008 $'000	Parent 31 December 2006 *Restated $'000
ASSETS					
Current assets					
Cash and cash equivalents	8	49,330	46,488	36,843	46,433
Trade and other receivables	9	208,007	272,207	51,628	39,832
Inventories	10	4,378	2,084	-	-
Income tax receivable		20,834	-	17,089	-
Other financial assets	11	23,897	2,003	23,897	2,003
Available-for-sale investments	12	-	354,531	-	354,531
Total current assets		306,446	677,313	129,457	442,799
Non-current assets					
Trade and other receivables	13	598,686	1,584,948	2,840,799	2,862,919
Inventories	14	9,510	10,139	-	-
Property, plant and equipment	15	3,442,527	3,312,495	3,103	2,662
Intangibles	16	344,831	346,356	4,079	11,897
Investments in equity accounted investees	17	504,144	494,832	-	-
Other financial assets	18	41	41	1,233,982	1,474,742
Other assets	19	651	22,805	1,662	22,805
Deferred tax assets		-	-	-	11,731
Total non-current assets		4,900,390	5,771,616	4,083,625	4,386,756
Total assets		5,206,836	6,448,929	4,213,082	4,829,555
LIABILITIES					
Current liabilities					
Trade and other payables	20	151,038	143,257	264,393	146,213
Interest bearing liabilities	21	274,372	825,000	274,372	825,000
Income tax payable		-	45,109	-	38,043
Provisions	22	78,766	56,893	37,808	7,074
Other financial liabilities	23	79,535	29,575	79,535	29,575
Other liabilities	24	2,016	819	-	-
Total current liabilities		585,727	1,100,653	656,108	1,045,905
Non-current liabilities					
Trade and other payables	25	47,532	186,997	1,531,112	1,483,845
Interest bearing liabilities	26	3,282,660	2,744,785	3,282,660	2,744,785
Provisions	27	34,931	41,448	17,270	19,760
Deferred tax liabilities		3,081	3,665	2,680	-
Total non-current liabilities		3,368,204	2,976,895	4,833,722	4,248,390
Total liabilities		3,953,931	4,077,548	5,489,830	5,294,295
Net assets/(liabilities)		1,252,905	2,371,381	(1,276,748)	(464,740)
EQUITY					
Issued capital	29	2,652,157	1,990,728	2,652,157	1,990,728
Reserves	28	(1,963,214)	72,432	(1,301,595)	80,617
(Accumulated losses)/retained profits	28	563,962	308,221	(2,627,310)	(2,536,085)
		1,252,905	2,371,381	(1,276,748)	(464,740)
Total equity		1,252,905	2,371,381	(1,276,748)	(464,740)

The above balance sheet should be read in conjunction with the accompanying notes.

* Refer to Note 2(g).

Statements of recognised income and expense

		Consolidated		Parent	
		15 months ended 31 March 2008	6 months ended 31 December 2006 *Restated	15 months ended 31 March 2008	6 months ended 31 December 2006 *Restated
		$'000	$'000	$'000	$'000
Amounts recognised directly in equity	Notes				
Foreign currency translation differences for foreign operations	28	(1,194)	(2,326)	-	-
Distribution from equity arising from debt forgiveness	28	(1,370,275)	-	(1,308,506)	-
Movement in reserves on transfer relating to acquisition by the Consortium	28	(5,841)	-	-	-
Cash flow hedge - effective portion	28	21,710	(29,997)	21,637	(29,997)
Cash flow hedge transferred to profit or loss for the period	28	(25,396)	-	(25,396)	-
Net change in fair value of available-for-sale investment	28	(35,722)	79,215	(35,722)	79,215
Net change in fair value of available-for-sale investment transferred to profit or loss	28	(43,493)	-	(43,493)	-
Actuarial gain on defined benefit superannuation plans	28	(24,206)	2,193	(22,876)	2,193
Income tax on income and expense recognised directly in equity		8,388	8,341	7,938	8,341
Net (expense)/income recognised directly in equity		(1,477,049)	57,426	(1,398,226)	59,752
Profit/(loss) for the period		272,685	(2,208,486)	(75,121)	(2,705,605)
Total recognised expense for the period		(1,204,364)	(2,151,060)	(1,473,347)	(2,645,853)
Attributable to:					
Shareholders of the Parent Entity		(1,204,364)	(2,151,060)	(1,473,347)	(2,645,853)

The above statement of recognised income and expense should be read in conjunction with the accompanying notes.

* Refer to Note 2(g).

Cash flow statements

	Notes	Consolidated 15 months ended 31 March 2008 $'000	Consolidated 6 months ended 31 December 2006 $'000	Parent 15 months ended 31 March 2008 $'000	Parent 6 months ended 31 December 2006 $'000
Cash flows from operating activities					
Receipts from customers		1,326,102	1,771,099	20,562	104,418
Payments to suppliers and employees		(647,918)	(1,481,716)	(68,929)	(514,801)
Dividends received		47,029	30,070	10,529	9,320
Finance income received		13,528	105,478	3,346	64,417
Finance costs paid		(301,943)	(206,523)	(301,480)	(204,052)
Income taxes paid		(143,992)	(65,968)	(143,992)	(65,968)
Net cash (outflow) inflow from operating activities	35	292,806	152,440	(479,964)	(606,666)
Cash flows from investing activities					
Payment for property, plant and equipment		(240,422)	(152,534)	-	-
Payment for exploration and evaluation		-	(15,200)	-	-
Payment for oil and gas assets		-	(114,700)	-	-
Payment for intangibles		-	-	-	(11,844)
Proceeds from sale of property, plant and equipment		9,412	576	-	-
Net cash (outflow) inflow from investing activities		(231,010)	(281,858)	-	(11,844)
Cash flows from financing activities					
On market share purchase		-	(5,872)	-	(5,872)
Proceeds from borrowings		277,926	300,000	277,926	300,000
Repayment of borrowings		(2,899,342)	(101,300)	(2,899,342)	(59,400)
Dividend paid		-	(282,600)	-	(282,600)
Loans (advanced to)/repaid by related entities		2,562,462	163,578	3,091,791	680,815
Net cash (outflow) inflow from financing activities		(58,954)	73,806	470,375	632,943
Net increase (decrease) in cash and cash equivalents		2,842	(55,612)	(9,590)	14,433
Cash and cash equivalents at the beginning of the financial year		46,488	102,100	46,433	32,000
Cash and cash equivalents end of year		49,330	46,488	36,843	46,433

The above cash flow statements should be read in conjunction with the accompanying notes.

Appendices p. 114

Contents of the notes to the financial statements

Notes to the financial statements

These notes form an integral part of the financial statements.

1 Basis of preparation

Alinta LGA Ltd ("the Company") is a company domiciled in Australia. The special purpose consolidated financial report for the Company as at 31 March 2008 comprises the Company, as the parent, and its subsidiaries (together referred to as "the Group" or "the consolidated entity") and the consolidated entity's interests in associated and jointly controlled entities.

This special purpose financial report for the Group is for the 15 months ended 31 March 2008 and authorised for issue by the Board of Directors on 23 July 2008.

(a) Financial reporting framework

In the opinion of the directors, the Group is not a reporting entity. Accordingly, the financial report has been drawn up as a "special purpose financial report" and has been prepared for distribution to the member under the Corporations Act 2001.

(b) Statement of compliance

This special purpose financial report has been prepared in accordance with the Corporations Act 2001, the recognition and measurement criteria specified by all Accounting Standards and Interpretations, and the disclosure requirements of Accounting Standards AASB 101 Presentation of Financial Statements, AASB 107 Cash Flow Statements and AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors.

Accounting Standards include Australian equivalents to International Financial Reporting Standards ("AIFRS") adopted by the Australian Accounting Standards Board. Certain disclosure requirements of applicable Accounting Standards have not been complied with.

(c) Basis of measurement

Historical cost convention

These financial statements have been prepared under the historical cost convention, except for:

- available-for-sale investments;
- derivative financial instruments; and
- defined benefit superannuation funds.

(d) Functional and presentation currency

The financial report is presented in Australian dollars, which is the Company's functional currency and the functional currency of the majority of members of the Group.

The Group is of a kind referred to in ASIC Class Order 98/100 dated 10 July 1998 (updated by CO 05/641 effective 28 July 2005 and CO 06/51 effective 31 January 2006) and in accordance with the Class Order, amounts in the financial report and Directors' Report have been rounded to the nearest thousand dollars, unless otherwise stated.

(e) Accounting policies

Significant accounting policies for this special purpose financial report are presented in note 2 below.

(f) Going concern basis

The financial statements have been prepared on the going concern basis of accounting, which contemplates the continuity of normal business activity, realisation of assets and settlement of liabilities in the normal course of business.

At the balance sheet date, the total current liabilities exceeded total current assets by $279.281 million. Of this amount $274 million represents the balance of a US$250 million bond held by Alinta LGA Limited which was repaid during April 2008. This repayment was funded with a corresponding increase in the debt with SPIAA. The Directors of SPIAA have confirmed their intention not to recall the loan if the Company is not in a position to pay. Accordingly, the going concern basis of preparation is considered appropriate by the Directors.

1 Basis of preparation (continued)

(g) Use of estimates and judgements

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses.

The estimates and associated assumptions are based on past experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. These accounting policies have been consistently applied by the Group.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. The areas involving a higher degree of judgement, or areas where assumptions and estimates are significant to the financial statements, are discussed in note 3.

2 Summary of significant accounting policies

(a) Principles of consolidation

(i) Subsidiaries

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of the Company as at 31 March 2008 and the results of all subsidiaries for the period then ended.

Subsidiaries are all those entities (including special purpose entities) over which the Group has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one-half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

The purchase method of accounting is used to account for the acquisition of subsidiaries by the Group (refer to note 2(i)).

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Investments in subsidiaries are accounted for at cost in the individual financial statements of the Company.

(ii) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for in the parent entity financial statements using the cost method and in the consolidated financial statements using the equity method of accounting, after initially being recognised at cost. The Group's investment in associates includes goodwill (net of any accumulated impairment loss) identified on acquisition.

The Group's share of its associates' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movements in reserves is recognised in reserves. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Dividends receivable from associates reduce the carrying amount of the investment in the Company's and the Group's financial statements.

