

## **Bingara Gorge Development**

Retail Supplier's  
Combined Sewerage Services and  
Recycle Water Supply  
Retail Supply Management Plan

Rev 5

August 2019



*Sewerage & Recycled Water Retail Supply Management Plan*

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**Distribution**

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Note the only controlled copy is that electronic version located on VWS server.

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# 1 Purpose

This Combined Sewerage Services Supply and Recycled Water Supply Retail Supply Management Plan (Plan) has been prepared by Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWS) for the Water Industry Infrastructure, in Wilton (NSW) pursuant to VWS's obligation under its NSW Retail Supplier's Licence No 10\_013R (the Licence) for the following Authorised Activities as detailed in the Licence:

Section S1 – Non-Potable Water Supply and Section S3 – Sewerage Services

Supply of Non-potable Water used for one or more of the stated purposes; such purposes being toilet flushing, garden irrigation, laundry washing (cold tap only) and golf course irrigation and provide sewerage services to serve the community in Bingara Gorge Development (which is land situated under following identifiers DP 270536, DP 1104390, DP 280010, DP 280014 and DP 1108927), known as Wilton Parklands – Bingara Gorge, as well as the corner of Hornby and Broughton Street, running through Hornby Street, Hornby Street West and Condell Park Road to Lot 103, DP 1108927, Wilton as developed by Authorised Person (Lend Lease "Lend Lease Communities (Wilton) Pty Ltd (LLC).

# 2 Background

VWS has been contracted by Lend Lease Communities (Wilton) Pty. Limited (ABN 31 110 022 976, ACN 110 022 976) (the Developer), (LLC), to provide certain operations and maintenance works. VWS is obligated under its Network Operator and Retail Supply licences to perform / ensure that various Network Operator and Retail Supplier Services for Sewerage Services and Recycled Water Supply at its Bingara Gorge development are appropriately performed.

Bingara Gorge is a planned 1165 lot residential development being constructed in phases around a Golf Course located at Wilton NSW approximately 80 km south west of Sydney CBD located adjoining the main Sydney-Canberra-Melbourne road corridor in Wollondilly Shire.

The Golf Course was, during the initial period of operations, irrigated using water from three different sources, namely:

- Captured stormwater runoff stored in water bodies located within the development.
- Tertiary treated effluent from Treatment Infrastructure (Temporary Recycled Water Treatment Plant, 20ML Pond) servicing Bingara Gorge.
- A supply of potable water from Sydney Water Corporation to a maximum of 200 ML per year.

Under a separate agreement, Sydney Water Corporation (SWC) had been supplying LLC with supply of potable water (up to 200 ML/yr) to provide a source of non-rainfall dependent supply for the irrigation of the course; this was ceased on the 28 November 2017, with the commencement of commercial operation of the Permanent Recycled Water Treatment Plant (PRWP).

Since that date, the Temporary Recycled Water Treatment Plant has been shut down and is in a mothballed state.

As of the above date, the quantity of treated effluent available from RWTP, coming from the houses built and occupied, is feeding requirements of all areas as detailed in Section S1 and S3 above. From



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this date, residential customers have stopped using SWC supplied potable water for toilet flushing and irrigation. An air gap has been introduced between the SWC supply and The Recycled Network.

### 3 The Water Industry infrastructure

The Water Industry Infrastructure as noted in section 1 above is presented diagrammatically in Appendix 1. This comprises the following:

- Sewerage infrastructure for sewage conveyance from individual house connections within Wilton and the Bingara development to and including the LLC sewage storage tank (Designed & Constructed (D&C) by LLC)
- The sewage treatment section of the infrastructure (Permanent Recycled Water Treatment Plant) (D&C by VWS) including:
  - Solids screening system,
  - Activated Sludge Tank,
  - Ultra-filtration
  - Ultra Violet Light (UV) and Chlorine (sodium hypochlorite) disinfection
  - Sludge dewatering
  - Ancillary pumps, piping, electrics, instrumentation and controls
- The Recycled Water section of the infrastructure (Design & Construct (D&C) by LLC)
  - Treated Water storage prior to delivery to Golf course and housing development, and
  - Ancillary pumps, piping, electrics, instrumentation and controls
- Recycle water reticulation infrastructure for golf course and to housing for toilet flushing and garden irrigation (Lilac System); D&C by LLC

All treated water produced by the Water Industry Infrastructure is used for all purposes as stated in Section S1.

## 4 Scope of this plan

### 4.1 Scope included

This Plan (and its scope) relates to the sewerage and recycled water infrastructure as defined under the Licence and elaborated upon above and has been prepared in accordance with the Water Industry Competition (General) Regulation 2008 (the Regulation) Part 2 (Additional conditions for licences for water supply) Schedule 2 Conditions for retail supplier's licences Section 7A (Retail Supply Management Plans).

This plan has been and is being periodically reviewed and updated, pursuant to the Water Industry Competition (General Regulation) 2008 (the Regulation) Schedule 2 (Conditions for Retail suppliers' licences) Part 1 (Licence conditions for all licences) section 7A (Retail Supply Management plan) Article (2) (a).

Accordingly the scope of this Plan addresses the prescriptive requirements of the Regulation (clause by clause) and the IPART Audit Guidelines (September 2018) as follows which have been categorised as:

- Planning,
- Implementation and

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- Compliance.

**Planning: For Non-Potable Water Supply**

The arrangements that the licensee (VWS) has made, or proposes to make, in relation to:

- (a) the events and circumstances that could adversely affect the licensee's ability to supply Non-Potable water, and
- (b) the probability of the occurrence of any such event or circumstance, and
- (c) the measures to be taken by the licensee:
  - i. to prevent the occurrence, or minimise the effect, of any such event or circumstance, and
  - ii. to arrange for alternative supplies of water, and
- (d) The arrangements that the licensee has made, or proposes to make, to ensure that it complies with:
  - i. its code of practice for customer complaints and its code of practice for debt recovery, and
  - ii. the marketing code of conduct and the transfer code of conduct.

**Planning: For Sewerage Services Supply**

The arrangements that the licensee (VWS) has made, or proposes to make, in relation to:

- (a) the events and circumstances that could adversely affect the licensee's ability to sewerage services, and
- (b) the probability of the occurrence of any such event or circumstance, and
- (c) the measures to be taken by the licensee:
  - iii. to prevent the occurrence, or minimise the effect, of any such event or circumstance, and
  - iv. to arrange for alternative sewerage services in response to such event or circumstance, and
- (d) The arrangements that the licensee has made, or proposes to make, in relation to complaint and debt recovery procedures

**Implementation: For both Non-Potable Water Supply and Sewerage Services Supply**

The licensee:

- (a) must ensure that its retail supply management plan is fully implemented and kept under regular review and, in particular, that all of its activities are carried out in accordance with that plan, and
- (b) must, if the Minister so directs, amend its retail supply management plan in accordance with the Minister's direction.

**Compliance: For both Non-Potable Water Supply and Sewerage Services Supply**

If the Minister or IPART so demands, or if any significant change is made to its retail supply management plan, the licensee:

- (a) must provide the Minister or IPART with a report, prepared by an approved auditor in such manner and form as the Minister or IPART may direct, as to the adequacy of the plan, or
- (b) must pay the Minister's or IPART's costs of conducting investigation into the adequacy of the plan.

In the preparation of this Plan VWS has also taken into consideration all actions to assure all stakeholders that this Plan and its associated controlling actions have the resilience and integrity required under Regulation.

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### Further Compliance

Licensee must comply with any requirements of NSW Health agreed to by IPART.

As such, and as advised by IPART to VWS in December 2017, in accordance with Clause B4, VWS will comply with the following from then onward:

VWS must consult with NSW Health during the:

- (a) Detailed risk and technology assessments for recycled water, as relevant
- (b) Development of management plans for recycled water, as relevant
- (c) Development of an incident notification protocol with NSW Health for recycled water, as relevant

VWS must:

- (a) Provide NSW Health with a copy of the new infrastructure audit report when it is provided to IPART and / or the Minister (in this case for any new infrastructure after December 2017)
- (b) Notify NSW Health when commencing commercial operation of such new infrastructure
- (c) Consult with NSW Health during the development of (and any amendment of) a procedure for notifying NSW Health of health-related complaints
- (d) Include a procedure for notifying NSW Health of health-related complaints, agreed to by NSW Health, in the retail supply management plan

## 4.2 Scope not included

This Plan does not address the events and circumstances that could adversely affect the licensee's ability to supply non-potable water or sewerage services in connection with:

- Other sources of water supply; e.g., supply of water by SWC for golf course irrigation, house toilet flushing and garden irrigation;
- Sewerage services and water supply to houses not connected to the LLC Bingara Gorge Housing Project;
- Recycled water systems delivering water to the Golf Course from existing sources of water bodies such as Lagoons and Ponds.

Importantly this Plan addresses the management of adverse events and circumstances that may arise during operations or the Water Industry Infrastructure. The Infrastructure Operating Plans and Water & Sewage Quality Plans address the risk management for the design, construction, operations, and maintenance stages as well as for sewage and non-potable water quality respectively.

It is at that time when risk is addressed by way of but not limited to design reviews, HAZOP studies, construction and commissioning risk workshops and the like; refer to Section 8 below. It is the case that controls put in place particularly at the design and build stages are those which mitigate many of the negative outcomes of adverse events and circumstances that may arise during operations.

## 5 Other conditions under Licence

Schedule B under Retail Supplier's Licence No 10\_013R prescribes a comprehensive list of standard conditions which the Minister has determined to impose pursuant to section 13 (1) (b) of the Act as well as those obligations imposed by the Regulation:

- B1 - Ongoing capacity to operate,
- B2 - Obtaining appropriate insurance,
- B3 - Maintaining appropriate insurance,
- B4 - Complying with NSW Health requirements,



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- B5 - Complying with Audit Guidelines from IPART
- B6 - Reporting in accordance with the Reporting Manual,
- B7 - Reporting information in relation to the Register of Licences
- B8 - Provision of copy of Plans
- B9 - Delineating responsibilities
- B10 - Notification of changes to Authorised Person
- B11 - Infrastructure to be used
- B12 - Notification of Operation

## 6 Other conditions under Regulation

In addition to this Plan the licensee (VWS) must meet the following conditions under Regulation, Schedule 2 Parts 1, 2 & 3 and to which VWS commits to meeting as applicable to its licence application requirements or unless directed otherwise by IPART or the Minister:

- Part 1 Licence conditions of all licences
  1. Provision of information,
  2. Implementation of government policy with respect to social programs,
  3. Customers to be notified of translation of services,
  4. Code of practice for customer complaints,
  5. Code of practice for debt recovery,
  6. Codes of conduct
  7. Environmental protection
  - 7A. Retail Supply Management Plans
  - 7B. Matters to be contained on licensee's website
- Part 2 Additional conditions for licences for water supply
  8. (Repealed)
  9. Non-potable water to match customer's needs,
  10. Obligation not to over commit,
  11. Notice of intended termination of supply of water,
  12. Notice of water restrictions,
  13. (Repealed), and
  14. Water to be supplied under contract to small retail customers
- Part 3 Additional conditions for licences for sewerage services supply
  15. (Repealed),
  16. Obligation not to over commit,
  17. Notice of intended termination of sewerage services,
  18. (Repealed), and
  19. Sewerage services to be provided under contract

## 7 Codes of practice and conduct

This section addresses the arrangements that VWS has made to ensure that it complies with; such as its code of practice for customer complaints and its code of practice for debt recovery

VWS's code of practice for customer complaints is provided in Appendix 7 of this Plan and has been prepared pursuant to the Regulation, Schedule 2, Part 1, Section 4 Code of practice for customer complaints and in conformance with AS ISO 10002-2006 Customer satisfaction-Guidelines for complaints handling in organisations.

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A code of practice for debt recovery is provided in Appendix 8 of this Plan and has been prepared pursuant to the Regulation, Schedule 2, Part 1, section 5 Code of practice for debt recovery and in conformance with ACCC and ASIC Debt collection guideline for collectors and creditors.

VWS also commits to complying with any water industry code of conduct, marketing code of conduct and transfer code of conduct that may be applicable to its Retail Supplier's Licence.

WICA Regulations Part 1 Preliminary Section 26 advises VWS of establishment of marketing code of conduct – stating that the Minister may, by order published in the Gazette, establish a code of conduct for the marketing of water supplies and sewerage services.

Similarly, WICA Regulations Part 1 Preliminary Section 27 advises VWS of establishment of transfer code of conduct – stating that the Minister may, by order published in the Gazette, establish a code of conduct for the transfer of water supplies and sewerage services to, from or between licensed retail suppliers or public water utilities (or both).

If and as may be required in future, VWS will comply with all relevant stakeholders its marketing code of conduct and the transfer code of conduct, as applicable to Bingara Gorge Recycled Water Project.

## **8 Relationship with other plans under Regulation**

This Plan forms part of a suite of plans required under the Regulation as part of VWS's obligations as both a Network Operator (not part of this Licence requirement) and a Retail Supplier in relation to the sewerage and water supply Infrastructure.

Strictly speaking there are six (6) Plans required under Regulation across the Network Operations and Retail Supply obligations as follows:

### **Network Operators (4 plans, combined into 2 plans)**

- Infrastructure Operating Plans for water infrastructure (WIOP) pursuant to the Regulation Schedule 1, Part 2, Section 6 and describes the design, construction, operation and maintenance of the water infrastructure and its integrity,
- Water Quality Plan (WQP) pursuant to the Regulation Schedule 1, Part 2, Section 7 and describes the non-potable water quality integrity of the water infrastructure, having regard to defined guidelines (AGWR1), the purposes for which water is to be used and for which water is not used
- Infrastructure Operating Plan (IOP) for sewerage infrastructure (SIOP) pursuant to the Regulation Schedule 1, Part 3, Section 13 and describes the design, construction, operation and maintenance of the sewerage infrastructure and its integrity, and
- Sewage Management Plan (SMP) pursuant to the Regulation Schedule 1, Part 3, Section 14 and describes the manner in which health and ecological assessments will be undertaken as well as arrangements for disposal of waste from the infrastructure.

### **Retail Supplier's Licences (2 Plans, combined into one)**

- Retail Supply Management Plan for non-potable water supply pursuant to the Regulation, Schedule 2 Part 2 (Additional conditions for licences for water supply) Section 8, (Retail Supply Management Plans), and
- Retail Supply Management Plan for sewerage services supply (RSMPS) pursuant to the Regulation, Schedule 2 Part 3 (Additional conditions for licences for sewerage services supply) Section 15 (Retail supply management plans). Together the RSMP

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Under Clause 16 of the Regulation it is permissible to combine plans provided that the Minister does not direct otherwise and that the plans are consistent with other plans. It follows that this Plan logically combines the requirements of Retail Supply of both sewerage services supply and water supply covering the infrastructure defined in the Retail Supplier's Licence No 10\_013R (refer section 1).

Importantly this plan addresses risk management of adverse events and circumstances that could impact the ability of the infrastructure to supply sewerage services and water to our customers.