2 Summary of significant accounting policies (continued)

(a) Principles of consolidation (continued)

(ii) Associates (continued)

When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

(iii) Joint ventures

Jointly controlled entities

Joint ventures are those entities whose activities are jointly controlled by the Group or established by contractual agreements and form part of the Group.

Jointly controlled operations and assets

Interests in jointly controlled operations are reported in the Special Purpose Financial Statements by including the entity's share of assets employed in the joint ventures, the share of liabilities incurred in relation to joint ventures and the share of any income and expenses incurred in relation to joint ventures in their respective classification categories.

Unrealised gains on transactions between the Group and its joint venture partners are eliminated to the extent of the Group's interest in the joint venture. Gains and losses are recognised as the contributed assets are consumed or sold by the jointly controlled entities or, if not consumed or sold by the jointly controlled entities, when the entity's interest in such entities is disposed of.

(b) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Amounts disclosed as revenue are net of returns, trade allowances and duties and taxes paid. Revenue is recognised for the major business activities as follows:

(i) Services revenue

Services revenue includes revenue earned from the distribution and transmission of gas and electricity.

Services revenue is recognised on delivery which coincides with the stage of completion of the service. Customers are billed for sales on a periodic and regular basis. However, as at each balance date, sales and receivables include an estimation of sales delivered to customers but not yet billed ("unread sales"). This estimation is based on previous consumption patterns and meter reading dates.

Services revenue also includes the following:

Rendering of asset management services

Revenue from rendering of asset management services is recognised in proportion to the stage of completion of the contract when the stage of contract completion can be reliably measured. The stage of completion is assessed by reference to work performed.

Where the outcome of an asset management contract cannot be reliably estimated, contract costs are expensed as incurred. Revenue is only recognised to the extent of costs incurred where it is probable that the costs will be recovered. An expected loss is recognised immediately as an expense.

From time to time the Group can receive revenue in advance of providing the services. This revenue is treated as unearned and is not recognised in the income statement but deferred to the balance sheet.

2 Summary of significant accounting policies (continued)

(b) Revenue recognition (continued)

(i) Services revenue (continued)

Construction contracts

Contract revenue and expenses are recognised on an individual contract basis using the percentage of completion method when the stage of completion can be reliably determined, costs to date can be clearly identified, and total contract revenue and costs to complete can be reliably estimated.

Stage of completion is measured by reference to an assessment of total labour hours and other costs incurred to date as a percentage of estimated total hours and costs for each contract.

Where the outcome of a contract cannot be reliably estimated, contract costs are expensed as incurred. Where it is probable that the costs will be recovered, revenue is recognised to the extent of costs incurred. An expected loss is recognised immediately as an expense.

(ii) Dividend income

Dividend revenue is recognised when the right to receive a dividend has been established. Dividends received from associates and jointly controlled entities are accounted for in accordance with the equity method of accounting.

(iii) Interest income

Interest income is recognised as it accrues using the effective interest method.

(iv) Contributions from customers for capital works

Contributions received from customers to assist in the financing of construction of assets are recognised as revenue when the project is complete.

(c) Gain or loss on disposals of non-current assets

The gain or loss on disposal of non-current assets is calculated as the difference between the carrying amount of the asset at the time of disposal and the net proceeds on disposal (including incidental costs). This is recognised usually when an unconditional contract of sale is signed.

(d) Expenses

(i) Financing costs

Finance costs comprise:
- interest payable on borrowings calculated using the effective interest rate method;
- unwinding of the discount on provisions; and
- bank charges and fees.

Borrowing costs incurred for the construction of any qualifying asset are capitalised during the period of time that is required to complete the asset for its intended use or sale. Other borrowing costs are expensed.

(e) Other income

Other income comprise:
- income from intragroup recoveries;
- foreign exchange gains; and
- gains on disposal of investments.

2 Summary of significant accounting policies (continued)

(f) Income tax

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the period, using tax rates enacted or substantially enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years. Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Temporary differences are not provided for the initial recognition of goodwill and the initial recognition of assets or liabilities that affect neither accounting nor taxable profit. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities using tax rates enacted or substantively enacted by the reporting date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are not recognised to the extent that it is no longer probable that the related tax benefit will be realised.

Tax consolidation

The head entity in the SPIAA Group recognises current tax amounts relating to transactions, events and balances of the wholly owned Australian controlled entities in the SPIAA Group as if those transactions, events and balances were its own (using the group allocation method), in addition to the current and deferred tax amounts arising in relation to its own transactions, events and balances.

Current tax expense/income, deferred tax liabilities and deferred tax assets arising from temporary differences of the members of the tax consolidated group are recognised in the separate financial statements of the members of the tax consolidated group using the "group allocation" method by reference to the carrying amounts in the separate financial statements of each entity and the tax values applying under tax consolidation.

Any current tax liabilities (or assets) and deferred tax assets arising from unused tax losses of the subsidiaries are assumed by the head entity in the tax consolidated group and are recognised as amounts payable (receivable) to (from) other entities in the tax consolidated group in conjunction with any tax funding arrangement amounts (refer below).

The Company recognises deferred tax assets arising from unused tax losses of the tax consolidated group to the extent that it is probable that future taxable profits of the tax consolidated group will be available against which the asset can be utilised.

The SPIAA Group has entered into a tax funding agreement that requires the wholly owned subsidiaries to make contributions to the head entity for current tax assets and liabilities arising from external transactions occurring after the implementation of tax consolidation. The contribution is recorded as an intercompany receivable/payable.

Under the tax funding agreement, the contributions are calculated on a "group allocation method" so that the contributions are equivalent to the tax balances generated by external transactions entered into by the wholly owned subsidiaries, adjusted for intercompany dividends. The contributions are payable as set out in the agreement and reflect the timing of the head company's obligations to make payments for tax liabilities to the relevant tax authorities. The assets and liabilities arising under the tax funding agreements are recognised as intercompany assets and liabilities with a consequential adjustment to income tax expense/revenue.

(g) Prior period restatement

The Company

During the period 1 July 2006 to 31 December 2006, the Company did not recognise income for the recovery of corporate costs and the corresponding amounts due from Alinta Asset Management (3) Pty Ltd, resulting in an understatement of these disclosure line items of $14,725,000 (tax effected: $10,308,000).

2 Summary of significant accounting policies (continued)

(g) Prior period restatement (continued)

This omission has had a financial effect of understating the Company's profit after tax by $4,417,000 for the six months ended 31 December 2006.

The error has been corrected by restating the respective 2007 opening financial statement line items and the comparative period income statement, balance sheet, statement of recognised income and expense and associated notes to the financial statements, have been restated to correct this adjustment.

The Group

Decommissioning costs had not previously been considered by Alinta ACP Pty Limited (wholly owned subsidiary of the Company). Therefore, a provision for decommissioning costs was made on consolidation of $8,931,000 for the plant as the risks and rewards of the asset have been transferred to the lessor.

Property, plant and equipment useful lives were changed during the 6 months ending 31 December 2006 for the gas distribution and electricity networks. The offset to the depreciation expense omitted in the prior year consolidated financial report, as a result of the useful life change, was $3,703,000. This increased net profit by $2,592,000 after tax.

(h) Leases

Finance leases, which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are capitalised at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments.

Finance lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income.

(i) Business combinations

The purchase method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired.

The purchase method requires the identification of the acquirer, being the entity that obtains control of the other combining entities or businesses. The accounting acquirer may not be the legal acquirer.

Cost of the business combination is measured as the fair value of the assets given, equity issued or liabilities incurred or assumed by the accounting acquirer at the date of exchange plus costs directly attributable to the acquisition.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, irrespective of the extent of any minority interest. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill (refer to note 2(n)). If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the income statement, but only after a reassessment of the identification and measurement of the net assets acquired.

(j) Impairment

The carrying amounts of the Group's assets, other than inventories (refer note 2(p)) and deferred tax assets (refer note 2(f)), are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists the asset's recoverable amount is estimated.

For goodwill, assets that have an indefinite useful life and intangible assets that are not yet available for use, the recoverable amount is estimated each year.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows associated with that asset.

2 Summary of significant accounting policies (continued)

(j) Impairment (continued)

Impairment losses are recognised in the income statement. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units (group of units) and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its current fair value.

When there is a decline in the recoverable amount of the Group's receivables an impairment loss is recognised in the income statement. Any cumulative loss in respect of an available-for-sale financial asset recognised previously in equity is transferred to the income statement.

(i) Calculation of recoverable amount

The recoverable amount of the Group's receivables carried at amortised cost is calculated as the present value of estimated future cash flows discounted at the original effective interest rate (i.e. the effective interest rate computed at initial recognition of these financial assets). Receivables with a short duration are not discounted.

The recoverable amount of other assets is the greater of their fair value less costs to sell and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

(ii) Reversals of impairment

An impairment loss in respect of a receivable carried at amortised cost is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised.

An impairment loss in respect of goodwill is not reversed.

For available-for-sale financial assets, the reversal is recognised directly in equity.

Impairment losses, in respect of other assets, are reversed if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(k) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and deposits at call.

(l) Trade and other receivables

Trade and other receivables are stated at amortised cost less impairment losses. Receivables are usually settled within no more than 30 days.

Collectibility of trade debtors is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off. An allowance is raised for any doubtful accounts, in accordance with policy note 2(j).

Deposits at call are initially recognised at fair value and subsequently measured at amortised cost.

2 Summary of significant accounting policies (continued)

(m) Property, plant and equipment

(i) Initial recognition

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (refer note 2(j)). Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials, direct labour, the initial estimate (where relevant) of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of direct production overheads.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

(ii) Subsequent costs

The consolidated entity recognises in the carrying amount of an item of property, plant and equipment, the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied within the item will flow to the consolidated entity and the cost of the item can be measured reliably. All other costs are recognised in the income statement as an expense as incurred.

(iii) Depreciation

Depreciation is charged to the income statement on a straight-line basis over the estimated useful life of each part of an item of property, plant and equipment. Land is not depreciated.

The estimated useful lives used in the current period are as follows:

Gas distribution system comprises:	
- Mains	60 - 120
- Secondary gate stations	40 - 50
- Regulators	40 - 50
- Meters	25
- Telemetry and monitoring	25
Electricity distribution systems comprises:	
- Transformers	40
- Meters	25
- Overhead conductor	45
- Cable	45
- Poles	55
- Switchgear	40
Buildings	40 - 50
Leasehold improvements	6 - 10
Other plant and equipment	3 - 10

The residual value, if significant, is reassessed annually.

(n) Intangible assets

(i) Goodwill

All business combinations are accounted for by applying the purchase method. Goodwill represents the difference between the cost of acquisition and the fair value of the net identifiable assets acquired.

Goodwill is stated at cost less any accumulated impairment losses. Goodwill is allocated to cash-generating units and is not amortised but is tested annually for impairment (refer note 2(j)). The investment in associates includes goodwill identified on acquisition.

2 Summary of significant accounting policies (continued)

(n) Intangible assets (continued)

(ii) Network licenses

The consolidated entity has distribution licenses that entitle it to own and operate gas and electricity distribution systems. The Australian licenses are carried at cost less any accumulated impairment losses. The licenses are considered to have indefinite useful lives as they are granted in perpetuity or there is evidence that the licenses will be renewed beyond the initial term and the cost of renewal is not significant. Licenses with indefinite useful lives are not amortised but are tested for impairment annually and whenever there is an indication that the licenses may be impaired. Any impairment is recognised immediately in the profit and loss.

(iii) Software licences

Software licenses are recorded at cost and amortised on a straight-line basis over their remaining useful lives.

(iv) Contract intangibles

Contract intangibles arising from a business combination are recorded at cost, being the present value of identified contracted net cash flow streams (including renewal options), and are amortised on a straight-line basis over the estimated contract lives. The weighted average estimated contract life is 17.2 years.

(o) Recoverable amount of non-current assets on cost basis

The carrying amounts of non-current assets valued on the cost basis are reviewed to determine whether they are in excess of their recoverable amount at balance date. If the carrying amount of a non-current asset exceeds its recoverable amount, the asset is written down to the lower amount. The write-down is recognised as an expense in the net profit or loss in the reporting period in which it occurs.

Where a group of assets working together supports the generation of cash inflows, the recoverable amount is assessed in relation to that group of assets.

The recoverable amount of an asset is the net amount expected to be recovered through the cash inflows and outflows arising from its continued use and subsequent disposal.

Except where specifically stated, non-current assets are recorded at the lower of cost or the recoverable amount.

In assessing recoverable amounts of non-current assets, the relevant cash flows have been not been discounted to their present values.

(p) Inventories

Inventories consist of parts and consumables and are stated at the lower of cost and net realisable value. Costs, including an appropriate portion of fixed and variable overhead expenses, are assigned to inventory on hand.

(q) Trade and other payables

These amounts represents liabilities for goods and services provided to the Group prior to the end of financial period which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition. Trade and other payables are stated at amortised cost.

(r) Provisions

A provision is recognised in the balance sheet when the Group has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

2 Summary of significant accounting policies (continued)

(r) Provisions (continued)

(i) Restoration

A provision for restoration is recognised when the entity has a legal or constructive obligation as a result of a past event. The future expected restoration cost is discounted using a pre-tax rate which is the basis of the provision recognised. The unwinding of the discount increases the net present value of the expected cost liability over time, which is recognised as an interest expense in the income statement.

(s) Goods and services tax

Revenue, expenses and assets are recognised net of the amount of goods and services tax ("GST"), except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the Australian Tax Office ("ATO") is included as a current asset or liability in the balance sheet.

Cash flows are included in the statement of cash flows on a gross basis. The GST components of cash flows arising from investing and financing activities, which were recovered from, or were paid to the ATO are classified as operating cash flows.

(t) Interest bearing liabilities

Interest bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition interest bearing borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the income statement over the period of the borrowings on an effective interest basis.

(u) Derivatives and hedging activities

The Group uses derivative financial instruments such as interest rate swaps and cross currency swaps to hedge its exposure to foreign exchange and interest rates arising from financing activities, with the instruments matching exactly to the underlying debt being hedged. In accordance with its treasury policy, the Group does not speculatively trade in derivative financial instruments. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

Derivative financial instruments are recognised initially at fair value. The gain or loss on remeasurement of fair value is recognised immediately in the income statement. However, where derivatives qualify for hedge accounting, recognition of any resultant gain or loss depends on the nature of the item being hedged.

The fair value of interest rate swaps and cross-currency swaps is the estimated amount that the Group would receive or pay to terminate the swap at the balance sheet date, taking into account current interest and foreign exchange rates and the current creditworthiness of the swap counterparties. The fair value of forward exchange contracts is their quoted market price at the balance sheet date, being the present value of the quoted forward price.

(i) Fair value hedge

Where a derivative financial instrument hedges the changes in fair value of a recognised asset or liability or an unrecognised firm commitment (or an identified portion of such assets, liability or firm commitment), any gain or loss on the hedging instrument is recognised in the income statement. The hedged item is restated at fair value in respect of the risk being hedged, with any gain or loss being recognised in the income statement.

If the fair value hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedge item, for which the effective interest method is used, is recognised in the income statement over the period to maturity of the hedged item.

2 Summary of significant accounting policies (continued)

(u) Derivatives and hedging activities (continued)

(ii) Cash flow hedge

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a recognised asset or liability, or a highly probable forecasted transaction, the effective part of any gain or loss on the derivative financial instrument is recognised directly in equity.

When the forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or the forecast transaction for a non-financial asset or non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the associated cumulative gain or loss is removed from equity and included in the initial cost or other carrying amount of the non-financial asset or liability. If a hedge of a forecasted transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains and losses that were recognised directly in equity are reclassified into the income statement in the same period or periods during which the asset acquired or liability assumed affects the income statement (e.g. when interest income or expense is recognised).

For cash flow hedges, other than those covered by the preceding two policy statements, the associated cumulative gain or loss is removed from equity and recognised in the income statement in the same period or periods during which the hedged forecast transaction affects the income statement. The ineffective part of any gain or loss is recognised immediately in the income statement.

When a cash flow hedging instrument expires or is sold, terminated or exercised, or the entity revokes designation of the hedge relationship, but the hedged forecast transaction is still expected to occur, the cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income statement or used to adjust the initial cost of the non-financial item.

When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

(v) Foreign currency translation

(i) Functional and presentation currency

Items included in the Special Purpose Financial Statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency').

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except when deferred in equity as qualifying cash flow hedges.

(w) Employee benefits

(i) Wages and salaries, annual leave and sick leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled within 12 months of the reporting date are recognised in provisions in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled. Non-accumulating sick leave is recognised in the income statement when the leave is taken and measured at the rates paid or payable.

2 Summary of significant accounting policies (continued)

(w) Employee benefits (continued)

(ii) Long service leave

The liability for long service leave expected to be settled within 12 months of the reporting date is recognised in the provision for employee benefits and is measured in accordance with (i) above. The liability for long service leave expected to be settled more than 12 months from the reporting date is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

(iii) Retirement benefit obligations

Termination benefits

Liabilities for termination benefits, not in connection with the acquisition of an entity or operation, are recognised when a detailed plan for the terminations has been developed and a valid expectation has been raised in those employees affected that the terminations will be carried out. The liabilities for termination benefits are recognised in other creditors or provisions as applicable.

Liabilities for termination benefits expected to be settled within 12 months are measured at the amounts expected to be paid when they are settled. Amounts expected to be settled more than 12 months from the reporting date are measured at the estimated cash outflows, discounted using market yields at the reporting date on national government bonds with terms to maturity and currencies that match, as closely as possible, the estimated future payments, where the effect of discounting is material.

(iv) Defined contribution superannuation plans

Obligations for contributions to defined contribution plans are recognised as an expense in the income statement when they are due.

(v) Defined benefit superannuation plans

The Group's net obligation in respect of defined benefit superannuation plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value and the fair value of any plan assets is deducted.

The discount rate is the yield at the balance sheet date on government bonds that have maturity dates approximating the terms of the consolidated entity's obligations. The calculation is performed by a qualified actuary using the projected unit credit method.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised as an expense in the income statement on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognised immediately in the income statement.

Actuarial gains and losses represent the difference between actual experience and expectations based upon a set of actuarial assumptions. For example underlying assumptions have changed or investment returns and salary increases were different to expectations. The Group recognises actuarial gains and losses directly in equity.

2 Summary of significant accounting policies (continued)

(w) Employee benefits (continued)

(vi) Profit-sharing and bonus plans

A liability for employee benefits in the form of bonus plans is recognised in provisions when there is no realistic alternative but to settle the liability and at least one of the following conditions is met:

- there are formal terms in the plan for determining the amount of the benefit;
- the amounts to be paid are determined before the time of completion of the financial report; or
- past practice gives clear evidence of the amount of the obligation.

Liabilities for bonus plans are expected to be settled within 12 months and are measured at the amounts expected to be paid when they are settled.

(vii) Employee benefit on-costs

Employee benefit on-costs, including payroll tax, are recognised and included in employee benefit liabilities and costs when the employee benefits to which they relate are recognised as liabilities.

(x) Issued capital

Ordinary share capital is recorded at the fair value of consideration received. The costs of issuing securities are charged against the share capital. Ordinary share capital bears no special terms or conditions affecting income or capital entitlements of the shareholders.

(y) Debt forgiveness

Intra-group debt forgiveness transactions are treated in accordance with their substance, and are classified as transactions with owners when they are completed on a non-arm's length basis. Any gains or losses arising on consummation of these transactions are taken directly to equity.