The risk management associated with design, construction, operation and maintenance of the infrastructure is addressed in the WIOP and SIOP, (Together SWIOP), the risk management associated with water quality is addressed in the WQP and the risk management associated with health effects of sewage is addressed in the SMP. (Together SRWQMP)

The division of responsibility for the preparation and implementation six plans is as follows:

Lead Plan	Plan	Preparation	Implementation	Licence	Remarks
SWIOP	WIOP	VWS	VWS	Network	WIOP and SIOP are combined
SWIOP	SIOP	VWS	VWS	Network	With LLC support
SRWQMP	WQP	VWS	VWS	Network	WQP and SMP are combined
SRWQMP	SMP	VWS	VWS	Network	With LLC support
RSMP	RSMP	VWS	VWS	Retail	This Plan

## 9 Stakeholders

This Plan refers to stakeholders, namely those persons, entities and authorities that have an interest in the infrastructure and its supply of services under licence.

These stakeholders are listed below noting all have been regularly updated and involved in the development of this project. All necessary approvals and comments have been sought and continue to be sought at the required times.

Stakeholder	Role
Wollondilly Shire Council	Approval of development application for overall scheme
Lend Lease Communities (Australia) Limited (formerly DLL Wilton Pty Ltd (DLLW))	Facilities Management Company –Company to which VWS has contracted to D & C and O & M for the scheme; also known as the Developer
Golf course	User of recycled water ( Current owner of Golf Course is Lend Lease Communities (formerly DLL Wilton Pty Ltd) and it is operated by McMahons Pty Ltd )
Development, lot owners and/or tenants	Customers (noting tenants are not contractual customers but they are users of the services provided and considered as customers in the generic sense).
Independent Pricing and Regulatory Tribunal (IPART)	The independent economic regulator for NSW. In this case administers the Water Industry Competition legislation. Reports to Minister of Energy and Environment in relation to WICA licence approval and ongoing audit and

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	regulation of licensed activities.
Department of Water within NSW Department of Industry	WICA Licence Approver
NSW Health (Ministry of Health)	Supports the executive and statutory roles of the . Statutory body in relation to all health incidents for schemes operated under WIC Act.
Office of Environment & Heritage (Under Ministry of Planning & Environment)	Administers environmental and water legislation other than WICA including noise and air quality (odour)
Water New South Wales (Minister for Industrial Relations and Minister for Finance, Services and Property on Board)	Administers the Water Act and Water Management Act (established under an Operating Licence by IPART)
Energy and Water Ombudsman of NSW (EWON)	Manages complaints (except for water pricing) which the Licensee has not handled to the satisfaction of the complainant and has referred the complainant to EWON.
Sydney Water Corporation (SWC)	Drinking Water Supplier and Back Up Water provider
Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWS)	Design and Construct that part of the Treatment Infrastructure that treats sewage to produce treated water. Now operating and maintaining Water Industry Infrastructure. Also known as the Retail Supply Manager (for this Plan)
Cardno(NSW/ACT) Pty. Ltd.	Superintendent, on behalf of Lend Lease Communities, for Design and Construction of Water and Sewer Infrastructure for progressive development of township
NSW Environment Protection Authority (EPA) (Metropolitan Branch)	Regulator and Monitoring Authority for any environmental issue within the Licensed Scheme
Energy and Water Ombudsman of NSW (EWON)	Manages complaints (except for water pricing) which the Licensee has not handled to the satisfaction of the complainant and has referred the complainant to EWON.
Other Contractors	Management/ maintenance of recycled water infrastructure (e.g. irrigation maintenance, hydraulic engineers, pressure sewer equipment providers/contractors)

## 10 Planning

The planning requirements are as follows and as detailed in the scope of work section 4.1. Regarding items (a) through (c) inclusive in Section 4.1 for both water and sewerage, these immediately focus VWS' approach and methodology applying proven Risk Management principles; these are introduced below, and addressed in detail in Appendix 2, Approach and Methodology.

The sections thereafter address (a) through (c) in turn; namely, the potential adverse events and circumstances, their probability of occurrence, the potential consequence of their occurrence and the measures taken to minimise the impact of such occurrences including making arrangements for alternative supplies sewerage services and water supply.

Later sections under this section address item (d) accordingly for both water and sewerage.

## 10.1 Approach and methodology

The VWS approach and methodology addressed in Appendix 2 demonstrates to IPART, VWS' customer and VWS' other stakeholders that VWS has:

- Developed and documented the approach and methodology to be used for identifying the events and circumstances that could adversely affect the ability to supply water or sewerage services,
- A documented process to periodically review and update the events and circumstances that could adversely affect the ability to supply water or sewerage services to incorporate any changes and,
- Documented a list of the events and circumstances, in accordance with the approach and methodology that could adversely affect its ability to supply water or sewerage services.

VWS is committed to Risk Management (RM) principles and methodologies by application of the policies and procedures contained in its QMS Certification Services certified Business Management System (BMS) and applied at every stage of project delivery from tendering through project management, contract management, design, procurement, construction, commissioning, operations, servicing and maintenance.

Importantly VWS is committed to the approach and methodology provided by Australian Standards AS ISO 31000:2018 Risk Management; Principles and Guidelines and related standards for managing disruption related risk and operational continuity as further described in Appendix 2.

The stepwise approach and methodology addressed in the appendices and the following sections are summarised below:

- Define categories of adverse events and circumstances both external and internal
- Identify adverse events and circumstances for each category
- Consider the probability (likelihood) of each adverse event or circumstance occurring
- Consider the consequence of each adverse event or circumstance should these occur
- Evaluate the likelihood and consequence of each adverse event or circumstance and decide whether treatment is necessary to reduce the likelihood or to mitigate the consequence or both
- Decide on an appropriate risk treatment
- Repeat the evaluation process following risk treatment selected to assure that the risk treatment provides sufficient mitigation and control
- Repeat the process if necessary to arrive at an acceptable risk treatment
- Put the risk treatment in place, then manage and monitor.

## 10.2 Adverse events and circumstances

Potential adverse events and circumstances that could adversely affect VWS's ability to supply sewerage services and water have been diligently considered, identified and categorised as follows; the complete list of identified potential adverse events and conditions is contained in Appendix 3:

**Table 10-1 - Example risk identification, risk analysis and risk evaluation**

Adverse Event or Circumstance Category	Example Adverse Event or Circumstance
<b>External Context sewerage &amp; water</b>	
Access & security	Building fire, vandalism
Utilities & external suppliers	Loss of power, unauthorised excavation
Legal & regulatory	WICA licence breach
Consumer customer	Illegal contaminant discharge
Stakeholder	Community complaint
<b>Internal Context sewerage &amp; water</b>	
Public Health	Treated water quality excursion

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OHS	Workplace injury
Environment	Environmental breach, extreme weather
Operations, service and maintenance	Process equipment or instrument failure
IT systems & communication	PLC failure
Contractual	Substantial/material breach
Financial	VWS bankruptcy
VWS compliance	Loss of BMS certification
Organisational, Human Resources	Loss of key staff

It is possible to categorise differently to the above. For example Environment could be considered external as well as internal; however, taking this same example we consider external environment (example storm, flood and earthquake) to be related to access and security, whereas environment in the internal context relates to VWS control of circumstances where it could possibly negatively impact on the environment.

It follows that regardless of the method of categorizing, the important outcome is that potential adverse events and circumstances are identified along with their risk of occurrence so that these can be managed and mitigated.

### 10.3 Probability of occurrence

By reference to our approach and methodology including definition of terms in Appendix 2, VWS considers the *probability (or likelihood) of occurrence* of any such event or circumstance in terms of risk management terminology in a stepwise manner:

- Risk identification,
- Risk analysis,
- Risk evaluation

VWS then considers the measures to be taken to prevent the occurrence, or minimise the effect, of any such event or circumstance in terms of Risk Treatment; addressed in the next section.

VWS considers *risk identification* of risk of occurrence (likelihood) as being from rare through, unlikely, to possible to likely then almost certain; and risk outcome (consequence) as going from insignificant through minor, moderate, major to severe effect or impact.

VWS considers *risk analysis* in terms of the effect of uncertainty or risk rating arising from the likelihood of an adverse event occurring versus the consequence of that event or circumstance.

When considering *risk evaluation* VWS makes a decision whether to treat or not to treat the risk based on the risk analysis or risk rating from low through medium, high and very high. Clearly VWS seeks a low risk rating as reasonably practicable.

Tabled below are risk identification, risk analysis and risk evaluation examples related to example adverse events and circumstances taken from those detailed in the appendices.



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Table 10-2 - Example risk identification, risk analysis and risk evaluation

Category	Example Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
<b>External Context</b>							
Access & security	Building fire elsewhere	No access	Loss of production	Unlikely	Moderate	High	N
Utilities, suppliers	Loss of power	Plant shutdown	Loss of production	Possible	Severe	Very High	N
Legal and regulatory	WICA licence breach	VWS must consult with IPART	Loss of licence	Rare event	Severe	High	N
Consumer customer	Illegal discharge	Plant upset	Loss of production	Possible	Moderate	High	N
Stakeholder	Community complaint	VWS must consult with LLC	Loss of licence	Possible	Moderate	High	N
<b>Internal Context</b>							
Public Health	Treated water quality excursion	Dept Public Health investigation	Prosecution	Rare	Severe	High	N
OHS	Workplace injury	WorkCover investigation	Prosecution	Possible	Moderate	High	N
Environmental	Environmental breach	DECC investigation	Prosecution	Unlikely	Moderate	Medium	N
Operations etc	Process failure	Water quality excursion	Loss of production	Possible	Major	Very High	N
IT systems & coms	PLC failure	Plant shutdown	Loss of production	Possible	Major	Very High	N
Contractual	Material breach	Court action	Loss of licence	Rare event	Severe	Very High	N
Financial	Bankruptcy	Court action	Loss of licence	Rare event	Severe	Very High	N
VWS compliance	Loss of certification	VWS must consult with BSI	Internal investigation	Unlikely	Major	High for VWS	N
Organisational	Operator shortage	No site control	No local control	Unlikely	Moderate	Medium	N

## 10.4 Measures to be taken (risk treatment)

This section addresses the measures to be taken (or Risk Treatment) by the licensee (VWS) to prevent the occurrence, or minimise the effect, of any such event or circumstance; notably:

- VWS has limited control over the potential for external context adverse events or circumstances arising but does have some control over their consequences, and
- VWS does have control and influence over those internal context adverse events and circumstances that could arise and has control over their consequences.

The outcome of risk evaluation is to treat or not to treat. It will be important that the measures taken or risk treatment are robustly sufficient to eliminate or lower to an acceptable level the risk of an adverse event or circumstance occurring as well as mitigating the consequences of the potential adverse events and circumstances should these occur. Our approach is in line with AS ISO 31000:2018 as follows:

1. Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk,
2. Removing the risk source; namely removing the potential for an adverse event or circumstance,
3. Changing the likelihood or risk of,
4. Changing the consequence or risk outcome, or
5. Retaining the risk by informed decision.

This approach is a variation on the conventional approach to hazard identification, risk assessment and control (HIRAC) five step hierarchy of managing hazards (as addressed in the SRWQMP); namely, elimination, substitution, segregation, engineering, administration, or personal protection.

It is important to reiterate at this point that this Plan and RM approach, risk treatment measures and controls are addressed in context with the VWS's ability to provide sewerage services and supply water by the Treatment Infrastructure.

The risk management associated with design, construction, operation and maintenance of the Treatment Infrastructure is addressed in the combined 'Infrastructure Operating Plan' and the risk management associated with water quality and sewage management are addressed in the combined 'Water Quality Plan and Sewage Management Plan' respectively.

Of course there is some overlapping in scope. Notably, during the design phase RM principles have been applied by way of for example Design Reviews, Hazards and Operability (HAZOP) studies as well as sewage and water quality HIRAC with applicable risk treatment controls put in place that enable VWS to prevent or mitigate the potential for and adverse event or circumstance to arise and to mitigate the impact of that adverse event that may prevent VWS from supplying services. These controls are evident within the detail of the appendices and are addressed in detail in the other plans noted above in Section 8.

To demonstrate the measures detailed in the appendices to prevent the occurrence, or minimise the effect of any adverse event or circumstance, the following examples are tabled below. These equate to Risk Treatment Plans under the standard and notably:

- Risk treatment to prevent, or to remove, or to avoid, or change the likelihood of an adverse event or circumstance arising occurs at the design and construct stage of the Treatment Infrastructure and the responsibility of either VWS or LLC at the time according to their contractual scope split, and
- Risk treatment to mitigate the consequences of any one or more adverse events or circumstances should these occur shall be the responsibility of VWS and or LCC to action according to their contractual scope split.

At this point it is important to highlight that the level and standard of service provided by VWS to its customer LLC and individual consumer customers are detailed in the operations, service and maintenance agreement between LLC and VWS as well as individual customer agreements between consumer customers and LLC and VWS. These levels and standards provided by VWS in the operation and maintenance of the infrastructure are summarised in Appendix 6.

## 10.5 Further measures

In addition to the specific treatment controls addressed in this Plan and the companion plans, the following documents have been prepared that follow on from and support this Plan:

- Appendix 9 Treatment Infrastructure EHS Plan (updated from previous version)
- Appendix 10 Treatment Infrastructure Emergency Preparedness & Response Plan  
(updated from previous version)

Sewerage & Recycled Water Retail Supply Management Plan

Table 10-3 - Example measures to be taken (risk treatment)

Category	Example Adverse Event	Example Risk Treatment to Avert * an Adverse Event	Example Risk Treatment to mitigate impact* of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating	Risk Treatment Adequate (Y/N)
<b>External Context</b>							
Access & security	Building fire elsewhere	Fire detection & protection & Security sys	Remote access & control	Part reduced	Reduced	Lowered	Y
Utilities, suppliers	Loss of power	Not under VWS control	Water storage surge capacity	Part reduced	Reduced	Lowered	Y
Legal and regulatory	WICA licence breach	Application of the IOP, WQP and RSMP	Compliance audits	Part reduced	Reduced	Lowered	Y
Consumer customer	Illegal discharge	Education; contract; brochures; possible fines	Large sewage storage to dilute contaminant impact	Reduced	Reduced	Lowered	Y
Stakeholder	Community complaint	Develop code of practice for customer complaints	Code of practice of customer complaint	Part reduced	Reduced	Lowered	Y
<b>Internal Context</b>							
Public Health	Treated water quality excursion	Critical control point monitoring	Process adjustment or plant shutdown	Reduced	Reduced	Lowered	Y
OHS	Workplace injury	Prepare OHS Management Plan	Implement OHS Management Plan	Reduced	Reduced	Lowered	Y
Environmental	Environmental breach	Prepare Environmental Management Plan	Implement Environmental Management Plan	Reduced	Reduced	Lowered	Y
Operations etc	Process failure	Redundancy; Robust Process Controls	Automatic or operator effected control	Reduced	Reduced	Lowered	Y
IT systems & coms	PLC failure	Uninterrupted Power Supply (UPS)	UPS comes into effect automatically	Reduced	Reduced	Lowered	Y
Contractual	Material breach	Fair contract	Good contract mgt	Reduced	Reduced	Lowered	Y
Financial	Bankruptcy	Robust financial control	VWS HO intervention	Reduced	Reduced	Lowered	Y
VWS compliance	Loss of certification	Compliance audits	Timely corrective action	Reduced	Reduced	Lowered	Y
Organisational	On site operator shortage	Sufficient engineers with multiple skills	Available on call	Reduced	Reduced	Lowered	Y

\*Note "avert" has the same meaning as to reduce the likelihood of and "impact" has the same meaning as consequence.

## 10.6 Odour management

This section specifically addresses odour management within VWS's scope of work for the Treatment Infrastructure including odour from raw sewage feed through the various process stages of the Treatment Infrastructure.

The potential sources of odour are as follows:

- Sewerage Network, inlet pump station and storage tank
- Screening and grit removal area;
- Buffer tank;
- Eco Disks and Disk Filter systems; (TRWP Only, when in operation)
- Sludge dewatering and disposal;
- Bio-Sep Units
- Ultrafiltration; (TRWP Only, when in operation)
- Chlorine contact tanks

During Operations and Maintenance stage, the following preventative measures have been included to mitigate the potential for or eliminate process odours.

- There is a buffer zone between the Treatment Infrastructure and residential area
- The Treatment Infrastructure process by way of its stage wise process units progressively treats the raw sewage to odourless recycled water and sludge discharge.
- All potentially odorous stages of the process (i.e. screening and sludge treatment) are housed within either a building structure or have been enclosed.
- There is an activated carbon filter for odour treatment of exhausted air prior to release to atmosphere.
- Biological process as built ensures low odour production
- All sewage, effluent and recycled water piping systems have been sealed including hydrostatic pressure testing before commissioning;
- Effluent treatment via equipment installed and design of the plant to achieve odourless recycled water;
- VWS Operations & maintenance (O&M) manual details further steps to mitigate any negative effects of process odour.

## 10.7 Alternative sewerage services and water supply

Until substantial supply of recycle water for use was available, Sydney Water Corporation (SWC) has an agreement with LLC to provide a supply of potable water (up to 200 ML per year) to provide for irrigation of the golf course and for housing toilet flushing and garden irrigation.

In the event of insufficient water for these purposes above and beyond this supply it will be the responsibility of LLC to arrange for the shortfall via SWC under the same agreement (Top-Up).

If, for whatever reasons, sewerage services are not available, VWS arranges pump out, tankering / collection and disposal services.

If for any reason whatsoever, the infrastructure fails to operate then continuity of sewerage service and water supply will be maintained by the Licensee. This may include sewage pump out services and further potable water supply by SWC.

## 10.8 Codes of practice and conduct

Refer to the appendices 7 and 8 which address the arrangements that VWS has made to ensure that it complies with its codes of practice for customer complaints and debt recovery.

The appendices contain the Codes of practice prepared by VWS; which are being practised by relevant VWS staff and LLC staff if and as required.

The appended guidelines are prescriptive in defining the responsibilities of both VWS and LLC. VWS monitors the performance of LLC in managing their responsibilities under the codes.

The split of responsibility is as follows:

VWS – Oversight of LLC Activities to ensure LLC performs below activities in compliance with Veolia's IPART licence

VWS - All operational related matters, reporting to LLC and together with LLC, as relevant.

LLC - All related customer interface matters including customer communications, tariff setting and debt recovery

Notably in the event a complainant is not satisfied with VWS and or LLC handling of their complaint, VWS shall refer the complainant on to EWON.

## 11 Implementation

This section affirms that the licensee (VWS):

- Will ensure that its retail supply management plan is fully implemented and kept under regular review and, in particular, that all activities are carried out in accordance with that plan, and
- If the Minister so directs, will amend its retail supply management plan in accordance with the Minister's direction.

### 11.1 Implementation

This Plan has been implemented by VWS since the day VWS has executed an operation, service and maintenance agreement of the Water Industry Infrastructure with LLC.

Prior to the implementation of this Plan, VWS had prepare Risk Treatment Plans (refer to Appendix 5) in anticipation of those potential adverse events or circumstances arising so that the planned actions are implemented in a timely and proper manner to mitigate the impact of the adverse event or circumstance to the planned acceptable level or better.

### 11.2 Amendments

Amendments to this Plan may include VWS improvements or those directed by the Minister.

This Plan may also be amended as necessary following outcomes of site inspections and audit findings by IPART, VWS, LLC, or any other authorised stakeholder.



## 12 Compliance

This section affirms that if the Minister or IPART so demands, or if any significant change is made to this retail supply management plan, the licensee (VWS):

- will provide the Minister or IPART with a report, prepared by an approved auditor in such manner and form as the Minister or IPART may direct, as to the adequacy of the plan, or
- will pay the Minister's or IPART's costs of conducting investigation into the adequacy of the plan.

### 12.1 IPART audit

This Plan may be audited by IPART or its representative at any time pursuant to IPART's Audit Guideline Water Licence Audits, Water — Guidelines or as amended and accessible from IPART's website.

### 12.2 VWS audit

All VWS personnel must perform their duties lawfully and in accordance with our certified Business Management System (BMS). Even so, all VWS business activities, products and services, including performing our core and support processes, carry a measure of risk.

VWS General Manager – Services, is responsible to ensure that this Plan and its audit responsibilities are carried out to reasonable satisfaction.

As required, project management, contracts management, legal and compliance management is involved time to time.

It follows that in addition to IPART audits pursuant to their Audit Guidelines, VWS shall regularly audit this Plan, its companion plans and the Service Agreement between VWS and LLC to ensure VWS is meeting its obligations under each.

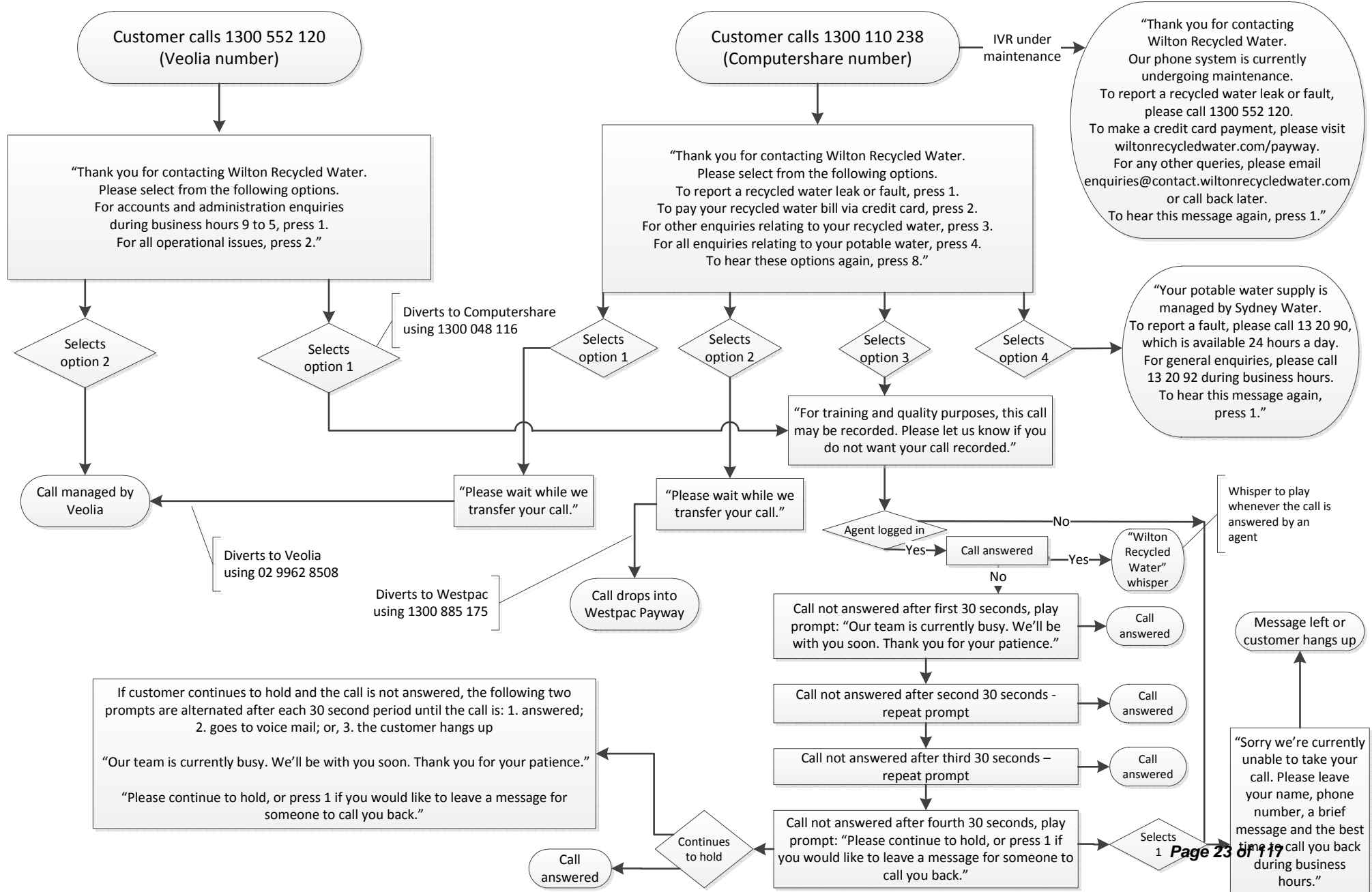
### 12.3 Audit outcomes

For IPART audits, following the submission of the final audit report, VWS may be required to take action to manage the audit outcomes. As prescribed in the IPART Audit Guidelines IPART will discuss the process for addressing any issues and the actions that the licensee proposes to take in response to the audit findings on a case-by-case basis.

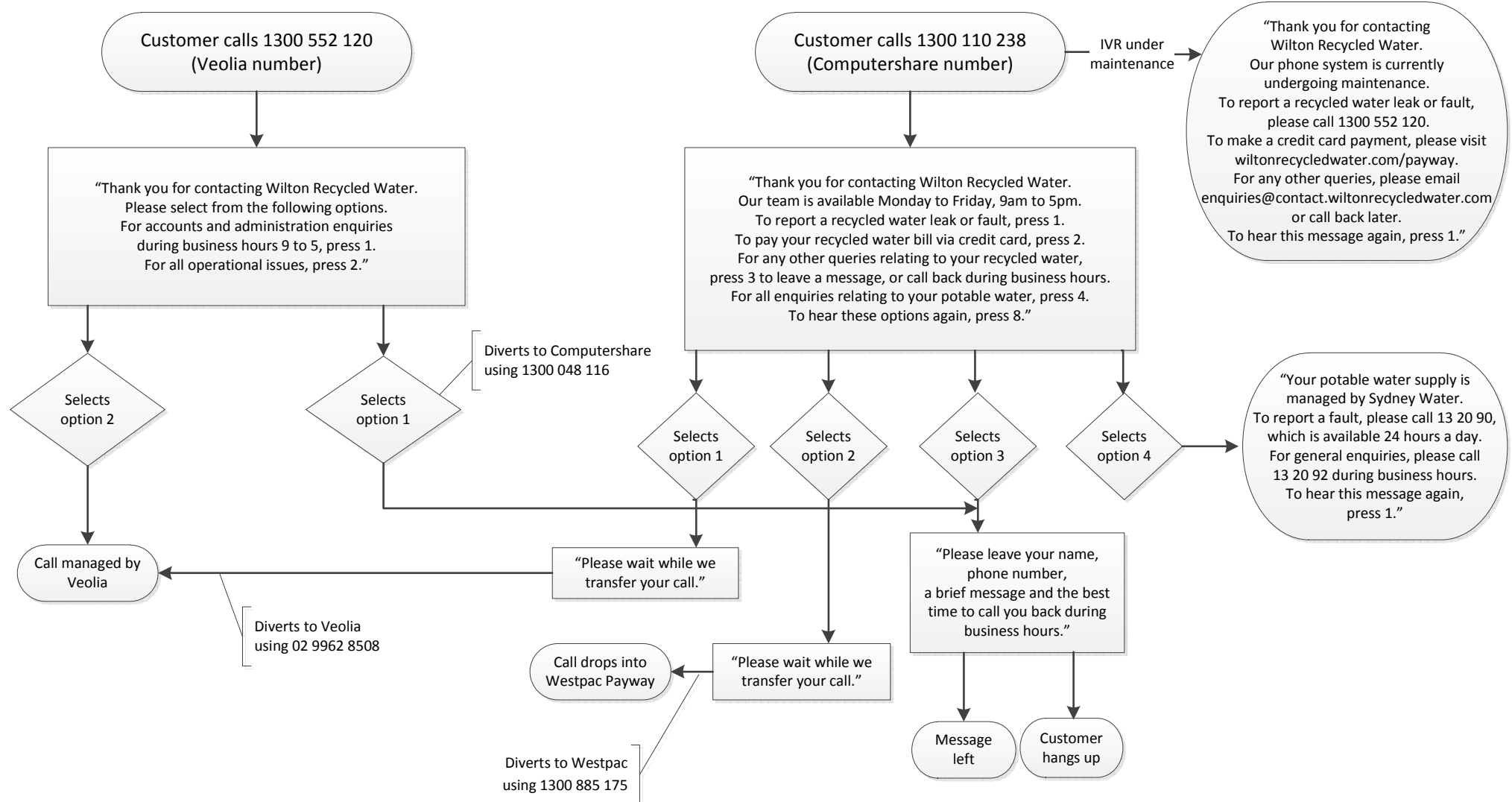
For VWS internal audits, VWS will take applicable corrective action to any non-conformance, observation of opportunity for improvement followed by review and investigation as necessary to determine root cause and then put in place preventative actions to avert any reoccurrence of the non-conformance.