(z) New standards not yet adopted

The following standards are available for early adoption at 31 March 2008, but have not been applied in preparing the financial statements:

- Revised AASB 3 Business Combinations is applicable to annual reporting periods commencing on or after 1 July 2009. This standard results in changes to how mergers and acquisitions are accounted for.
- Revised AASB 101 Presentation of Financial Statements is applicable to annual reporting periods commencing on or after 1 January 2009. This standard results in changes to the financial statements including the replacement of the Income Statements with a Statements of Comprehensive Income. This standard will not result in any changes to the financial results but will affect how those results are presented.
- AASB 2007 4 Amendments to Australian Accounting Standards arising from ED 151 and Other Amendment is applicable to annual reporting periods beginning on or after 1 July 2007. These amendments are the result of the AASB's decision that, in principle, all accounting policy options available under International Financial Reporting Standards should be included in Australian Accounting Standards and additional Australian disclosures should be eliminated, other than those considered particularly relevant in the Australian reporting environment.
- AASB 2007 7 Amendments to Australian Accounting Standards is applicable to annual reporting periods beginning on or after 1 July 2007. AASB 2007 7 eliminates wording errors, inconsistencies and discrepancies in several accounting standards.
- Interpretation 4 Determining whether an Arrangement contains a Lease is applicable to annual reporting periods beginning on or after 1 January 2008. Interpretation 4 specifies the criteria for determining whether an arrangement is, or contains, a lease.

2 Summary of significant accounting policies (continued)

(z) New standards not yet adopted (continued)

- Interpretation 14 AASB 119 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction, is applicable to reporting periods beginning on or after 1 January 2008. Interpretation 14 clarifies how to determine the limit on the asset that can be recognised in respect of a defined benefit fund surplus.

There are also other minor amendments and revisions to standards and interpretations as well as disclosure changes issued during the year that have not been early adopted. As these changes are minor in nature or relate to disclosure rather than measurement issues, they are not expected to result in any material changes to the Group's financial results.

The potential effect of these standards and interpretations is yet to be fully determined. However it is not expected that the new standards and interpretations will significantly affect the Group's financial report.

3 Critical accounting estimates and judgements

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. Accounting estimates and assumptions where changes in those estimates and assumptions could result in a significant change are detailed below:

(i) Estimated recoverable amount of intangible assets with an indefinite useful life and associated tangible assets

For the purpose of impairment testing on the cash-generating units ("CGUs") containing goodwill, goodwill is allocated to the Group's operating divisions which represent the lowest level within the Group at which the goodwill is monitored for internal management purposes.

The recoverable amounts of the CGUs were based on their value in use.

Value in use was determined by discounting future cash flows generated from the continuing use of the units and was based on the following key assumptions:

1 Cash flows were projected based on the 5 year business plans. From these business plans, 20 year cash flow models were extrapolated using growth assumptions for revenue, expenditure and maintenance capital expenditure. Management believes that this forecast period was justified due to the long term nature of the unit's activities.

2 For regulated assets, the growth assumption is primarily driven by the assumptions in the regulatory building block models with growth being the function of regulated asset base and the allowable return from the regulator. For non-regulated assets, the growth is largely determined by contractual parameters and projected Australian Consumer Price Index (CPI). Expenditure growth for all assets is largely indexed to the projected Australian CPI.

   The annual growth rates applied to the units range between 2.6% and 3.5%.

3 Cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the assets. Depending on the nature of the assets, the discount rates applied in determining the recoverable amounts of the units range between 9.9% and 13.6% per annum.

(ii) Fair values in business combinations

The Group accounts for business combinations using the purchase method of accounting. This method requires the application of fair values for both the consideration given and the assets and liabilities acquired. The calculation of fair values is often predicated on estimates and judgements including future cashflows, revenue streams and value-in-use calculations. The determination of the fair values may remain provisional for up to 12 months from the date of acquisition due to the time necessarily required to obtain independent valuations of individual assets and to complete assessments of provisions.

3 Critical accounting estimates and judgements (continued)

(ii) Fair values in business combinations (continued)

In early 2007, SPIAA, through Singapore Power International Pte Ltd (SPI), formed a consortium with various Babcock & Brown entities (collectively B&B) to make a proposal to Alinta for the acquisition of all of the shares in Alinta Limited. The Alinta board ultimately accepted the consortium's offer and proposed the Alinta Scheme with its members, which was implemented on 31 August 2007. Under the Alinta Scheme, all of Alinta Limited's shares were acquired by the consortium's bid vehicle for a mixture of scrip and cash consideration.

The allocation of the purchase price to the identifiable assets and liabilities acquired in this business combination is currently being determined and has not been completed. For the purpose of preparing the financial statements for the year ended 31 March 2008, the Group has recorded the preliminary fair value of the net identifiable assets acquired. The Group expects to make adjustments to the preliminary fair value within 12 months from the date of acquisition if there are any significant changes to the underlying assumptions adopted on the initial accounting.

(iii) Income taxes

The tax expense and deferred tax balances assume certain tax outcomes and values of assets in relation to the application of the tax consolidation regime. These outcomes affect factors such as the quantification and utilisation of tax losses, capital allowance deductions and the taxation treatment of transactions between members of the Group.

The tax expense assumes that the Group can carry forward available income tax losses.

The Group has taken positions in relation to the income tax and capital gains tax consequences of the acquisition by SPI (Australia) Assets Pty Ltd of the Alinta assets.

Assumptions are also made about the application of income tax legislation. These assumptions are subject to risk and uncertainty and there is a possibility that changes in circumstances will alter expectations which may impact the amount of deferred tax assets and deferred tax liabilities in the balance sheet. In these circumstances, the carrying amount of deferred tax assets and liabilities may change resulting in an impact on the earnings of the Group or on the fair value of the tax assets acquired.

In addition, deferred tax assets are recognised for deductible temporary differences only if it is probable that future taxable profits are available to utilise those temporary differences.

(iv) Recognition of deferred tax

The Group applies the criteria stated in Australian Accounting Standard AASB 112 Income Taxes ("AASB 112") with regards to the calculation and recognition of deferred tax assets. The application of the AASB 112 criteria involves the exercise of judgement surrounding the calculation of accounting and tax bases for the Group's assets and liabilities. Furthermore, the potential reversal of temporary timing differences also requires the use of estimates of future profitability, availability of taxable profits/losses on both revenue and capital account and potential future changes in accounting and tax bases.

In particular, the expectation of the availability of future taxable profits against which deferred tax assets arising in respect of revenue losses is subject to estimation and judgement.

(v) Tax consolidation resets

The Group resets tax bases and values for assets and liabilities within tax consolidated groups as and when those tax consolidated groups are reformed due to acquisitions or disposals of entities. The calculations are complex in nature. They are performed to attribute values as part of this process and are subject to a degree of estimation, judgement and finalisation.

3 Critical accounting estimates and judgements (continued)

(vi) Leases

The Group has considered a number of contractual arrangements in applying the accounting policy in note 2(h). The assessment of these contractual arrangements requires a degree of judgement as to whether the significant risks and rewards of ownership of an asset are substantially transferred to other entities. The classification of a contractual arrangement could materially change the balance sheet of the Group.

(vii) Derivatives

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes.

The fair value of financial instruments traded in active markets is based on quoted market prices at the measurement date. The quoted market price used for financial instruments held by the Group is the current mid price.

Derivatives are used only for risk management strategies and are not actively traded.

The fair value of financial assets and financial liabilities are determined as follows:

- the fair value of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices;
- the fair value of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis; and
- the fair value of derivative instruments, are calculated using quoted prices. Where such prices are not available use is made of discounted cash flow analysis using the applicable yield curve for the duration of the instruments.

Appropriate transaction costs are included in the determination of net fair value.

(viii) Accrued revenue

Revenue accrual estimates are made to account for the unbilled period between the end user's last billing date and the end of the accounting period. The accrual relies on detailed analysis of customers' historical consumption patterns, which take into account base usage, sensitivity to prevailing weather conditions and consumption growth. The results of this analysis are applied for the number of days and weather conditions over the unbilled period.

(ix) Useful lives of property, plant and equipment

Depreciation is provided for on property, plant and equipment, including freehold buildings but excluding land and easements. Depreciation is calculated on a straight line basis so as to write off the net cost of each asset over its estimated useful life to its estimated residual value. The estimated useful lives, residual values and depreciation methods are reviewed annually. Assumptions are made regarding the useful lives and residual values based on the regulatory environment and technological developments. These assumptions are subject to risk and there is the possibility that changes in circumstances will alter expectations.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

(x) Contingent liabilities

SPIAA acquired a business during the year (refer note 3) under a consortium arrangement. The allocation of certain assets and liabilities and the identification of unallocated assets and liabilities between the consortium members have not been finalised as at 31 March 2008. However, the Group does not expect material adjustments to the financial statements other than those already provided for as at 31 March 2008.

4 Interest income

	Consolidated		Parent	
	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000
Interest - Other entities	13,528	309,324	3,346	304,153
Interest - Subsidiaries	-	-	15,056	1,851
Interest - Related entities	61,902	-	61,902	-
	75,430	309,324	80,304	306,004

5 Dividend income

	Consolidated		Parent	
	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000
Dividends - Other entities	10,529	96,206	10,529	-
Dividends - Subsidiaries	-	-	-	174,905
Dividends - Associates	-	-	-	21,081
	10,529	96,206	10,529	195,986

6 Other income

	Consolidated		Parent	
	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000
Net gain on disposal of property, plant and equipment	4,543	44,122	-	-
Fair value gain on net assets	-	18,988	-	-
Net foreign exchange gains	-	3,409	-	3,401
Rental income	831	999	-	2,278
Bad debt recovered	60	32	-	-
Fair value adjustment intragroup loans	-	-	-	165,271
Cash flow hedges recognised in profit & loss	11,137	-	11,137	-
Other	14,978	86	14,265	-
	31,549	67,636	25,402	170,950

7 Finance costs

	Consolidated		Parent	
	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000
Interest expense - External	(214,385)	-	(214,385)	-
Interest expense - Other entities	-	(219,985)	-	(125,351)
Interest expense - Subsidiaries	-	-	(80,936)	(31,920)
Interest expense - Related entities	(111,018)	-	(111,018)	-
Amortisation - borrowing costs	-	(581)	-	(6,082)
Treasury derivatives	-	(14,194)	-	(14,194)
Capitalised interest	2,936	-	3,508	688
Other	(1,303)	(71)	(932)	(323)
	(323,770)	(234,831)	(403,663)	(177,182)

8 Current assets - Cash and cash equivalents

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Cash on hand and at bank	44,644	44,636	32,157	44,581
Deposits at call	4,686	1,852	4,686	1,852
	49,330	46,488	36,843	46,433

9 Current assets - Trade and other receivables

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Net trade receivables				
Trade receivables	122,311	241,680	24,676	21,173
Provision for doubtful receivables	(1,961)	-	-	-
Unbilled revenue	70,517	-	8	-
	190,867	241,680	24,684	21,173
Net related party receivables				
Related party receivables	5,683	-	25,438	42
	5,683	-	25,438	42
Net finance lease receivables				
Finance lease receivables	-	20,057	-	-
	-	20,057	-	-
Other receivables				
Interest receivable	-	-	-	18,404
Other receivables	8,465	9,687	21	77
	8,465	9,687	21	18,481
Prepayments				
Prepayments	2,992	783	1,485	136
	2,992	783	1,485	136
	208,007	272,207	51,628	39,832

Appendices p. 133

10 Current assets - Inventories

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Raw materials	4,378	2,084	-	-
	4,378	2,084	-	-

11 Current assets - Other financial assets

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Fair value derivatives	23,897	2,003	23,897	2,003
	23,897	2,003	23,897	2,003

12 Current assets - Available-for-sale investments

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Investment in listed entity	-	354,531	-	354,531
	-	354,531	-	354,531

In July 2006 Alinta Limited purchased a number of units in the Australian Pipeline Trust ("APT"), resulting in a share ownership of 10.25%. These units were held by Trewas Pty Limited ("Trewas"), a wholly owned entity of Alinta Limited.