## **13 Bingara Gorge IVR Structure and Scripting**

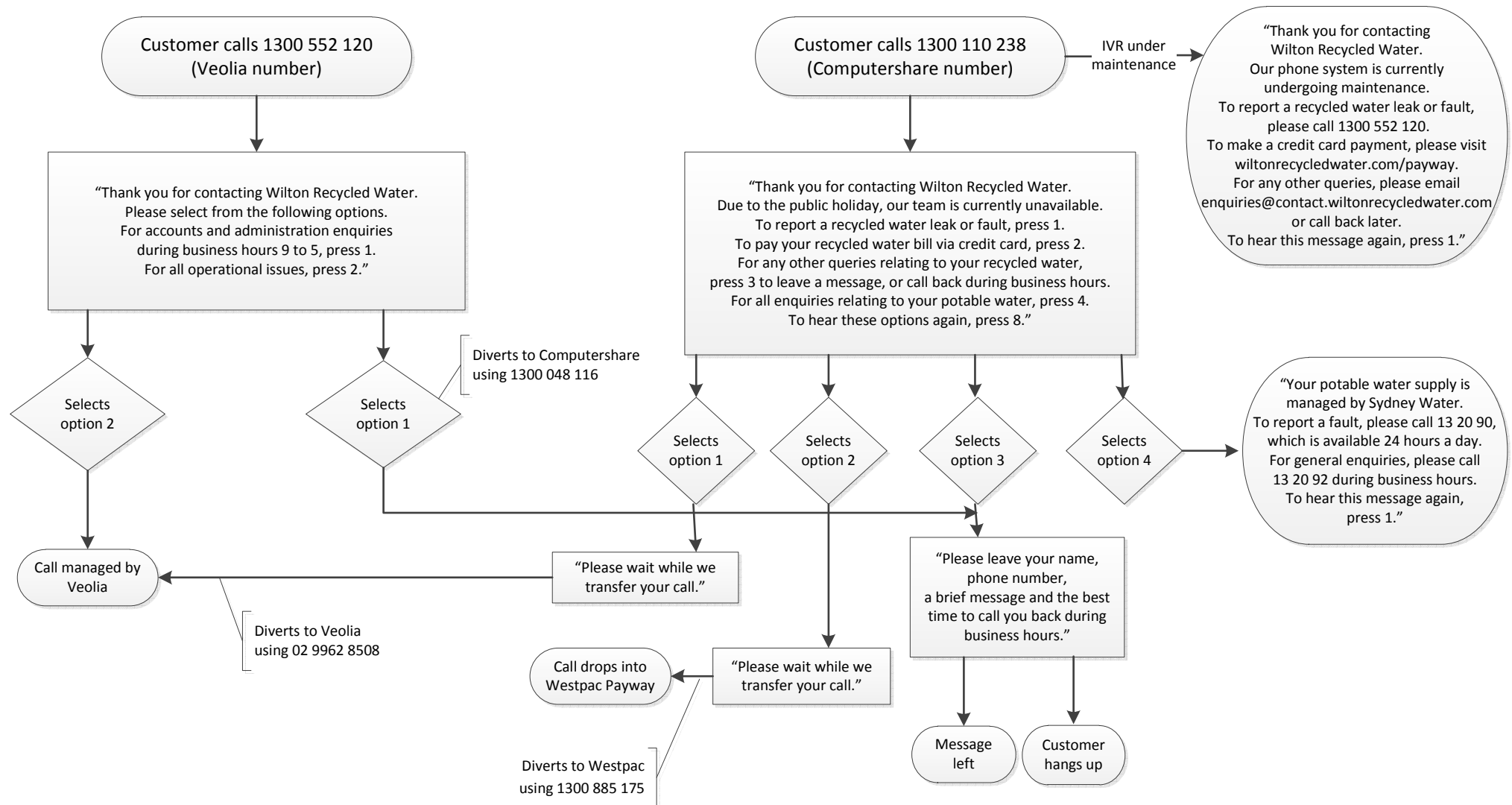
**FINAL Bingara Gorge IVR Structure and Scripting – Business hours (v1.0 as at 18 May 2017)**  
**(Mon to Fri 9am to 5pm AEST/AEDST – based on NSW business days)**



**FINAL Bingara Gorge IVR Structure and Scripting – Out of hours (v1.0 as at 18 May 2017)**  
**(before 9am and after 5pm Mon to Fri AEST/AEDST and weekends – based on NSW business days)**



**FINAL Bingara Gorge IVR Structure and Scripting – Public holidays (v1.0 as at 18 May 2017)**  
**(based on NSW business days)**



## 14 Appendices

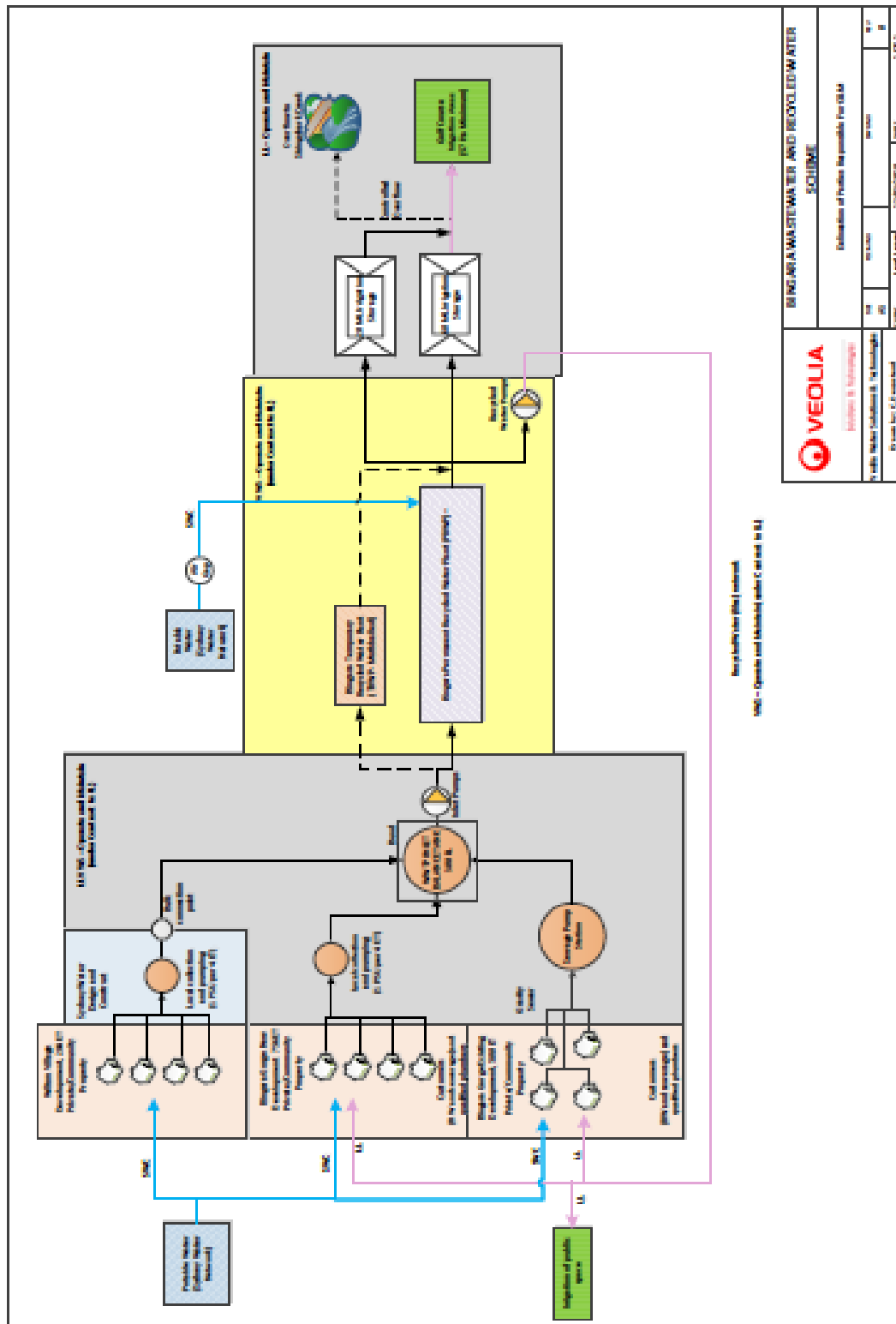
- Appendix 1 Treatment Infrastructure flow diagram
- Appendix 2 Risk management approach and methodology
- Appendix 3 Identification: Adverse events and circumstances
- Appendix 4 Probability: Risk identification, assessment and evaluation
- Appendix 5 Measures: Risk treatment
- Appendix 6 Level of and standard of service
- Appendix 7 Code of Practice – Complaints Handling
- Appendix 8 Code of Practice – Debt Recovery
- Appendix 9 Treatment Infrastructure EHS Plan
- Appendix 10 Treatment Infrastructure Emergency Preparedness & Response Plan (EPRP)

Risk management documentation such as Design Review, HAZOP studies, construction and commissioning risk workshops and the like are not contained herein but in the applicable plans (IOPs, WQP appropriate)



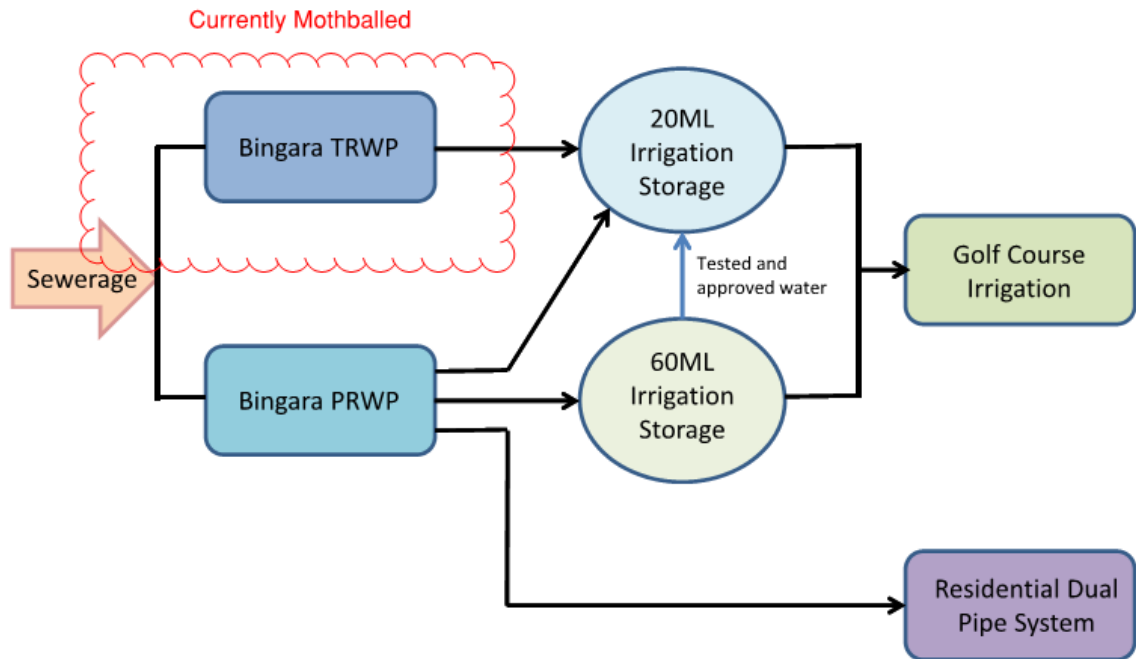
## **Appendix 1 -Diagram of Water Industry Infrastructure at Bingara Gorge**

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**Commercial operation of all infrastructure**



## Appendix 2 - Approach and methodology

This appendix demonstrates to IPART, customers and other stakeholders that VWS has:

- Developed and documented the approach and methodology to be used for identifying the events and circumstances that could adversely affect the ability to supply sewerage services and water,
- A documented process to periodically review and update the events and circumstances that could adversely affect their ability to supply water to incorporate any changes and,
- Documented a list of the events and circumstances, in accordance with the approach and methodology that could adversely affect its ability to supply water,
- Estimated the probability of the occurrence of any such events or circumstance that could adversely affect their level of service,
- Evaluated the major sources of uncertainty associated with each event or circumstance and actions have been considered to reduce uncertainty,
- Determined the significant risks and established documented priorities for the management of those events or circumstances that could adversely affect their ability to supply water,

VWS is committed to good Risk Management (RM) principles and methodologies by application of the policies and procedures contained in VWS's Business Management System (BMS) which is certified by QMS Certification Services to the following standards:

- AS/NZS 4801: 2001 OHS Management Systems
- AS/NZS ISO 14001: 2015 Environmental Management Systems
- AS/NZS ISO 9001: 2015 Quality Management Systems

Importantly VWS is committed to the approaches outlined in the following standards specific to RM:

- AS ISO 31000:2018 Risk management; Principles and Guidelines; as well as
- AS/NZS 5050:2010 Business Continuity; Managing disruption related risk, and
- ISO 22301:2012 Business Continuity Management System Requirements

VWS's organisation includes a General Counsel and a WHSEQ Compliance Systems Manager, both reporting to the Managing Director and responsible for providing assurance to top management and our stakeholders that the company's activities, products and services are being performed or provided in accordance with applicable legislation, codes of practice, standards, contract conditions and VWS's own certified BMS policies and procedures; all necessary for good corporate governance and accountability.

These standards and our BMS procedures require the application of rigorous RM principles at every stage of project delivery from initial planning, through project management of delivery, design, procurement, construction, commissioning, operations service and maintenance.

These principles include the identification of non-conformances, safety hazards, environmental aspects as well as incident management, emergency response and business continuity interruption; namely the management of adverse events and circumstances in a planned and controlled manner to mitigate negative outcomes.

This Plan applies the principles and processes contained in the above standards to meet the specific requirements of the Regulation; noting it is not the purpose of this Plan to repeat or quote in detail each and every definition contained in these standards, except for those addressed below.

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VWS's RM approach and methodology are discussed below necessarily elaborating further on five main generic definitions contained in AS ISO 31000:2018 to better describe these specifically in context with this Plan.

These are tabled below and coincidentally but not surprisingly equate to the requirements of the Regulation and define VWS's RM approach and methodology in relation to the Water Recycling Plant's (Treatment Infrastructure) integrity, and the management thereof, to supply water:

**Table 1 - Risk management definitions related to planning**

Term	AS ISO 31000:2018 Definition	Definition in context of this Plan
Event	Occurrence or change of a particular set of circumstances noting an event can be one or more occurrences and can have several causes; can consist of something not happening; can refer to an incident or accident; an event without consequence (eg near miss)	Events and circumstances that could adversely affect the licensee's ability to supply water; a disruptive occurrence. In this Plan we shorten this to a disruption or adverse event or similar while taking account of the extended definitions of the standard.
Risk	Effect of uncertainty on objectives noting risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of the occurrence.	The combination or risk rating arising from the likelihood of (probability of, or risk of) an adverse event occurring v the consequence (impact, or risk outcome) of that event.
Risk assessment	Overall process of risk identification, risk analysis and risk evaluation (refer to Standard)	Overall process of risk identification, risk analysis and risk evaluation related to potential adverse events and circumstances
Risk Treatment	The process to modify risk including avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk, removing the risk source, changing the likelihood, changing the consequence or retaining the risk by informed decision.	The measures (controls) to be taken by the licensee: <ul style="list-style-type: none"> <li>i. to prevent the occurrence, or minimise the effect, of any adverse event or circumstance, and</li> <li>ii. to arrange for alternative supplies of water in response to any such event or circumstance</li> </ul>
Residual Risk	The risk remaining after risk treatment	The risk remaining after the measures taken to prevent the occurrence, or minimise the effect, of any adverse event or circumstance.

It follows that the VWS RM approach and methodology follows that of AS ISO 31000:2018 and is as follows to prevent the occurrence, or minimise the effect, of any adverse event or circumstance, and to arrange for alternative supplies of water in response to any such event or circumstance:

- 1. Establish the context:** Identify the potential adverse events; these are defined in the next sub-section and may be caused by external occurrences or internal occurrences,
- 2. Risk Assessment:** risk identification, risk analysis and risk evaluation related to potential adverse events and circumstances,
- 3. Risk Treatment:** Put in place appropriate controls to prevent the (likelihood of or risk of) occurrence and to minimise the effect (mitigate the consequence or risk outcome) of the adverse event to an acceptable residual risk level,

Implement, manage and monitor the Plan, including periodic review and update of the events and circumstances that could adversely affect VWS ability to supply water and to incorporate any changes.

The combination of the likelihood of an adverse event and its consequence will determine the level of risk as shown in the Figures below: Risk (Rating) Matrix. This matrix identifies the level of risk found when analysing the likelihood versus consequence of an adverse or disruptive event occurring. This

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table is similar to Table 6.6 in AS HB 436:2004 RM Guidelines and Table 2.7 Qualitative Risk Estimation in The Australian Guidelines for Water recycling: managing Health and Environmental Issues (phase 1) 2006; namely a 5x5 matrix with 4 Risk Ranking levels requiring some qualitative assessment.

The risk matrix ranks the likelihood of an adverse event or circumstance occurring increasing from rare, to unlikely, possible, likely to almost certain (or 1 to 5 respectively); and the consequence of such event or circumstance increasing from insignificant to minor, moderate, major or severe (or 1 to 5 respectively) as the case may be.

The quasi-quantitative assessment of the combination of likelihood v consequence is determined by multiplying the likelihood and consequence ranking; refer to Figure 2.

**Figure 1 – Risk (Rating) Matrix - display 1: qualitative**

Likelihood or Probability	Consequence or Impact (Risk outcome)				
	Insignificant -1	Minor - 2	Moderate - 3	Major - 4	Severe - 5
Almost Certain - 5	Low	Medium	High	Very High	Very High
Likely - 4	Low	Medium	High	Very High	Very High
Possible - 3	Low	Medium	High	Very High	Very High
Unlikely - 2	Low	Low	Medium	High	Very High
Rare event - 1	Low	Low	Low	High	High

**Figure 2 – Risk (Rating) Matrix - display 2: quasi-quantitative**

Likelihood or Probability	Consequence or Impact (Risk outcome)				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	5	10	15	20	25
Likely	4	8	12	16	20
Possible	3	6	9	12	15
Unlikely	2	4	6	8	10
Rare event	1	2	3	4	5

It follows from the above risk matrix that VWS must consider and put in place mitigation actions and controls for any adverse event that results in a Medium, High or Very High risk category or combined risk rating of 4 or above, unless noted otherwise.

The priority of the actions and controls put in place shall be proportional to the level of risk identified in order that the residual risk becomes acceptable.

This can be described qualitatively as follows noting that with the 5x5 matrix and 4 Risk Ratings, there is some crossover in the ratings and therefore cross over in our qualitative assessment:



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**Figure 3 – Qualitative assessment rating of controls**

<b>Qualitative Residual Risk Rating</b>	<b>Quasi-quantitative Residual Risk Rating</b>	<b>Qualitative Assessment of Controls</b>
Low-medium	1-3	Best practice unless noted otherwise
Medium	4	Adequate unless noted otherwise
High-Very High	4-25	Inadequate

The higher the residual risk rating the greater the significance of that risk and the higher priority given to its prevention and or mitigation as applicable.

Once VWS puts in place actions and controls to mitigate the consequence of an adverse event, VWS then reassesses that mitigation to assure ourselves the control in place reduce the residual risk rating to an acceptable level.

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## Appendix 3 - Identification of adverse events and circumstances

Context and Category	Adverse Event
<b>External</b>	
Access & security	Flood, extreme rain event
Access & security	Lightning
Access & security	Bush fire
Access & security	Earthquake
Access & security	Road accident restricting access
Access & security	Vandalism or other risk to Treatment Infrastructure
Utilities, suppliers	Power supply failure
Utilities, suppliers	Third party excavation without permit damage to sewerage infrastructure
Legal and regulatory	WICA licence breach
Legal and regulatory	Change in law for licence holder
Consumer customer	Illegal discharge of contaminants
Consumer customer	Illegal connection of recycle to potable water piping
Stakeholder	Community complaint e.g. odour (relates to internal context public health)
Stakeholder	Shire council complaint e.g. odour (relates to internal context public health)
Stakeholder	Facilities management complaint e.g. odour (relates to internal context public health)
Stakeholder	Golf course complaint e.g. odour (relates to internal context public health)
Stakeholder	Possibility of any perceived or actual threat to customers or public health as a result of the company's operations
<b>Internal</b>	
Public Health	Sewage odour
Public Health	Recycle water odour
Public Health	Treatment Infrastructure odour
Public Health	Recycle water quality below specification; potential for sickness
OHS	Work related illness
OHS	Work related injury
OHS	Inadequate supply of Personal Protection Equipment (PPE)
OHS	Inadequate resources
Environmental	Chemical spill
Environmental	Fire
Environmental	Operational noise.
Environmental	Excessive Birdlife on open storage pond affecting water quality
Environmental	Excessive growth of aquatic plants, water weeds or algae in storages
Environmental	Assess for presence of high numbers of mosquitoes

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Category	Adverse Event
Environmental	Integrity of storage pond breached
Operations	Plant electrical failure
Operations	Pressure sewerage pumping station failure
Operations	Blockage in Sewerage infrastructure component
Operations	Customer sewage pump fails
Operations	Sewage surge
Operations	Sewage quality deteriorates
Operations	Sewage transfer pump fails
Operations	Screening plant fails
Operations	Ecodisk failure
Operations	Drum filter failure
Operations	Sludge Thickener failure
Operations	Ultrafiltration failure
Operations	UV failure Chlorination failure
Operations	CIP failure
Operations	Insufficient lab equipment and reagents
Operations	Partial or full loss of supply of chemicals - Sodium Hypochlorite
Operations	Partial or full loss of supply of chemicals - Antiscalant
Operations	Partial or full loss of supply of chemicals - Citric Acid
Operations	Breach of integrity of water retaining structures (tanks)
Operations	Recycled water main failure or burst (not part of current licence scope)
Operations	Plant fire
Operations	Compressed air system failure
Operations	Control instrumentation failure
Operations	Inadequate supply of spares and consumables
IT systems & coms	Loss of telephone, fax and/or mobile phone communication for more than a day
IT systems & coms	Server and internet failure
IT systems & coms	Loss of PLC/SCADA system
Contractual	Material breach (eg unable to meet obligations)
Contractual	Change in law
Financial	Bankruptcy by VWS
Financial	VWS losing money on job
VWS compliance	BMS - loss of certification
VWS compliance	Failure to submit reports on time – contract, EPA, Work cover
VWS compliance	Not keeping licences up to date (driver, trade, confined space and the like)
VWS compliance	Contract non-compliance - reporting requirements
Organisational	Loss of key staff due to resignation

## Appendix 4 - Probability - risk identification, analysis and evaluation

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Context And category	Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
<b>External</b>							
Access & security	Flood, extreme rain event	No access	Loss of production	Possible	Major	High	N
Access & security	Lightning	Safety of personnel & plant	Injury or plant failure	Possible	Major	V High	N
Access & security	Bush fire	No access	Loss of production	Possible	Moderate	High	N
Access & security	Earthquake	Infrastructure damage	Loss of production	Rare event	Major	High	N
Access & security	Road accident restricting access	No access	Loss of production	Possible	Moderate	High	N
Access & security	Vandalism or other risk to Treatment Infrastructure	Infrastructure damage	Loss of production	Possible	Major	V High	N
Utilities, suppliers	Power supply failure	Plant stoppage	Loss of production	Possible	Major	V High	N
Utilities, suppliers	Third party excavation cause damage	Service interruption	Customer complaint	Possible	Major	V High	N
Legal & regulatory	WICA licence breach	VWS must consult IPART	Loss of licence	Rare event	Severe	High	N
Legal & regulatory	Change in law for licence holder	VWS must consult IPART	Licence amendment	Possible	Moderate	High	N
Consumer customer	Illegal discharge of contaminants	Process upset	Loss of production	Possible	Major	V High	N
Consumer customer	Illegal connection of recycle to potable water piping	Consumer Health issue	Consumer fined	Possible	Severe	V High	N
Stakeholder	Community complaint eg odour (relates to internal context public health)	PR and rectification costs	Loss of reputation or litigation	Possible	Severe	V High	N
Stakeholder	Shire council complaint eg odour (refer to internal context public health)	PR and rectification costs	Loss of reputation or litigation	Possible	Severe	V High	N
Stakeholder	Facilities mgt complaint eg odour (refer to internal context public health)	PR and rectification costs	Loss of reputation or litigation	Possible	Severe	V High	N

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Context And category	Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
Stakeholder	Golf course complaint eg odour (relates to internal context public health)	PR and rectification costs	Loss of reputation or litigation	Possible	Severe	V High	N
Stakeholder	Possibility of any perceived or actual threat to customers or public health as a result of the company's operations	PR and rectification costs	Loss of reputation or litigation	Possible	Severe	V High	N
<b>Internal</b>							
Public Health	Sewage odour	Fines & rectification costs	Fines & loss of reputation	Possible	Severe	V High	N
Public Health	Recycle water odour	Fines & rectification costs	Fines & loss of reputation	Possible	Severe	V High	N
Public Health	Treatment Infrastructure odour	Fines & rectification costs	Fines & loss of reputation	Possible	Severe	V High	N
Public Health	Recycle water quality below specification;	Potential for health issues	Fines and litigation	Unlikely	Severe	V High	N
OHS	Work related illness	WorkCover reporting	Loss of reputation	Possible	Major	V High	N
OHS	Work related injury	WorkCover reporting	Loss of reputation	Possible	Major	V High	N
OHS	Inadequate supply of Personal Protection Equipment (PPE)	Unable to do certain works	Loss of production	Rare event	Major	High	N
OHS	Inadequate resources	Staff shortage	Plant failure	possible	moderate	High	N
Environmental	Chemical spill	Environmental pollution	Fines and litigation	Rare event	Severe	High	N
Environmental	Fire	Community Complaint, Environmental pollution	Fines and litigation	Possible	Severe	V High	N
Environmental	Operational noise.	Community complaint	Fines & loss of reputation	Unlikely	Major	High	N
Environmental	Excessive birdlife on storage pond	Pollution of treated water	Retreatment	Possible	Severe	V High	N
Environmental	Excessive aquatic plants/algae in storage pond	Pollution of treated water	Retreatment	Possible	Severe	V High	N
Environmental	High numbers of mosquitoes	Mosquito borne diseases	Fines & loss of reputation	Possible	Severe	V High	N
Environmental	Integrity of storage pond breached	Flooding of environment	Loss of treated water	Rare event	Severe	High	N

**Sewerage & Recycled Water Retail Supply Management Plan**

Note while the above environmental concerns related to the storage pond are documented, the management and care of the storage pond is not in VWS scope. Nonetheless there could be a perception that VWS is at fault which could impact on VWS reputation.

Context And category	Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
Operations	Plant electrical failure	Partial or full shutdown	Loss of production	Possible	Moderate	High	N
Operations	Pressure sewerage pumping station failure	Time limited discharge by customers	Customer complaint	Possible	Major	V High	N
Operations	Blockage in Sewerage infrastructure component	Time limited discharge by customers	Customer complaint	Possible	Major	V High	N
Operations	Customer sewage pump fails	Time limited discharge by customers	Customer complaint	Possible	Major	V High	N
Operations	Sewage surge	Sewage overflows	Health issues	Rare event	Severe	High	N
Operations	Sewage quality deteriorates	Plant upset	Loss of production	Possible	Major	V High	N
Operations	Sewage transfer pump fails	No feed to Plant	Loss of production	Possible	Major	V High	N
Operations	Screening plant fails	No feed to Plant	Loss of production	Possible	Major	V High	N
Operations	Ecodisk failure	Reduced production	Loss of production	Possible	Major	V High	N
Operations	Drum filter failure	Production stops	Loss of production	Possible	Major	V High	N
Operations	Sludge Thickener failure	Production stops	Loss of production	Possible	Major	V High	N
Operations	Ultrafiltration failure	Production stops	Loss of production	Possible	Major	V High	N
Operations	UV failure Chlorination failure	Production stops	Loss of production	Possible	Major	V High	N
Operations	CIP failure	Production reduced	Loss of production	Possible	Major	V High	N
Operations	Insufficient lab equipment and reagents	Product quality not assessed	Poor quality product	Possible	Major	V High	N



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Context And category	Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
Operations	Partial or full loss of supply of chemicals - Sodium Hypochlorite	Plant output out of specification	Poor quality product	Possible	Major	V High	N
Operations	Partial or full loss of supply of chemicals - Antiscalant	Plant output out of specification	Poor quality product	Possible	Major	V High	N
Operations	Partial or full loss of supply of chemicals - Citric Acid	Plant output out of specification	Poor quality product	Possible	Major	V High	N
Operations	Breach of integrity of water retaining tanks (Storage tank failure)	Loss of sewage or water	Environmental and contract breaches	Rare event	Major	V High	N
Operations	Recycled water main failure or burst (not part of current licence scope)	Loss of water to customers	Potential health issues	Possible	Major	V High	N
Operations	Plant fire	Plant stoppage	Loss of production	Unlikely	Major	V High	N
Operations	Compressed air system failure	Plant stoppage	Loss of production	Possible	Major	V High	N
Operations	Control instrumentation failure	Plant interruption	Loss of production	Possible	Major	V High	N
Operations	Inadequate supply of spares and consumables	Plant interruption	Loss of production	Possible	Major	V High	N
IT systems & coms	Loss of telephone, fax and/or mobile phone communication for more than a day	Plant interruption	Loss of production	Possible	Major	V High	N
IT systems & coms	Server and internet failure	Plant interruption	Loss of production	Possible	Major	V High	N
IT systems & coms	Loss of PLC/SCADA system	Plant interruption	Loss of production	Possible	Major	V High	N
Contractual	Material breach (eg unable to meet obligations)	Litigation	Loss of contract	Rare event	Severe	High	N
Contractual	Change in law	Contract amendment	Increase costs	Possible	Moderate	High	N
Financial	Bankruptcy by VWS	Breach of contract	Loss of contract	Rare event	Severe	High	N
Financial	VWS losing money on job	Work to contract	Loss of reputation	Rare event	Severe	High	N
VWS compliance	BMS - loss of certification	Not a material breach	Loss of reputation	Unlikely	Moderate	Medium	N

*Sewerage & Recycled Water Retail Supply Management Plan*

VWS compliance	Failure to submit reports on time – contract, EPA, Work cover	Potential breach	Penalties	Unlikely	Severe	V High	N
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Context And category	Adverse Event	Potential Immediate Consequence	Consequence (Penultimate Risk)	Likelihood (Risk of) of Occurrence	Consequence of Occurrence (Risk Outcome)	Risk Rating	Risk Evaluation: Acceptable Outcome (Y/N)
VWS compliance	Not keeping licences up to date (driver, trade, confined space and the like)	Potential breach	Penalties	Unlikely	Major	High	N
VWS compliance	Contract non-compliance - reporting requirements	Potential breach	Penalties	Unlikely	Major	High	N
Organisational	Loss of key staff due to resignation	Dearth of supervision	Multiple	Unlikely	Severe	V High	N

## Appendix 5 - Risk treatment

### Note

The residual risk analyses in the following table are necessarily subjective (described as unchanged or reduced etc.). It follows that there is some latitude in the perceived outcomes of the treatment put in place to avert an occurrence and/or to mitigate the impact of an occurrence.