As part of the AGL transaction, Alinta gained ownership of a further 26% of APT on 25 October 2006. This brought Alinta's total equity interest to 36.25%.

The consolidated entity was prevented from appointing any board members to the board of APT (through an undertaking provided to the Australian Competition and Consumer Commission) and it was also unable to exert any management influence over the day to day operations of APT. As a result, the consolidated entity did not consider APT to be an associate.

As a result, from 25 October 2006 the consolidated entity had classified its investment in APT as an "available-for-sale" financial asset, which was marked-to-market (i.e. to fair value) through equity. Prior to 25 October 2006, the consolidated entity classified its investment at 25 October 2006 in APT as an associate, which was accounted for using the equity method of accounting.

In December 2006, the Australian Competition and Consumer Commission ("ACCC") announced a decision to force Alinta to sell this share holding to the Australian Securities and Investments Commission ("ASIC") or another willing buyer. This ACCC decision was deemed to be invalid by the Full Federal Court on 20/4/2007, however the Court also concluded that Alinta had breached s606 of the Corporations Act 2001.

As a result of the Court ruling, and in association with the board-recommended external bid for the Alinta Group from Babcock & Brown and Singapore Power ("B&B"), the Alinta directors decided to distribute the APT units to shareholders partly as an "in specie" dividend and partly as a return of capital. The distribution took place on the 30th of August 2007 and the distribution of the unit holding was distributed to Alinta NR Pty Limited, a wholly owned controlled entity of Alinta Limited.

13 Non-current assets - Trade and other receivables

	Consolidated		Parent	
	31 March 2008	31 December 2006	31 March 2008	31 December 2006 *Restated
	$'000	$'000	$'000	$'000
Finance lease receivables	-	232,306	-	-
Other receivables	587,465	-	587,465	-
	587,465	232,306	587,465	-
Net related party receivables				
Intragroup receivables	-	-	2,242,113	1,709,407
Related party receivables	11,221	1,352,642	11,221	1,153,512
	11,221	1,352,642	2,253,334	2,862,919
	598,686	1,584,948	2,840,799	2,862,919

* Refer to Note 2(g).

14 Non-current assets - Inventories

	Consolidated		Parent	
	31 March 2008	31 December 2006	31 March 2008	31 December 2006
	$'000	$'000	$'000	$'000
Strategic spares & stores	9,510	10,139	-	-
	9,510	10,139	-	-

15 Non-current assets - Property, plant and equipment

	Buildings $'000	Plant and equipment $'000	Leasehold improvements $'000	Total $'000
Consolidated				
At 31 December 2006 *Restated (refer to Note 2(g))				
Cost	28,618	4,291,906	9,735	4,330,259
Accumulated depreciation	(2,999)	(1,009,434)	(5,331)	(1,017,764)
Net book amount	25,619	3,282,472	4,404	3,312,495
At 31 March 2008				
Cost	39,457	4,480,597	10,223	4,530,277
Accumulated depreciation	(3,301)	(1,081,439)	(3,010)	(1,087,750)
Net book amount	36,156	3,399,158	7,213	3,442,527
Parent				
At 31 December 2006				
Cost	-	6,048	926	6,974
Accumulated depreciation	-	(4,281)	(31)	(4,312)
Net book amount	-	1,767	895	2,662
At 31 March 2008				
Cost	-	7,100	926	8,026
Accumulated depreciation	-	(4,846)	(77)	(4,923)
Net book amount	-	2,254	849	3,103

Appendices p. 135

16 Non-current assets - Intangibles

Consolidated	Goodwill $'000	Network licences $'000	Software licences $'000	Other $'000	Total $'000
At 31 December 2006					
Cost	45,863	278,200	97,885	-	421,948
Accumulated amortisation	-	-	(75,592)	-	(75,592)
Net book amount	45,863	278,200	22,293	-	346,356
At 31 March 2008					
Cost	17,844	316,907	105,558	5,880	446,189
Accumulated amortisation	-	(13,058)	(88,300)	-	(101,358)
Net book value	17,844	303,849	17,258	5,880	344,831
Parent					
At 31 December 2006					
Cost	-	-	69,199	-	69,199
Accumulated amortisation	-	-	(57,302)	-	(57,302)
Net book amount	-	-	11,897	-	11,897
At 31 March 2008					
Cost	-	-	69,199	-	69,199
Accumulated amortisation	-	-	(65,120)	-	(65,120)
Net book value	-	-	4,079	-	4,079

17 Non-current assets - Investments in equity accounted investees

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Investments in equity accounted investees - unlisted	504,144	494,832	-	-
	504,144	494,832	-	-

Investments in equity accounted investees are accounted for in the consolidated financial statements using the equity method of accounting and are carried at cost by the parent entity.

18 Non-current assets - Other financial assets

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Investments in subsidiaries	-	-	1,614,183	1,651,242
Impairment	-	-	(380,201)	(176,500)
	-	-	1,233,982	1,474,742
Investments other	41	41	-	-
	41	41	-	-
	41	41	1,233,982	1,474,742

Appendices p. 136

19 Non-current assets - Other assets

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Defined benefit superannuation plan assets	651	22,805	1,662	22,805
	651	22,805	1,662	22,805

20 Current liabilities - Trade and other payables

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 *Restated $'000	31 March 2008 $'000	31 December 2006 *Restated $'000
Trade payables	100,776	93,179	37,120	3,477
Interest payable	19,182	23,136	19,182	23,136
Intragroup payables	-	-	189,887	115,183
Other payables	31,080	26,942	18,204	4,417
	151,038	143,257	264,393	146,213

* Refer to Note 2(g).

21 Current liabilities - Interest bearing liabilities

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Fixed rate notes	-	325,000	-	325,000
Senior notes	274,372	-	274,372	-
Bank loans	-	500,000	-	500,000
	274,372	825,000	274,372	825,000

The Senior Notes comprises of a US$250m bond issued to mature in April 2008. The bond was issued at a fixed rate of 6.40%. Cross Currency Swaps have been used to convert the US dollar obligations to fixed interest rate Australian dollar obligations.

22 Current liabilities - Provisions

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 *Restated $'000	31 March 2008 $'000	31 December 2006 *Restated $'000
Employee benefits	34,980	34,549	9,769	2,149
Restoration provisions	867	1,388	637	1,158
Franking deficit tax provisions	25,636	-	25,636	-
Other provisions	17,283	20,956	1,766	3,767
	78,766	56,893	37,808	7,074

* Refer to Note 2(g).

23 Current liabilities - Other financial liabilities

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Fair value derivatives	79,535	29,575	79,535	29,575
	79,535	29,575	79,535	29,575

24 Current liabilities - Other liabilities

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Unearned revenue	2,016	819	-	-
	2,016	819	-	-

25 Non-current liabilities - Trade and other payables

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Net related party payables				
Intragroup payables	-	-	1,485,850	1,483,845
Related party payables	43,948	186,997	41,678	-
Other payables	3,584	-	3,584	-
	47,532	186,997	1,531,112	1,483,845

26 Non-current liabilities - Interest bearing liabilities

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Fixed rate notes	275,000	275,000	275,000	275,000
Senior notes	309,285	669,785	309,285	669,785
Bank loans	-	1,800,000	-	1,800,000
Intragroup loans	2,698,375	-	2,698,375	-
	3,282,660	2,744,785	3,282,660	2,744,785

The Company has issued $275 million of fixed rate medium term notes to public investors. The maturity date of this program is September 2009 and the interest rate is 6.75%.

The Senior Notes comprises of a series of US dollar bonds issued in a variety of maturities ranging from September 2015 to April 2018. The bonds are issued at fixed rates of between 5.30% and 6.85%. Cross Currency Swaps have been used to convert the US dollar obligations to fixed interest rate Australian dollar obligations.

As at 30 August 2007 the total drawn down amount of the Syndicated Facility Agreement was $2.362 billion. On 31 August 2007, this was repaid by SPIAA ultimately, hence resulted in an intragroup payable, with interest rate of 6.935% and a margin 0.09%.