Sewerage & Recycled Water Retail Supply Management Plan

Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
<b>External</b>									
Access & security	Flood, extreme rain event	VWS has no influence over rain event. These will occur	D&C good stormwater management & drainage & ability to run infrastructure remotely. Implement EPRP	Unchanged	Reduced	Low	Y	Not applicable	LLC & VWS
Access & security	Lightning	VWS has no influence over lightning event. These will occur	Install adequate lightning and surge current protection	Unchanged	Reduced	Low	Y	Not applicable	LLC & VWS
Access & security	Bush fire	VWS has no influence over bush fire event. These may occur	Design and install adequate fire detection and protection	Unchanged	Reduced	Low	Y	Not applicable	LLC & VWS
Access & security	Earthquake	VWS has no influence over earthquake event. These may occur	D&C to earthquake standards. Implement EPRP.	Unchanged	Reduced	Low	Y	Not applicable	VWS
Access & security	Road accident restricting access (third party)	VWS has no influence over third party drivers on main or approach roads.	Construct good access roads into and within Bingara Gorge development	Unchanged	Reduced	Low	Y	Not applicable	LLC
Access & security	Vandalism or other risk to Treatment Infrastructure	Security fencing; intruder security alarm with back to base notification; Security Company Patrols	Have sufficient insurance spares for critical equipment	Unlikely	Minor/Moderate	Low	Y	LLC	VWS
Utilities, suppliers	Power supply failure	VWS has no influence over third party power supply	UPS for PLC. Hire emergency generator if long term event	Unchanged	Minor/Moderate	Low	Y	LLC	VWS
Utilities, suppliers	Third party excavation causes damage to sewerage	Strict rules on dial before you dig; heavy penalties; visible routes	Emergency call out to repair	Lessened	Minor/Moderate	Low	Y	LLC	VWS
Legal & regulatory	WICA licence breach	Have in place excellent contract administration and infrastructure management	Take whatever action is required applicable to the matter to rectify breach	Lessened	Minor/Moderate	Low	Y	LLC	VWS
Legal & regulatory	Change in law for licence holder (VWS)	VWS has no influence over change in law. These may occur	Negotiate sensibly with IPART and LLC	No change	Reduced	Low	Y	Not applicable	LLC & VWS
Consumer customer	Illegal discharge of contaminants	Customer contracts and other documentation including penalties highlighting what is illegal	Sufficient surge capacity in sewage storage to dilute contaminants and procedures to handle various	Reduced	Reduced	Low	Y	LLC & VWS	LLC & VWS
Consumer customer	Illegal connection of recycle to potable water piping	Customer contracts and other documentation including penalties highlighting what is illegal	Refer offenders to counselling and medical practitioners	Reduced	Reduced	Low	Y	LLC & VWS	LLC & VWS
Stakeholder: Community, Shire Council, Facilities Manager, Golf Course, other	Community complaint eg odour (relates to internal context public health)	Infrastructure design to have eg adequate odour control. Operate, maintain and monitor treatment infrastructure to high standard. Refer IOPs. Have in place Codes for Complaints Handling and Debt collection incl associated requirements	Implement Odour Release Plan or EPRP as applicable. Immediate route cause analysis and corrective action. Engage Odour consultant to further investigate. Consult community to alleviate concerns & abate reputation	Reduced	Reduced	Medium	Y	LLC & VWS	LLC & VWS

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issues arising									
Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
Stakeholder	Shire council complaint eg odour (refer to internal context public health)	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above
Stakeholder	Facilities mgt complaint eg odour (refer to internal context public health)	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above
Stakeholder	Golf course complaint eg odour (relates to internal context public health)	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above	Refer above
Stakeholder	Possibility of any perceived or actual threat to customers or public health as a result of the company's operations	Have in place excellent communications and marketing material in place for customers including emergency contact information	Implement that section of EPRP	Reduced	Reduced	Medium	Y	LLC & VWS	LLC & VWS
<b>Internal</b>									
Public Health	Sewage odour (sewage itself)	Infrastructure design to have adequate odour control to DECC standards. Operate, maintain & monitor treatment infrastructure to high standard. Refer IOPs.	Follow standard procedure in O&M manual for determining cause and corrective action. Engage odour consultant if needed.	Reduced	Reduced	Medium	Y	LLC & VWS	VWS
Public Health	Recycle water odour (product water)	Infrastructure design to have adequate odour control to DECC standards. Operate, maintain & monitor treatment infrastructure to high standard. Refer IOPs.	Follow standard procedure in O&M manual for determining cause and corrective action. Engage odour consultant if needed.	Reduced	Reduced	Medium	Y	VWS	VWS
Public Health	Treatment Infrastructure odour (sewerage and treatment facilities)	Infrastructure design to have adequate odour control to DECC standards. Operate, maintain & monitor treatment infrastructure to high standard. Refer IOPs.	Follow standard procedure in O&M manual for determining cause and corrective action. Engage odour consultant if needed.	Reduced	Reduced	Medium	Y	LLC & VWS	VWS
Public Health	Recycle water quality below specification;	Infrastructure design to be specific for producing odourless and colourless treated water	Follow standard procedure in O&M manual for determining cause and corrective action.	Reduced	Reduced	Medium	Y	VWS	VWS
OHS	Work related illness	Have in place stringent OHS Management Plan and enforce it in behavioural based awareness manner	Follow Incident response and management procedure. Report to relevant authorities depending on severity	Reduced	Reduced	Medium	Y	LLC & VWS	LLC & VWS
OHS	Work related injury	Have in place stringent OHS Management Plan and enforce it in behavioural based awareness manner	Follow Incident response and management procedure. Report to relevant authorities depending on severity	Reduced	Reduced	Medium	Y	LLC & VWS	LLC & VWS
OHS	Inadequate supply of Personal Protection Equipment (PPE)	Robust inventory management system in place	Operate remotely. Source alternate supplies from nearest supplier	Rare event	Minor-moderate	Low	Y	LLC & VWS	LLC & VWS

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Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
OHS	Inadequate management of an emergency or crisis	Train and practice our documented EPRP regularly	Recognise any poor management and replace responsible person	Rare Event	Moderate	Low	Y	VWS	VWS
Environmental	Chemical spill	Permanent bunding; established procedures; available spill kits; adequate training	Follow procedures including source isolation.	Rare event	Moderate	Low	Y	VWS	VWS
Environmental	Fire	Regular Maintenance of grounds and boundary interfaces to prevent vermins and reduce possibilities of fire; educate community with housekeeping rules	Use existing security to monitor and take appropriate steps and co-ordinate with VWS	Reduced	Reduced	Medium	Y	LLC	LLC & VWS
Environmental	Operational noise.	Design and build to meet or better minimum noise levels; monitor noise	ID and isolate the offending equipment; determine root cause and rectify. Implement community consultation if needed	unchanged	Moderate	Low-medium	Y	VWS	VWS
Environmental	Excessive birdlife on storage pond	Possibly install netting; limit bird life by way of removal	Relocate birds; potentially may need to have VWS re-treat effluent	unchanged	Moderate	Low-medium	Y	LLC	LLC
Environmental	Excessive aquatic plants or algae in storage pond	Pond maintenance program	Concerted eradication	unchanged	Moderate	Low-medium	Y	LLC	LLC
Environmental	High numbers of mosquitoes	Pond Maintenance program including spraying	Concerted eradication	unchanged	Moderate	Low-medium	Y	LLC	LLC
Environmental	Integrity of storage pond breached	Pond design integrity and maintenance program	Implement LLC EPRP	unchanged	Moderate	Low-medium	Y	LLC	LLC
Note while the above environmental concerns related to the storage pond are documented, the management and care of the storage pond is not in VWS scope. Nonetheless there could be a perception that VWS is at fault which could impact on VWS reputation.									
Operations	Plant electrical failure	Robust preventative maintenance program; refer IOPs	Identify root cause and rectify to mitigate loss of production	unchanged	Lessened	Low-medium	Y	VWS	VWS
Operations	Pressure sewerage system pumping station failure	Robust preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert potential for health issue arising	unchanged	Lessened	Low-medium	Y	LLC & VWS	LLC & VWS
Operations	Blockage in Sewerage infrastructure component	Robust preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert potential for health issue arising	unchanged	Lessened	Low-medium	Y	LLC	LLC & VWS
Operations	Customer sewage pump fails	Customer information directs customer to advise VWS	Rectification as per proc.; crew mobilization. If needed pump(s) to be replaced. Spares available with LLC on Site.	unchanged	Lessened	Low-medium	Y	LLC	VWS

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**Bingara Gorge**

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Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
Operations	Sewage surge	Treatment infrastructure to have adequate surge capacity; refer IOP for design and O&M.	Manage surges effectively following O&M procedures	unchanged	Lessened	Low-medium	Y	LLC & VWS	VWS
Operations	Sewage quality deteriorates	Educate community. Design infrastructure to have sufficient surge capacity as buffer; in place monitoring downstream	Identify root cause and rectify in timely manner to avert treatment upset	Unchanged	Lessened	Low-medium	Y	LLC & VWS	VWS
Operations	Sewage transfer pump fails	Current design has 100% redundancy. (1 Duty and 1 standby). In case of any issue, Customer information centre directs customer to advise VWS	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	LLC & VWS	VWS
Operations	Screening plant fails	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Ecodisk failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Drum filter failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Sludge Thickener failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Ultrafiltration failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	UV failure Chlorination failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	CIP failure	Regular Preventative maintenance program; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Insufficient lab equipment and reagents	Inventory monitoring and procurement system in place	If necessary use third party NATA services	Unlikely	lessened	Low-medium	Y	VWS	VWS



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Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
Operations	Partial or full loss of supply of chemicals - Sodium Hypochlorite, Antiscalant, Citric Acid, other	Inventory monitoring and procurement system in place Robust tank design including bunding to avert environmental release	Activate emergency response EPRP if storage tank failure. Arrange for immediate Chem delivery	Unlikely	lessened	Low-medium	Y	VWS	VWS
Operations	Breach of Integrity of Water Retaining Structures (Storage tank failure)	Storage tank design, fabrication and bunding to Australian Standards.	Activate emergency response EPRP if storage tank failure. Arrange for temporary storage and immediate Chem delivery	Rare event	lessened	Low-medium	Y	VWS	VWS
Operations	Recycled water main failure or burst (not part of current licence scope)	Robust design with buried route marked above and below grade	Immediate response to determine location as well as remedial action. tanker in potable water if needed	unchanged	lessened	Low-medium	Y	LLC	VWS
Operations	Plant fire	Adequate fire detection and protection installed and personnel trained in use; refer to IOPs;	Activate EPRP and extinguish fire	unchanged	lessened	Low-medium	Y	LLC	VWS
Operations	Compressed air system failure	preventative maintenance program;; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Control instrumentation failure	preventative maintenance program;; refer IOPs	Identify root cause and rectify in timely manner to avert treatment upset or odour or health issues	unchanged	lessened	Low-medium	Y	VWS	VWS
Operations	Inadequate supply of spares and consumables	inventory monitoring and procurement system in place	If necessary use local supplier	Unlikely	lessened	Low-medium	Y	VWS	VWS
IT systems & coms	Loss of telephone, fax and/or mobile phone communication for more than a day	No real control over third party supplier of these services; however, have in place adequate supplier services agreement	Ensure site attendance within 24 hours rather than remote monitoring	unchanged	lessened	Low-medium	Y	VWS	VWS
IT systems & coms	Server and internet failure	Robust back up; disaster recovery plan in place	Implement normal recovery or disaster recovery if needed	unchanged	lessened	Low-medium	Y	VWS	VWS
IT systems & coms	Loss of PLC/SCADA system	Back up program and keep it available	Attend site, determine cause and rectify by updating from the backup program	unchanged	lessened	Low-medium	Y	VWS	VWS
Contractual	Material breach (eg unable to meet obligations)	Understand contract before signing and properly administer by competent personnel	Meet with LLC and authorities to mitigate negative outcomes	unchanged	lessened	Low-medium	Y	LLC & VWS	LLC & VWS

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Context and category	Adverse Event	Example Risk Treatment to Avert an Adverse Event	Example Risk Treatment to mitigate impact of Adverse Event	Residual Likelihood of occurrence	Residual Consequence	Residual Risk Rating (Significance)	Risk Treatment Adequate (Y/N)	Responsibility Prevention at D&C By	Responsibility Mitigate impact By
Contractual	Change in law	Potential for amending contract in equitable way	Meet with LLC and authorities to amend contract equitably	unchanged	lessened	Low-medium	Y	LLC & VWS	LLC & VWS
Financial	Bankruptcy by VWS	VWS Corporate Governance at the highest of levels	Internal and external audits	unchanged	lessened	Low-medium	Y	VWS	VWS
Financial	VWS losing money on job	All contingencies covered prior to signing contract	If due to change in law or variations, negotiate accordingly; Veolia never walks away	unchanged	lessened	Low-medium	Y	VWS	VWS
VWS compliance	BMS - loss of certification	VWS compliance group performs its duties	Regain certification with urgency to mitigate loss of reputation	lessened	lessened	Low	Y	VWS	VWS
VWS compliance	Failure to submit reports on time – contract, EPA, Work cover	VWS to have in place organisation and sufficient resources to ensure this does not occur	Increase resources and work overtime to mitigate this possibility	lessened	lessened	Low	Y	VWS	VWS
VWS compliance	Not keeping licences up to date (driver, trade, confined space and the like)	VWS administration regularly to monitor and manage	Replace any unqualified resource with qualified	unchanged	lessened	Low-medium	Y	VWS	VWS
VWS compliance	Contract non-compliance - reporting requirements	Understand contract before signing and properly administer by competent personnel	Identify and rectify in timely manner	unchanged	lessened	Low-medium	Y	VWS	VWS
Organisational	Loss of key staff due to resignation	Have in place succession or support duties plan	Call-out if needed	unchanged	lessened	Low-medium	Y	VWS	VWS

## Appendix 6 - VWS level and standard of service

The level and standard of service provided by VWS to its customer LLC are detailed in the operations, service and maintenance agreement between LLC and VWS. These levels and standards are summarised below.

- Commitment 1 ensure a safe operation having minimal impact on the environment
- Commitment 2 treat contracted quantities of sewage and supply of recycled water
- Commitment 3 provide attendance on site within 24 hours or by remote access
- Commitment 5 ensure reliability of membranes
- Commitment 6 ensure the reliable supply of water treatment chemicals & consumables
- Commitment 7 handle customer complaints in accordance with VWS code of practice
- Commitment 8 manage adverse events or circumstances in accordance with this Plan

The level or scope of service includes:

- **Site Operations**
  - Operate and maintain and service the plant in accordance with the Treatment Infrastructure operating procedures and performance criteria
- **Service support**
  - Carry out specialty servicing as contained in detail in the service agreement to ensure optimal plant performance
- **Maintenance**
  - Perform all necessary plant maintenance in in line with inspection and performance monitoring and CMMS system installed.
- **Spare Parts and Consumables**
  - Supply all necessary spare parts and consumables for operation of the Treatment Infrastructure shall be in accordance with procurement arrangement between Licensee and LLU
- **Chemicals**
  - Supply all necessary chemicals to operate the plant
- **Water testing**
  - All necessary water testing to achieve performance parameters and regulatory compliance
- **Licensing**
  - Maintain plant performance to meet or exceed all licensing requirements
- **Meetings and reporting**
  - Meet regularly with LLU and report to applicable stakeholders as required under Regulation.

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The standard of performance will be measurable as in terms of key performance indicators (KPIs) as tabled below.

**Table 1 – Standard of service key performance indicators**

KPI	Min/Max target	Method of Assessment
Safety	No lost time injuries	Number of lost time injuries reported
Environment	No environmental incidents	Number of incidents reported
Service Delivery	Response (via Phone or Attendance) within 4 hours (high priority) of contact by LLC representative or consumer customer	Contact with VWS personnel
Reclaimed Water Quality	Samples taken as per specification requirements	Independent water analysis
System Performance	Refer service agreement. Emergency stoppages are excluded from this guarantee.	Review of hours run counter
Critical control points: UV status Chlorine residual value	Refer service agreement & SRWQMP	Refer service agreement & SRWQMP
Maintenance Mechanical Electrical & controls Instrumentation	All work detailed in the Service agreement will be carried out in accordance with the O&M manual and equipment manufacturers' instructions (Replicated with the CMMS system)	Review of quarterly reports (Min) Review of Monthly Reports (Max)

## Appendix 7 Code of Practice for Complaints Handling

### PURPOSE

This code of practice provides a guideline for complaints handling (including the preparation of related procedures) by management and employees of Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWS) in relation to its Sewerage Services and Recycled Water Network Operator and Retail Supplier Licences for the Bingara Gorge Development pursuant to the Water Industry Competition (General) Regulation 2008, Schedule 2, Part 1, Cl 4 as well as Health Care Complaints Act.

This code of practice is for VWS internal use only; a short version shall be made available to Customers and to the general public.

### BACKGROUND

VWS has been contracted by LLC to supply sewerage services and recycle water for the Bingara Gorge Development. LLC and VWS are stated in a tri-party agreement that every customer signs.

Both LLC and VWS commit to provide these services in accordance with the code of practice described in this appendix prepared by VWS as licence holder. LLC and VWS share responsibility for customer communication, complaints handling and debt recovery. The split of responsibility is as follows:

- VWS – Oversight of LLC Activities to ensure LLC performs below activities in compliance with Veolia's IPART licence
- VWS - All operational related customer interface matters
- LLC - All financial related customer interface matters including tariff setting and debt recovery
- LLC – All General Customer Communications.

### LICENCE HOLDER OBLIGATION

Pursuant to the above Regulation, VWS shall:

- (a) establish and comply with a code of practice for customer complaints, whether in relation to:
  - i. the supply of water, or the provision of sewerage services, by the licensee, or
  - ii. the operation of the water or sewerage infrastructure from which that water is supplied or those services provided
  - iii. establishment of a procedure for notifying NSW Health during the development of (and any amendment of) a procedure for notifying NSW Health of Health of Health related complaints, agreed to by NSW Health, in the Retail Supply Management Plan and
- (b) provide copies of that code of practice to the Minister, IPART and to the ombudsman (EWON), and
- (c) keep its customers informed as to:
  - i. the provisions of that code of practice, and
  - iv. the existence of the ombudsman, and the procedure for referring complaints or disputes to the ombudsman, and
- (d) furnish periodic reports to the Minister and IPART, in relation to the complaints it receives, in such form, and containing such information, as the Minister or IPART requires.

### REFERENCE STANDARD

This code of practice conforms to and takes from AS/ISO 10002—2018 Customer Satisfaction; Guidelines for complaints handling in organisations, as published by Standards Australia.

### DEFINITIONS

The reference standard definitions follow, edited specifically to this Plan and Licence

#### Complainant

Person, organisation or its representative, making a complaint; in this case any customer (small retail and large), consumer, tenant or member of the public

**Complaint**

Expression of dissatisfaction made to an organisation (VWS or LLC), related to its products (namely sewerage services and non-potable water supply), or its use (health risks emanating from use of such product) or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected

**Customer**

Organisation (e.g. local School or other) or person (person connected to sewerage and recycled water) that receives sewerage services and recycled water supply whether contractually as landowner (householder) or large customer (e.g. Golf Course) or as a user (e.g. as a tenant)

**GUIDING PRINCIPLES****Visibility**

Information about how and where to complain shall be well publicised to customers, personnel and other interested parties.

**Accessibility**

VWS and LLC complaints handling process shall be easily accessible to all complainants. Information shall be made available on the details of making and resolving complaints. The complaints handling process and supporting information shall be easy to understand and use.

**Responsiveness**

Receipt of each complaint shall be acknowledged to the complainant immediately. Complaints shall be addressed promptly in accordance with their urgency. For example, significant health and safety issues shall be processed immediately. The complainants shall be treated courteously and be kept informed of the progress of their complaint through the complaints handling process.

**Objectivity**

Each complaint shall be addressed in an equitable, objective and unbiased manner through the complaints handling process.

**Charges**

Access to the complaints handling process shall be free of charge to the complainant.

**Confidentiality**

Personally identifiable information concerning the complainant shall be available where needed, but only for the purposes of addressing the complaint within VWS and shall be actively protected from disclosure, unless the customer or complainant expressly consents to its disclosure.

**Customer-focused approach**

VWS shall adopt a customer-focused approach, shall be open to feedback including complaints, and shall show commitment to resolving complaints by its actions.

**Accountability**

VWS shall ensure that accountability for and reporting on the actions and decisions of VWS with respect to complaints handling is clearly established.

**Continual improvement**

The continual improvement of the complaints handling process and the quality of products shall be a permanent objective of both VWS and LLC.

## COMPLAINTS HANDLING FRAMEWORK

### Commitment

VWS and LLC is actively committed to effective and efficient complaints handling.

### Policy

VWS is committed to customer focused complaints handling practices..

### Responsibility and authority

*Appropriate management personnel of Veolia shall be responsible for the following:*

- ensuring that the complaints handling process and objectives are established;
- ensuring that the complaints handling process is planned, designed, implemented, maintained and continually improved;
- identifying and allocating the management resources needed for an effective and efficient complaints handling process;
- ensuring the promotion of awareness of the complaints handling process and the need for a customer focus throughout VWS;
- ensuring that information about the complaints handling process is communicated to customers, complainants, and, where applicable, other parties directly concerned in an easily accessible manner;
- appointing a complaints handling management representative and clearly defining his or her responsibilities and authority in addition to the responsibilities and authority set out below;
- ensuring that there is a process for rapid and effective notification to appropriate management of any significant complaints;
- periodically reviewing the complaints handling process to ensure that it is effectively and efficiently maintained and continually improved.

*The complaints handling management representative shall be responsible for the following:*

- establishing a process of performance monitoring, evaluation and reporting;
- reporting to appropriate management on the complaints handling process, with recommendations for improvement;
- maintaining the effective and efficient operation of the complaints handling process, including the recruitment and training of appropriate personnel, technology if required
- requirements, documentation, setting and meeting target time limits and other requirements, and process reviews.

*Other managers involved in the complaints handling process shall, as applicable within their area of responsibility, be responsible for the following:*

- ensuring that the complaints handling process is implemented;
- liaising with the complaints handling management representative;
- ensuring the promotion of awareness of the complaints handling process and of the need for a customer focus;
- ensuring that information about the complaints handling process is easily accessible;
- reporting on actions and decisions with respect to complaints handling;
- ensuring that monitoring of the complaints handling process is undertaken and recorded;
- ensuring that action is taken to correct a problem, prevent it happening in the future, and that the event is recorded;
- ensuring that complaints handling data are available for the top management review.

*All personnel in contact with customers and complainants shall*

- be trained in complaints handling,



- comply with any complaints handling reporting requirements determined by VWS,
- treat customers in a courteous manner and promptly respond to their complaints or direct them to the appropriate individual, and
- show good interpersonal and good communication skills.

*All personnel shall*

- be aware of their roles, responsibilities and authorities in respect of complaints,
- be aware of what procedures to follow and what information to give to complainants, and
- report complaints which may have a significant impact on VWS.

## **PLANNING AND DESIGN**

### **Objectives**

Appropriate management shall ensure that the complaints handling objectives are established for relevant functions and levels within VWS. These objectives shall be measurable and consistent with the complaints handling policy. These objectives shall be set at regular intervals as detailed performance criteria.

### **Activities**

Appropriate management shall ensure that the planning of the complaints handling process is carried out in order to maintain and increase customer satisfaction.

### **Resources**

In order to ensure that the complaints handling process operates effectively and efficiently, appropriate management shall assess the needs for resources and provide them. These include resources such as personnel, training, procedures, documentation, specialist support, materials and equipment, computer hardware and software, and finances.

## **OPERATION OF COMPLAINTS-HANDLING PROCESS**

### **Communication**

Information concerning the complaints handling process, such as brochures, pamphlets, or electronic based information, shall be made readily available to customers, complainants and other interested parties including:

- where complaints can be made;
- how complaints can be made;
- information to be provided by the complainant;
- the process for handling complaints;
- time periods associated with various stages in the process;
- the complainant's options for remedy, including external means;
- how the complainant can obtain feedback on the status of the complaint.

### **Receipt of complaint**

Upon reporting of the initial complaint, the complaint shall be recorded with supporting information and a unique identifier code. The record of the initial complaint shall identify the remedy sought by the complainant and any other information necessary for the effective handling of the complaint including the following:

- a description of the complaint and relevant supporting data;
- the requested remedy;
- the products or practices complained about;
- the due date for a response;
- data on people, department, branch, organization and market segment;
- immediate action taken (if any).

### **Tracking of complaint**

The complaint shall be tracked from initial receipt through the entire process until the complainant is satisfied or the final decision is made. An up-to-date status shall be made available to the complainant upon request and at regular intervals, at least at the time of pre-set deadlines.

#### **Acknowledgement of complaint**

Receipt of each complaint shall be acknowledged to the complainant immediately (for example via post, phone or e-mail).

#### **Initial assessment of complaint**

After receipt, each complaint shall be initially assessed in terms of criteria such as severity, safety implication, complexity, impact, and the need and possibility of immediate action.

#### **Investigation of complaints**

Every reasonable effort shall be made to investigate all the relevant circumstances and information surrounding a complaint. The level of investigation shall be commensurate with the seriousness, frequency of occurrence and severity of the complaint.

#### **Response to complaints**

Following an appropriate investigation, VWS shall offer a response, for example correct the problem and prevent / limit it happening in the future. If the complaint cannot be immediately resolved, then it shall be dealt with in a manner intended to lead to its effective resolution as soon as possible.

#### **Communicating the decision**

The decision or any action taken regarding the complaint, which is relevant to the complainant or to the personnel involved, shall be communicated to them as soon as the decision or action is taken.

#### **Closing the complaint**

If the complainant accepts the proposed decision or action, then the decision or action shall be carried out and recorded. If the complainant rejects the proposed decision or action, then the complaint shall remain open. This shall be recorded and the complainant shall be informed of alternative forms of internal and external recourse available. VWS and LLC shall continue to monitor the progress of the complaint until all reasonable internal and external options of recourse are exhausted or the complainant is satisfied.

### **MAINTENANCE AND IMPROVEMENT**

#### **Collection of information**

VWS and LLC will ensure that LLC records the performance of its complaints handling process. VWS and LLC shall ensure that LLC establish and implement procedures for recording complaints and responses and for using these records and managing them, while protecting any personal information and ensuring the confidentiality of complainants. This shall include the following:

- specifying steps for identifying, gathering, classifying, maintaining, storing and disposing of records;
- recording its handling of a complaint and maintaining these records, taking utmost care to preserve such items as electronic files and magnetic recording media, since records in these media can be lost as a result of mishandling or obsolescence;
- keeping records of the type of training and instruction that individuals involved in the complaints handling process have received;
- specifying criteria for responding to requests for record presentation and record submissions made by a complainant or his or her agent; this may include time limits, what kind of information will be provided, to whom, or in what format;
- specifying how and when statistical non-personally identifiable complaints data are disclosed to the public.

### **Analysis and evaluation of complaints**

All complaints shall be classified and then analysed to identify systematic, recurring and single incident problems and trends, and to help eliminate the underlying causes of complaints.

### **Satisfaction with the complaints handling process**

Action as suitable will be taken to determine the levels of satisfaction of complainants with the complaints handling process. This may take the form of random surveys of complainants and other techniques.

### **Monitoring of the complaints handling process**

Monitoring of the complaints handling process, the resources required (including personnel) and the data to be collected, as considered appropriate, shall be undertaken. The performance of the complaints handling process shall be measured against predetermined criteria.

### **Auditing of the complaints handling process**

VWS shall perform or provide for audits of both VWS and LLC time to time in order to evaluate the performance of the complaints handling process. The audit shall provide information on

- process conformity to complaints handling procedures, and
- process suitability to achieve complaints handling objectives.

The complaints handling audit may be conducted as part of VWS quality management system audit. The audit results shall be taken into account in the management review to identify problems and introduce improvements in the complaints handling process. The audit shall be carried out by competent individuals independent of the activity being audited.

### **Management review of the complaints handling process**

Top management of VWS shall review the complaints handling process time to time in order to:

- ensure its continuing suitability, adequacy, effectiveness and efficiency,
- identify and address instances of nonconformity with health, safety, environmental, customer, regulatory and other legal requirements,
- identify and correct product deficiencies,
- identify and correct process deficiencies,
- assess opportunities for improvement and the need for changes to the complaints handling process and products offered, and
- evaluate potential changes to the complaints handling policy and objectives.

The input to management review shall include information on:

- internal factors such as changes in the policy, objectives, organizational structure, resources available, and products offered or provided,
- external factors such as changes in legislation, competitive practices or technological innovations,
- the overall performance of the complaints handling process, including customer satisfaction surveys and the results of the continual monitoring of the process,
- the results of audits,
- the status of corrective and preventive actions,
- follow up actions from previous management reviews, and
- recommendations for improvement.

The output from the management review shall include

- decisions and actions related to improvement of the effectiveness and efficiency of the complaints handling process,
- proposals on product improvement, and decisions and actions related to identified resource needs.

Records from management review shall be maintained and used to identify opportunities for improvement.

## Continual improvement

VWS will ensure that VWS and LLC aim to continually improve the effectiveness and efficiency of the complaints handling process used, so that it can continually improve the quality of its services. This can be achieved through corrective and preventive actions and innovative improvements. VWS shall take action to eliminate the causes of existing and potential problems leading to complaints in order to prevent recurrence and occurrence, respectively.