27 Non-current liabilities - Provisions

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
Employee benefits	18,262	23,873	791	2,630
Restoration provisions	16,669	17,502	16,479	17,130
Other provisions	-	73	-	-
	34,931	41,448	17,270	19,760

Appendices p. 138

28 Capital and reserves

Reconciliation of movement in capital and reserves

	Issued capital	Retained profits/ (Accumulated losses)	Available for sale reserve	Debt forgiveness reserve	Foreign currency translation reserve	Employee equity benefit reserve	Asset revaluation reserve	Hedge reserve	Share reduction reserve [ii]	Other reserve	Total equity
Consolidated	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	**$'000**
Balance at 1 July 2006	1,997,300	2,803,100	-	-	14,400	(700)	2,600	(46,100)	-	(6,300)	4,764,300
Purchase of shares on market under employee incentive plans	(6,572)	-	-	-	-	700	-	-	-	-	(5,872)
Loss attributable to shareholders of the parent entity	-	(2,197,730)	-	-	-	-	-	-	-	-	(2,197,730)
Actuarial gains on defined benefit plans	-	1,535	-	-	-	-	-	-	-	-	1,535
Dividend paid	-	(282,664)	-	-	-	-	-	-	-	-	(282,664)
Fair value movement of Available-For-Sale investment	-	-	79,215	-	-	-	(2,600)	-	-	6,300	82,915
Translation of foreign subsidiaries	-	-	-	-	(2,326)	-	-	-	-	-	(2,326)
Losses on cash flow hedge recognised in equity	-	-	-	-	-	-	-	(20,998)	-	-	(20,998)
Transfers relating to the restructure and de-merger of AGL Energy Limited entities	-	(5,264)	-	-	(20,259)	-	-	68,500	-	-	42,977
Balance at 31 December 2006	1,990,728	318,977	79,215	-	(8,185)	-	-	1,402	-	-	2,382,137
Balance at 1 January 2007	1,990,728	318,977	79,215	-	(8,185)	-	-	1,402	-	-	2,382,137
Correction of error in previous financial year [i]	-	(10,756)	-	-	-	-	-	-	-	-	(10,756)
Balance at 1 January 2007 (restated)	**1,990,728**	**308,221**	**79,215**	**-**	**(8,185)**	**-**	**-**	**1,402**	**-**	**-**	**2,371,381**
Issue of ordinary shares	661,429	-	-	-	-	-	-	-	-	-	661,429
Debt forgiveness	-	-	-	(1,304,279)	-	-	-	-	-	-	(1,304,279)
Profit for the period	-	272,685	-	-	-	-	-	-	-	-	272,685
Actuarial losses on defined benefit plans	-	(16,944)	-	-	-	-	-	-	-	-	(16,944)
Translation of foreign subsidiaries	-	-	-	-	(1,194)	-	-	-	-	-	(1,194)
Fair value movement of Available-For-Sale investment	-	-	(35,722)	-	-	-	-	-	-	-	(35,722)
Distribution of APT investment	-	-	(43,493)	-	-	-	-	-	-	-	(43,493)
Gain on cash flow hedge recognised in equity	-	-	-	-	-	-	-	15,197	-	-	15,197
Gain on cash flow hedge transferred to profit and loss	-	-	-	-	-	-	-	(17,777)	-	-	(17,777)
Transfer relating to the acquisition by the Consortium [ii]	-	-	-	(65,996)	-	-	-	-	(575,541)	(6,841)	(648,378)
Balance at 31 March 2008	**2,652,157**	**563,962**	**-**	**(1,370,275)**	**(9,379)**	**-**	**-**	**(1,178)**	**(575,541)**	**(6,841)**	**1,252,905**

(i) - During the period 1 July 2006 to 31 December 2006, the tax effect of revenue of Alinta LGA Ltd from Alinta Asset Management (3) Pty Ltd was not recognised in the Alinta LGA Limited consolidated results. This omission has had a financial effect of overstating the consolidated profit after tax by $4.417 million. The error has been corrected by restating the respective 2007 opening financial statement line items.

- Decommissioning costs had not previously been considered by Alinta ACP Pty Limited (wholly owned subsidiary of the Company). Therefore, a provision for decommissioning costs was made on consolidation of $8.931 million for the plant, in the retained earnings rather than the asset, as the risks and rewards of the asset have been transferred to the lessor.

- Property, plant and equipment useful lives were changed during the 6 months ending 31 December 2006 for the gas distribution and electricity networks. The offset to the depreciation expense omitted in the prior year consolidated financial report, as a result of the useful life change, was $3.703 million. This increased net profit by $2.592 million after tax.

(ii) - During the period, and as part of the acquisition of the Alinta Group, 49% of Alinta Asset Management Pty Ltd (AAM) and 100% of Alinta Asset Management (2) Pty Ltd (AAM 2) were transferred to Alinta ASB Pty Ltd (a wholly-owned subsidiary of the Company).

28 Capital and reserves (continued)

Reconciliation of movement in capital and reserves

	Issued capital	Retained profits/ (Accumulated losses)	Available for sale reserve	Debt forgiveness reserve	Employee equity benefit reserve	Hedge reserve	Total equity
Parent	$'000	$'000	$'000	$'000	$'000	$'000	**$'000**
Balance at 1 July 2006	1,997,300	333,100	-	-	(700)	22,400	2,352,100
Purchase of shares on market under employee incentive plans	(6,572)	-	-	-	700	-	(5,872)
Loss attributable to shareholders of the parent entity	-	(2,715,913)	-	-	-	-	(2,715,913)
Actuarial gains on defined benefit plans	-	1,535	-	-	-	-	1,535
Dividend paid	-	(282,664)	-	-	-	-	(282,664)
Transfer of equity accounted retained earnings due to change in accounting treatment	-	117,871	-	-	-	-	117,871
Fair value movement of Available-For-Sale investment	-	-	79,215	-	-	-	79,215
Losses on cash flow hedge recognised in equity	-	-	-	-	-	(20,998)	(20,998)
Transfers relating to the restructure and de-merger of AGL Energy Limited entities	-	(322)	-	-	-	-	(322)
Balance at 31 December 2006	1,990,728	(2,546,393)	79,215	-	-	1,402	(475,048)
Balance at 1 January 2007	1,990,728	(2,546,393)	79,215	-	-	1,402	(475,048)
Correction of error in previous financial year[(i)]	-	10,219	-	-	-	-	10,219
Balance at 1 January 2007 (restated)	**1,990,728**	**(2,536,174)**	**79,215**	**-**	**-**	**1,402**	**(464,829)**
Issue of ordinary shares	661,429	-	-	-	-	-	661,429
Debt forgiveness	-	-	-	(1,300,506)	-	-	(1,300,506)
Profit for the period	-	(75,121)	-	-	-	-	(75,121)
Actuarial losses on defined benefit plans	-	(16,015)	-	-	-	-	(16,015)
Fair value movement of Available-For-Sale investment	-	-	(35,722)	-	-	-	(35,722)
Distribution of APT investment	-	-	(43,493)	-	-	-	(43,493)
Gain on cash flow hedge recognised in equity	-	-	-	-	-	15,286	15,286
Gain on cash flow hedge transferred to profit and loss	-	-	-	-	-	(17,777)	(17,777)
Balance at 31 March 2008	**2,652,157**	**(2,627,310)**	**-**	**(1,300,506)**	**-**	**(1,089)**	**(1,276,748)**

(i) - During the period 1 July 2006 to 31 December 2006, the Company did not recognise income for the recovery of corporate costs and the corresponding amounts due from Alinta Asset Management (3) Pty Ltd, resulting in an understatement of these disclosure line items of $14.725 million (tax effected: $10.308 million). The comparative period income statement, balance sheet, statement of recognised income and expense and associated notes to the financial statements, have been restated to correct this adjustment.

29 Issued capital

	31 March 2008 Shares	31 December 2006 Shares	Consolidated 31 March 2008 $'000	Consolidated 31 December 2006 $'000	Parent 31 March 2008 $'000	Parent 31 December 2006 $'000
Share capital						
Ordinary shares fully paid	563,711,864	455,910,464	2,652,157	1,990,728	2,652,157	1,990,728
			2,652,157	1,990,728	2,652,157	1,990,728

The Group does not have authorised capital or par value in respect of its issued shares.

All ordinary shares entitle the holder to participate in dividends.

30 Remuneration of auditors

During the period the following fees were paid or payable for services provided by the auditor of the company, and its related practices:

	Consolidated 31 March 2008 $	Consolidated 31 December 2006 $	Parent 31 March 2008 $	Parent 31 December 2006 $
(a) Assurance services				
Auditor of the Parent Entity				
Audit and review of financial reports under the Corporations Act 2001	1,600,000	776,000	1,600,000	255,000
Other regulatory audit services	232,500	-	-	-
Other assurance services	151,986	-	-	-
Total remuneration for assurance services	1,984,486	776,000	1,600,000	255,000
(b) Taxation services				
Auditor of the Parent Entity				
Tax consolidation reset	-	52,000	-	8,000
Total remuneration for taxation services	-	52,000	-	8,000
(c) Advisory services				
Auditor of the Parent Entity				
Advisory services on de-merger transaction	-	331,214	-	-
Other accounting services	-	-	-	-
Total remuneration for advisory services	-	331,214	-	-
	1,984,486	1,159,214	1,600,000	263,000

31 Contingencies

(a) Guarantees

(i) Bank guarantees

Alinta LGA Limited ("the Company") and its controlled entities have provided various bank guarantees in respect of the consolidated entity's obligations. As at 31 March 2008 these bank guarantees totalled $19,267,243.

(ii) Financial guarantee contracts

The Company has provided a guarantee over a $25 million bank facility utilised by TransACT, an entity in which Alinta LGA Limited holds a minority interest. The guarantee is secured upon the assets of TransACT. As at 31 March 2008 the facility had been drawn down to the amount of $22 million.

(iii) Subsidiary guarantees

As at 31 March 2008, Alinta LGA Limited has not provided any parental guarantees to subsidiaries.

31 Contingencies (continued)

(b) Commercial disputes

Breakfast Point GST Margin Scheme

Alinta LGA Limited sold land at Breakfast Point, NSW to Breakfast Point Pty Ltd ("BPPL"), a subsidiary of Rosecorp Pty Limited. Under a deed of option entered into between BPPL and Alinta LGA in 1999 (and amended in 2000), the GST Margin Scheme was applied to the sale of the basis that BPPL would indemnify Alinta LGA for any losses (including any extra GST payable) incurred as a result of applying the GST Margin Scheme.

The Australian Tax Office (ATO) has indicated that Alinta LGA may be liable for $14 million additional GST, although this amount is likely to be a maximum and may be reduced.

Alinta LGA has sent a letter to BPPL/ Rosecorp informing them of the ATO's decision to dispute the 2000 valuation. BPPL/ Rosecorp have also been informed that, in Alinta LGA's view, BPPL is liable to indemnify Alinta LGA of all of its costs in relation to this matter. Alinta's considered opinion is that it will not be exposed to any material liability in relation to this matter.

32 Commitments

	Consolidated		Parent	
	31 March 2008 $'000	31 December 2006 $'000	31 March 2008 $'000	31 December 2006 $'000
(a) Capital expenditure commitments				
Capital expenditure contracted for at reporting date but not recognised as liabilities:				
Plant and equipment	110,825	3,120	-	-
	110,825	3,120	-	-
Within one year	93,068	3,120	-	-
Later than one year but not later than five years	17,757	-	-	-
	110,825	3,120	-	-
(b) Operating lease commitments				
Commitments for the minimum lease payments in relation to non-cancellable operating lease are payable as follows:				
Within one year	10,080	4,007	-	-
Later than one year but not later than five years	44,975	1,612	-	-
Later than five years	32,898	-	-	-
	87,953	5,619	-	-

Operating lease

The consolidated entity leases various offices under non-cancellable operating leases. The leases have varying terms and renewal rights. On renewal, the terms of the leases are renegotiated.

33 Ultimate parent entity

The Company is ultimately owned by Temasek Holdings (Private) Limited, a company incorporated in the Republic of Singapore.

34 Subsequent events after balance sheet date

During April 2008 the company's current external debt being a USD250m bond and related hedge instrument was repaid upon maturity. This repayment was funded with non-current intercompany debt from SPIAA.

SPIAA also announced during June 2008 that it had signed a Business Sale Agreement to purchase the business and assets of the CLM Excavations Group, a leading infrastructure services and civil construction and cable laying business based in New South Wales. The transaction is subject to a number of conditions being met and is expected to be concluded by July 31.

35 Reconciliation of profit for the period to net cash flows from operating activities

	Consolidated		Parent	
	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000	15 months ended 31 March 2008 $'000	6 months ended 31 December 2006 $'000
Profit/(loss) for the period	272,684	(2,208,486)	(75,121)	(2,705,605)
Share of profit of equity accounted investees	(45,813)	(88,476)	-	-
Dividends received from associates and jointly controlled entities	36,500	24,161	-	-
Depreciation, amortisation and asset impairment	97,960	168,875	8,428	22,218
Fair value (gain)/loss on derivatives	(25,395)	(91,851)	(25,395)	(34,404)
Net loss/(gain) on disposal of property, plant & equipment	(4,543)	(43,855)	-	289
Net (gain)/loss on disposal of businesses	-	-	-	51,159
Net (gain)/loss on disposal of Wattle Point Wind Farm	(33,504)	-	(81,050)	-
Net (gain)/loss on disposal of investment in APT	(43,493)	-	(43,493)	-
Net (gain)/loss on disposal of investment in Cawse	31,873	-	11,426	-
Changes in net assets and liabilities:				
(Increase)/decrease in receivables	(64,520)	(587,017)	(190,454)	1,773,246
(Increase)/decrease in inventories	(1,665)	34,723	-	-
(Increase)/decrease in other assets	16,310	4,145,472	(2,456)	319,781
Increase/(decrease) in payables	57,375	(226,164)	51,666	10,311
(Decrease)/increase in provisions	15,356	(22,590)	2,608	3,834
Increase/(decrease) in other liabilities	-	(259,844)	-	(37,221)
Increase/(decrease) in income tax payable	(16,319)	(692,508)	(136,123)	(10,274)
Net cash (outflow) inflow from operating activities	292,806	152,440	(479,964)	(606,666)

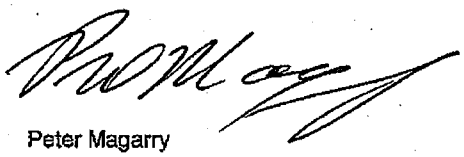
Appendices p. 143

Directors' declaration

In the opinion of the directors of Alinta LGA Ltd:

(a) the Company and the Group are not reporting entities;
(b) the financial statements and notes set out on pages 5 - 37 are in accordance with the Corporations Act 2001 including:
    (i) giving a true and fair view of the financial position of the Company's and Group's financial position as at 31 March 2008 and of their financial performance, as represented by the results of their operations and their cash flows for the financial period ended on that date in accordance with the basis of preparation described in Note 1, and
    (ii) complying with Accounting Standards and other mandatory professional reporting requirements to the extent described in Note 1 and the Corporations Regulations 2001; and
(c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the directors:



Peter Magarry
Director

Melbourne

23 July 2008

KPMG

Independent audit report to the members of Alinta LGA Limited

We have audited the accompanying financial report, being a special purpose financial report, of Alinta LGA Limited (the Company), which comprises the balance sheets as at 31 March 2008, and the income statements, statements of recognised income and expense and cash flow statements for the year ended on that date, a summary of significant accounting policies and other explanatory notes and the directors' declaration set out on pages 5 to 38 of the Group comprising the Company and the entities it controlled at the period's end or from time to time during the financial period.

Directors' responsibility for the financial report

The directors of the Company are responsible for the preparation and fair presentation of the financial report and have determined that the accounting policies described in Note 2 to the financial statements, which form part of the financial report, are appropriate to meet the requirements of the Corporations Act 2001 and are appropriate to meet the needs of the members. The directors' responsibility also includes designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. No opinion is expressed as to whether the accounting policies used, as described in Note 2, are appropriate to meet the needs of members. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with the basis of accounting described in Note 1 to the financial statements so as to present a view which is consistent with our understanding of the Company's and Group's financial position, and of their performance.

The financial report has been prepared for distribution to members for the purpose of fulfilling the directors' financial reporting obligations under the *Corporations Act 2001*. We disclaim any assumption of responsibility for any reliance on this report or on the financial report to which it relates to any person other than the members, or for any purpose other than that for which it was prepared.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Qualification

As at 25 October 2006 the ownership of the Company changed. The directors of the Company were unable to provide us with all of the information and explanations required in relation to transactions which occurred prior to the change of ownership. These transactions impact the income statements, statements of recognised income and expense, statements of cash flows and related notes to the financial report insofar as they relate to the six months ended 31 December 2006.

As a result of these difficulties, a limitation in scope exists in relation to the completion of KPMG's audit of the results of the Company's and Group's performance as presented in the income statements, statements of changes in equity, statements of cash flows and related notes to the financial report insofar as they relate to the six months ended 31 December 2006. The nature of this limitation in scope is such that sufficient appropriate audit evidence to resolve the uncertainty resulting from the limitation cannot reasonably be obtained and the possible effects of the adjustments that might have been required if this limitation in scope did not exist are pervasive and fundamental. Sufficient appropriate audit evidence has been obtained to enable KPMG to express an opinion on the balance sheets of the Company and the Group as at 31 December 2006.

Qualified audit opinion

In our opinion, because of the existence of the limitation on the scope of our work in relation to the financial report, as described in the qualification paragraphs, and the effects of such adjustments, if any, as might have been determined to be necessary had the limitation not existed, we are unable to and do not express an opinion as to whether the results of the Company's and Group's performance as presented in the income statements, statements of changes in equity, statements of cash flows and related notes to the financial report insofar as they relate to the six months ended 31 December 2006 are in accordance with the Corporations Act 2001, including:

(a) giving a true and fair view of the Company's and Group's financial performance for the six months ended on that date in accordance with the accounting policies described in Note 2; and

(b) complying with Australian Accounting Standards to the extent described in Note 1 and the Corporations Regulations 2001.

In relation to the balance sheets of the Company and the Group as at 31 December 2006 and 31 March 2008 and the income statements, statements of recognised income and expense, statements of cash flows and related notes to the financial report insofar as they relate to the fifteen month period ended 31 March 2008, in our opinion, the financial report of Alinta LGA Limited is in accordance with the Corporations Act 2001, including:

(a) giving a true and fair view of the Company's and Group's financial position as at 31 December 2006 and 31 March 2008 and of their performance for the fifteen month period ended 31 March 2008 in accordance with the accounting policies described in Note 2; and
(b) complying with Australian Accounting Standards to the extent described in Note 1 and the Corporations Regulations 2001.

KPMG

KPMG

Michael Bray
Partner

Melbourne

23 July 2008

Credit Opinion: SPI (Australia) Assets Pty Ltd

SPI (Australia) Assets Pty Ltd

Melbourne Australia

Ratings

Category	Moody's Rating
Outlook	Stable
Issuer Rating -Dom Curr	A3

Contacts

Analyst	Phone
Clement K. Chong/Sydney	612.9270.8108
Ian ChanChong/Sydney	612.9270.8167
Brian Cahill/Sydney	612.9270.8105

Opinion

Corporate Profile

SPI (Australia) Assets Pty Ltd ("SPIAA") is an owner of electricity and gas infrastructure assets. Its assets include a gas distribution network in NSW, electricity distribution network in Victoria, 50% interest in ActewAGL's distribution businesses, the Eastern Gas Pipeline (EGP), Queensland Gas Pipeline (QGP), VicHub Interconnect Facility, and asset management businesses in the eastern states of Australia. SPIAA is wholly owned by Singapore Power International Pte Limited (SPI), in turn, a wholly-owned subsidiary of Singapore Power ("SP", rated Aa3).

SPIAA's ownership of the NSW and Victorian distribution networks, and interest in ActewAGL is through Alinta LGA Ltd now trading as "Jemena Limited" (rated A3).

Rating Rationale

SPIAA's A3 issuer rating reflects the company's: [1] stable cash flow generation from its ownership of a diversified portfolio of low-risk gas and electricity infrastructure assets, [2] relatively high level of leverage, and [3] its ownership by a more highly-rated parent in SP.

SPIAA's assets face low business risk, given they are either regulated, or subject to long-term contracts which underpin revenues over the medium term. These businesses will make up a substantial portion of total earnings.

The company's regulated businesses include: the NSW gas distribution, Victorian electricity distribution, and ActewAGL distribution. The regulatory regimes for these businesses are well established and have relatively long track records for delivering supportive tariff outcomes. The regulated businesses are expected to make up 55% of EBIT in FY09. When EGP and QGP's EBIT (which are based on contracted revenues) and distributions from UED are included, contributions from regulated and contracted-pipeline businesses will approximate 72%.

The Asset Management businesses are higher risk due to the competitive markets in which it operates and the typically low operating margins associated with its works. However, Moody's notes the asset management business' track record in this field, and that revenues are generally contracted over a number of years with utilities. For instance, Jemena has long-term operating and maintenance agreements with UED and MultiNet for the management of their networks.

Counterbalancing the company's strong business risk profile is its high leverage. Reflecting this situation, FFO/Interest is expected to be around 1.8 times, FFO/Debt 7%, and Debt/EBITDA 6-7 times over the next three years. Moody's does not expect the company to pay equity distributions until such time that FFO/Interest reaches 2 times and over. Based on current expectations, this is likely to occur in FY2013.

SPIAA's A3 rating considers a rating uplift which takes into account its ownership by a more highly-rated parent in

SP which is rated Aa3. The rating uplift considers the strategic nature of SPIAA to SP. In this regard, SPIAA is wholly-owned by SP and the latter is expected to maintain meaningful influence over its subsidiary's strategic directions.

Peer Comparison:

Without considering its rating uplift, SPIAA's standalone credit profile would indicate a mid-Baa rating when compared to its single-asset regulated utility peers. For instance, FFO/Interest of 1.7-1.8x is comparable with Baa2 peers such as Multinet and Alinta Network Holdings. Similarly, SPIAA's FFO/Debt of 6-8% is comparable with these two companies. At the same time, SPIAA has a more diversified asset portfolio that includes 5 main income-generating businesses, although its non-regulated businesses face a greater degree of competition than a regulated network and therefore have higher business risk. All in all, SPIAA's fundamental credit profile positions it at the mid-Baa rating level.

Key Rating Drivers:

The key rating drivers for SPIAA includes:

1) Stable cash flow from good-quality asset portfolio

SPIAA's assets are expected to generate stable and predictable cash flow. The company's assets are of good quality, comprising regulated or contracted-pipeline assets - which will contribute to 72% of EBIT in FY09. Given the nature of its assets, it faces relatively low business risk. The regulatory regimes for the company's regulated assets have a long track record of predictable tariff outcomes. This minimizes any adverse changes in regulatory regimes in the future.

The non-regulated businesses - which include the gas pipelines and the asset management business - are not as low-risk as the regulated businesses. However, they benefit from long-term contracts which support revenue stability. For instance, a substantial portion of the capacity under the EGP and QGP has been contracted under take-or-pay arrangements with relatively creditworthy counterparties. Also, a portion of Asset Management revenue is underpinned by long-term operation and maintenance (O&M) arrangements with UED and Multinet. Contract renewal risk is manageable for these businesses due to their competitive positions in their respective market places.

SPIAA's assets enjoy relatively strong competitive positions. The regulated assets are largely monopoly-like assets that face low by-pass risk. The gas pipelines (EGP and QGP) have established positions in their respective markets, and Asset Management has a well-established track record in the infrastructure management space.

Operating risk is low, given the nature of its assets. In addition, the company has retained key management personnel from former Alinta. Its assets are in good conditions and are expected to have remaining useful lives of 30 years or longer.

2) Relatively diversified asset portfolio further support cash flow stability

SPIAA's relatively diversified portfolio of good-quality assets adds stability to its cash flows. This degree of diversity is more superior than other rated single-asset owners such as Alinta Network Holdings or Multinet. It further enjoys a degree of geographic diversity, given its assets are relatively spread out, although located on the east coast of Australia. That said, the non-regulated assets are not as low-risk as the regulated assets.

The company has five main earnings contributors, with the largest contributor (NSW gas distribution) making up about 30% of EBIT. Other main earnings contributors include Asset Management (28%), Victorian electricity distribution (17%), EGP (13%), and ActewAGL (8%).

3) Relatively high level of leverage

Despite SPIAA's strong business risk profile, its credit profile is constrained by the high financial leverage evident in its capital structure. Reflecting this situation, FFO/Interest is expected to around 1.8 times, FFO/Debt 7%, and Debt/EBITDA 6-7 times over the next three years. Moody's does not expect the company to pay equity distributions until such time that FFO/Interest reaches 2 times and over. Based on current expectations, this would occur in FY2012.

4) Rating uplift due to ownership by higher-rated parent

SPIAA's A3 rating considers a rating uplift due to its ownership by a more highly-rated parent in SP. The rating uplift considers the strategic nature of SPIAA to SP, its 100% ownership by SP, and an expectation that SP will maintain a meaningful degree of influence over its subsidiary's strategic directions.

The importance of SPIAA is demonstrated by SP's willingness to provide a guarantee for SPIAA's proposed new

bank debt. However, it is anticipated that future financing by SPIAA will be done on a standalone basis and without any guarantee from SP. For this reason, Moody's has not rated SPIAA's issuer rating as the same as that of SP.

5) Some event risk in the medium to long-term

Whilst not a major rating issue over the next 1-2 years, Moody's foresees some risk of a potential evolution in SPIAA's asset profile. Such a shift in its asset profile could affect the stability of the company's cash flows, and hence its position in the current rating. The company is predominantly an asset owner for now, but Moody's expects it to gradually grow its asset management/service provider platforms. It may fund this initiative by reducing stakes in some of its current suite of infrastructure assets, while at the same time, retaining meaningful control over the assets.

6) Complex capital structure

Moody's considers SPIAA's capital structure - which comprises mainly senior debt and deeply subordinated shareholder loans from an SP-controlled entity - to be complex and could introduce a degree of legal risk. The shareholder loan agreement contains languages which could make the loans less "equity-like", when compared with the shareholder loans of other rated utilities (such as ETSA). That said, Moody's is comfortable with treating these loans as having the same effect as equity - at the current rating level - due to the presence of a strategic shareholder in SP, and the senior lender's protection through the subordination deed poll.

Furthermore, Moody's has not notched the company's rating for structural subordination because of an expectation that Alinta LGA's debt will eventually be refinanced at SPIAA, mitigating the risk of subordination. At present, more than 15% of SPIAA's consolidated debt resides at Alinta LGA which, in turn owns a material portion of the group's assets. Moody's expects that A$275 million of Alinta LGA's debt will be refinanced by SPIAA in a year's time, bringing Alinta LGA's debt down to under 10% of consolidated debt. Moody's expects that future indebtedness of the group will be raised by SPIAA.

Liquidity Profile

SPIAA's liquidity profile considers the company's stable cash flow generation which, in turn, is challenged by tight covenant headroom and rating-related review event.

Over the next 12 months, the company is expected to generate operating cash flow in the range of A$230 million to A$250 million. After including capital expenditure of about A$450 million, SPIAA will not be generating free cash flow.

The company currently has A$150 million in 364-day working capital facilities. However, the tight headroom over a financial covenant or the presence of a rating-related review event in its bank documents has the potential to affect the company's ability to access its bank facilities. Moody's understands the company is close to finalizing a new bilateral facility for A$200 million which, when signed, would provide additional liquidity.

The company will not be paying dividends in the next year and there will not be any material debt maturity in the same period.

Rating Outlook

The outlook on SPIAA's A3 rating is stable, reflecting its anticipated stable operating and financial profile over the next 12-18 months.

What Could Change the Rating - Up

Given the high leverage level, and the resultant weak financial metrics, a rating uplift is unlikely in the near term. However, positive pressures could emerge over time if SPIAA achieves the following metrics: FFO/Interest above 2.4 times, FFO/Debt above 10%, and Debt/EBITDA under 6 times. Furthermore, Moody's would look for the company to enhance its liquidity position by improving financial covenant headroom and remove the rating-related review event clause in its bank facilities.

An intention by SP to guarantee all of SPIAA's future indebtedness would result in an alignment of SPIAA's rating to that of SP.

What Could Change the Rating - Down

SPIAA's rating could come under pressure if it were to suffer disappointment in its financial performance, as indicated by FFO/Interest under 1.6-1.7 times, FFO/Debt under 5%, and Debt/EBITDA above 7 times on a sustainable basis. A downgrade of SP's rating could pressure SPIAA's rating.

The rating could also come under pressure if Moody's perceives a decrease in SPIAA's strategic importance to SP.

Water Industry Competition Act 2006
Network Operator's Licence Application

SPI Rosehill Network Pty Limited and Rosehill Water Network Pty Limited (the Applicants)

Supplementary Information

The Applicants attach a copy of Jemena's Policy on Compliance with the Law. This document should be read in conjunction with the response to Question 2(d)(iii) in the Applicants' original application.

Our Policy

Compliance with the Law

SPI (Australia) Assets Pty Ltd (**Jemena**) operates within an environment of demanding and sometimes complex, legal and regulatory obligations. Jemena is committed to conducting all its business operations and dealings in full compliance with the law and to ensuring that all Jemena personnel understand its compliance requirements.

To deliver on this commitment we will:

- establish and maintain governance structures and compliance management systems that are commensurate with the nature of the obligations and associated compliance risks; and
- foster and maintain a culture that values and supports compliance through strong leadership, participation, training and development.

Wherever we operate we will:

- identify and assess applicable obligations and develop and implement appropriate procedures and controls to ensure compliance;
- set and monitor performance against meaningful objectives and measures for compliance;
- identify and analyse breaches and possible breaches of the law, and implement appropriate responses; and
- actively engage with key compliance stakeholders to foster constructive relationships.

In pursuing our goal of full compliance with the law, we:

- adhere to Jemena's corporate values in managing compliance and in our dealings with all stakeholders;
- value and encourage behaviour that supports and produces compliant outcomes; and
- strive for continuous improvement in compliance performance.

We are all responsible for Jemena's compliance performance. In particular:

- management and supervisors will provide visible leadership and appropriate resources, and ensure that efficient and effective compliance procedures and controls are implemented in the workplace; and
- as individuals, we are all accountable and empowered to ensure we adhere to Jemena's compliance management systems and perform our duties in compliance with the law. We are also responsible for reporting any breach or possible breach of the law that comes to our attention.

We must comply with this policy and the law at all times.

It is a requirement that every Jemena director, officer, and employee, as well as contractors, advisers, and agents that act on behalf of Jemena, take all reasonable steps to avoid breaches of this policy and the law. This obligation includes taking due care to obtain advice to avoid inadvertent breaches. Where there is doubt about the appropriateness of a course of action, advice must be sought from an appropriate subject matter expert or escalated, if necessary to the relevant Leadership Team member, for consideration.

Behaviours that compromise compliance will not be tolerated.

Lim Howe Run
Acting Chief Executive Officer
September 2008