VWS and LLC shall

- explore, identify and apply best practices in complaints handling,
- foster a customer-focused approach within VWS,
- encourage innovation in complaints handling development, and
- recognise exemplary complaints handling behaviour.

## RECOURSE TO FURTHER ACTION

In the event a customer is not satisfied with the handling of their complaint by VWS or LLC, we shall direct the customer to the Energy and Water Ombudsman of NSW (EWON) should they wish to take further action.

## REFERENCES (used as necessary)

- Complaints handling Policy
- Code of Practice
- Complaints Management Organisation and Responsibilities
- Complaints Handling Administration Procedure
- Performance Monitoring - Key Performance Indicators (KPIs)
- Training Program
- Audit

## Attachments

Call Handling process flow (LLC document)

Technical (including Health related) complaint process

Financial complaint process

## TECHNICAL COMPLAINT PROCESS TO BE FOLLOWED BY PHONE OPERATOR\*

\* Current Call Centre No: 1300 552 120 or

1300 110 238 (Press Number for faults or leaks)

Email Address: [info@myrecycledwater.com.au](mailto:info@myrecycledwater.com.au)

Courteous receipt of call:

1. Call centre records time of call AEST
2. First of all we shall need to record your name, address and contact phone number and email:
  - a) Name
  - b) Address of property
  - c) Phone number at home and mobile
  - d) Email address
  - e) What is the most suitable number to call you back and at what time?
3. To help us understand your complaint for us to resolve the matter as efficiently as possible is your complaint in connection with one of the following:
  - a) Lilac System (Recycled Water)
  - b) Sewer
  - c) Recycle Water Treatment Plant
  - d) The Golf Course Lagoon
  - e) None of the above

4. If your complaint refers to the Lilac System, are you concerned about:
  - a) no recycle water available
  - b) low recycle water pressure
  - c) your meter
  - d) your piping
  - e) colour of the water
  - f) any odour
  - g) health Issues in relation to the recycled water
  - h) none of the above
5. If your complaint refers to the sewer, are you connected to:
  - a) the gravity system, or
  - b) the pressure system (you have a grinder pump)
  - c) health Issues in relation to the sewer network
  - d) don't know
6. If your complaint refers to the gravity sewer, are you concerned about:
  - a) blockage
  - b) local odour
  - c) health Issues in relation to the gravity sewer network
  - d) other
7. If your complaint refers to the pressure sewer, are you concerned about:
  - a) blockage or overflow
  - b) grinder pump has stopped
  - c) noise
  - d) odour
  - e) health Issues in relation to the pressure sewer network
  - f) other
8. If your complaint refers to the Recycle Water Treatment Plant, are you concerned about:
  - a) Security
  - b) noise
  - c) odour
  - d) other (eg speeding Veolia vehicles)
9. If your complaint refers to the Golf Course lagoon, are you concerned about:
  - a) Security
  - b) noise
  - c) odour
  - d) other (eg spray)

**FINANCIAL COMPLAINT PROCESS TO BE FOLLOWED BY PHONE OPERATOR\***

**\*\* - Current Call Centre No: 1300 110 238**  
**Email: [enquiries@contact.wiltonrecycledwater.com](mailto:enquiries@contact.wiltonrecycledwater.com)**

Courteous receipt of call:

1. Call centre records time of call AEST
2. First of all we shall need to record your name, address and contact phone numbers and email:
  - a) Name
  - b) Address of property/dress
  - c) Phone number at home and mobile
  - d) Email address
  - e) What is the most suitable number to call you back and at what time?

Sewerage & Recycled Water Retail Supply Management Plan

3. To help us understand your complaint and for us to resolve the matter as efficiently as possible, is your complaint in connection with one of the following:

a) Your Water and Sewage Services

If answer: <b>YES</b> →	<b>Q. Are you concerned about:</b>	✓ if YES	Any other details / comments?
	• How to connect to the service		
	• Contractual Information		
<b>NO</b> go to (b)	• understanding the usage restrictions of either the sewer or recycled water service	→	<p>To assist you, information is available at:</p> <p>a) <a href="http://www.myrecycledwater.com.au/wilton-rwtp">www.myrecycledwater.com.au/wilton-rwtp</a> (refer to Prohibited Substance Rules, at bottom left)</p> <p>b) <a href="http://www.bingaragorgeonline.com.au">www.bingaragorgeonline.com.au</a></p> <p>c) Wilton Recycled Water Treatment Plant Brochure (available within the website stated in (a))</p> <p>d) In your contract with Wilton Recycled Water</p> <p>Do you still require a staff member to call you? ✓ if YES <input type="checkbox"/></p>

b) Payment problems/hardship

If answer: <b>YES</b> →	<b>Q. Are you concerned about:</b>	✓ if YES	Any other details / comments?
	• How to pay your bill		
	<b>Q. Would you like to make arrangements for:</b>		
	• a delayed payment date		
	• incremental payments		
<b>NO</b> go to (c)	• organising an agreed payment plan	→	

c) Service Bill Charges

If answer: <b>YES</b> →	<b>Q. Are you concerned about:</b>	✓ if YES	✓ if YES	Any other details / comments?
	• The sewage component	<b>Q. Is it regarding:</b>		
		• The connection fee		
		• Fixed Charges		
	• Other	• Usage amount		
		• Usage Charges		
		• Other		
<b>Please provide brief description</b>				

d) Interpreter services

If answer: <b>YES</b> →	<b>Please provide brief description of your concern</b>	
<b>NO</b> go to 4		

Other (not related to water and sewage)

4. If your complaint refers to your services bill charges, are you concerned about:
  - a) sewage component
  - b) recycle water component
  - c) other
5. If your complaint refers to the sewage services, are you connected to:
  - a) the connection fee,
  - b) fixed charges, or
  - c) don't know
6. If your complaint refers to Usage charges, are you concerned about:
  - a) usage,
  - b) usage charges, or
  - c) or don't know
7. If your complaint refers to Call-out services, are you concerned about:
  - a) step 1
  - b) step 2
  - c) step 3
  - d) step 4
8. If your call refers to payment problems/hardship, please tell us your issue:
  - a) step 1
  - b) step 2
  - c) step 3
  - d) step 4
9. If your complaint refers to Interpreter services, are you concerned about: Thank you for talking to us about your concern. A staff member will be in contact and you should expect a response within two business days. Is there anything else I can do for you? (If **YES**, record details)

Thank you for calling Wilton Recycled Water Services. We will respond to your enquiry as soon as possible

## Appendix 8 Code of Practice for Debt Recovery

### PURPOSE

This code of practice provides a guideline for debt recovery by management and employees of Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWS) in relation to its Sewerage Services and Recycled Water Network Operator and Retail Supplier Licences for the Bingara Gorge Development pursuant to the Water Industry Competition (General) Regulation 2008, Schedule 2, Part 1, Cl 5.

This code of practice is for VWS internal use only; a short version shall be made available to Customers and to the general the public and shall be included as part of Customer Contracts.

### BACKGROUND

VWS has been contracted by LLC to supply sewerage services and recycle water for the Bingara Gorge Development. LLC and VWS are stated in a tri-party agreement that every customer signs..

Both LLC and VWS commit to provide these services in accordance with the code of practice described in this appendix prepared by VWS as licence holder. LLC and VWS will share responsibility for customer communication, complaints handling and debt recovery. The split of responsibility is as follows:

- VWS - Oversight of LLC Activities to ensure LLC performs below activities in compliance with Veolia's IPART licence
- LLC - All financial related customer interface matters including tariff setting and debt recovery

### LICENCE HOLDER OBLIGATION

#### Included

Pursuant to the above Regulation, VWS shall:

- (a) establish and comply with this code of practice for debt recovery, and
- (b) provide copies of this code of practice to the Minister, IPART and to the ombudsman (EWON), and
- (c) keep its customers informed as to the provisions of this code of practice.

Specifically this code of practice provides for the deferment, in whole or in part, of payments owed by small retail customers suffering financial hardship.

As a matter of arrangement between LLC and VWS, LLC is directly implementing all actions relevant to this process; with VWS continuing to have oversight of the same since 1<sup>st</sup> July 2017.

#### Not included

This code of practice applies to persons that have a small retail customer (householders) contract with VWS for sewerage supply services and recycled water supply services and does not apply to tenants of customers (without derogating tenants' rights under law). This code also generally applies to large customers (e.g. Golf Course)

### GUIDING PRINCIPLES

This code of practice conforms to and takes from ACCC and ASIC Debt Collection Guideline: for collectors and creditors as published by the ACCC and ASIC in October 2005 and reprinted in April 2010.

Notably the ACCC/ASIC guideline is specifically developed for Debt Collection Agencies whereas this code of practice is for reference by VWS appointed personnel for handling debt recovery by VWS. Only when this code of practice is followed through to completion and debt remains shall VWS transfer debt recovery to a third party debt collection company.

### PRACTICAL GUIDANCE

#### Contact for a reasonable purpose only

Communications with the debtor must always be for a reasonable purpose, and should only occur to the extent necessary. It is considered necessary and reasonable for VWS to contact a debtor to:



*Sewerage & Recycled Water Retail Supply Management Plan*

- give information about the debtor's account,
- convey a demand for payment,
- accurately explain the consequences of non-payment, including any legal remedies available to the collector/creditor, and any service restrictions,
- make arrangements for repayment of a debt,
- put a settlement proposal or alternative payment arrangement to the debtor,
- review existing arrangements after an agreed period,
- ascertain why earlier attempts to contact the debtor have not been responded to within a reasonable period, if this is the case and
- ascertain why an agreed repayment arrangement has not been complied with, if this is the case

#### **Making contact with debtor**

Under privacy laws, VWS / LLC has an obligation to protect the privacy of debtors. When making direct contact, VWS / LLC must always ensure the person we are dealing with is the debtor. This must be done every time we make contact before you divulge any information about the debt, the process for its recovery or other confidential information.

The privacy limits on disclosing information to third parties apply to the debtor's spouse, partner and/or family as much as they apply to other third parties. Having established the debtor's identity, you should then identify who you are and whom you work for, and explain the purpose of the contact.

VWS/LLC identify ourselves only by company name and enquirers first name and also give at least basic information about the debt, including the name of the creditor and any assignee of the debt, and details of the account and the amount claimed.

#### **Hours of contact**

VWS/LLC only contacts the debtor or a third party at reasonable hours, taking into account their circumstances and reasonable wishes. The following are considered reasonable.

##### *Hours of contact*

Contact Method	Periods	Times
By Phone, emails and fax	Monday to Friday	7.30am – 9.00pm
	Weekends	9.00am – 9.00pm
	Public Holidays	Nil
Face-to-Face (not by VWS; by third party collector only engaged by VWS)	Monday to Friday	9.00am – 9.00pm
	Weekends	9.00am – 9.00pm
	Public Holidays	Nil

There may be reasons why contact during the above times is unreasonable, or contact outside of these times is reasonable. For instance, a debtor may ask that contact be made at other or more restricted times. This may be for a range of reasons including but not limited to debtor is a shift worker, or is responsible for children and contact around meal times is not convenient or debtor does not wish to be contacted when other family members are present or other.

In these and other such cases, the reasonable wishes of the debtor should be respected, and contact limited to the times requested by the debtor. However, we may alter the time of contact if, after reasonable efforts over a reasonable period of time to contact the debtor during normal hours or at the times requested by the debtor, if we have not been able to do so.

#### **Frequency of contact**

Debtors are entitled to be free from excessive communications from collectors. Communications must always be for a reasonable purpose, and should only occur to the extent necessary.

Unduly frequent contact designed to wear down or exhaust a debtor, or likely to have this effect, constitutes 'undue harassment' or coercion and is contrary to this code of practice. This is particularly likely if we would make a number of phone calls or other contacts in rapid succession.

### **Location of contact**

In most cases, the debtor's home will be the appropriate place to contact a debtor, with contact by letter or telephone generally being the appropriate mode of contact. However, if a debtor provides a telephone (including mobile phone) contact number as the means of contact, contact using that number will be appropriate whatever the debtor's location.

Sometimes, a debtor may not wish to be contacted at their home. If the debtor provides an alternative and reasonable location for contact and is able to be contacted at that location, the debtor should not be contacted at home.

### **Privacy obligations to the debtor**

A debtor's personal information should always be treated with respect. The improper use of a debtor's personal information may cause that person serious difficulties. There are legal obligations under the NSW Privacy Act 1988 designed to protect the privacy of a debtor's personal information.

### **When a debtor is represented**

A debtor has a right to have an authorised representative (such as a financial counsellor, financial advisor, community worker, solicitor, guardian or carer) represent them or advocate on their behalf about a debt. Except in the circumstances outlined below VWS shall not contact a debtor directly after we know, or should know, that the debtor is represented and shall not refuse to deal with an appointed or authorised representative. VWS is entitled to contact a debtor directly if:

- the representative does not respond to within a reasonable time (normally 14 days)
- the representative advises that they do not have instructions from the debtor about the debt
- the representative does not consent to act
- the debtor specifically requests direct communication with you
- the representative is not a solicitor and you advise that written authority stating that you are to communicate through the debtor's representative is required, and the debtor or their representative does not provide that authority.

### **Record keeping**

Accurate record keeping by all parties is vital to promptly resolve disputes and allow collectors and debtors to limit or avoid costly collection activity. VWS shall ensure:

- we maintain accurate, complete and up-to-date records of all communications with debtors, including the time, date and nature of calls about the debt, records of any visits in person, and records of all correspondence sent
- all payments made are accurately recorded (including details of date, amount and payment method).
- settlements are fully documented in relevant files and computer systems
- once a debt is settled, any credit reporting agency report on the debtor must be updated appropriately

### **Providing information and documents**

Requests by debtors for information and/or documentation about an account should not be ignored. In certain circumstances, failure to provide information may constitute misleading and deceptive conduct or unconscionable conduct. VWS shall provide such information as necessary to demonstrate proof of debt.

### **If liability is disputed**

If a person VWS contacts about a debt claims that they are not the alleged debtor or the debt has been paid or otherwise settled and we have not already confirmed their identity and liability, we shall suspend further collection activity (including credit report listing) until the debtor's identity and ongoing liability have been confirmed.

### **Conduct towards the debtor**

A debtor is entitled to respect and courtesy, and must not be subject to misleading, humiliating or intimidating conduct. Such conduct is likely to breach the Commonwealth consumer protection laws, and may breach other laws as well.

### **CUSTOMERS SUFFERING FINANCIAL HARDSHIP VWS/LLC commitment**

This code of practice provides for the deferment, in whole or in part, of payments owed by retail customers suffering financial hardship. In such cases of financial hardship VWS/LLC shall not enforce disconnection of services in part or in whole.

#### **Debtors**

Debtors are legally responsible for paying the debts they legitimately owe, and they should not deliberately try to avoid their obligations. Whenever possible, debtors should take action before they get into difficulties. Debtors experiencing financial hardship should promptly contact VWS/LLC to negotiate a variation in payments or other arrangement. In seeking a variation, debtors should be candid about their financial position, including their other debts. VWS also recommends that debtors in financial difficulty consider seeking the assistance of a community-based financial counsellor, solicitor or other qualified adviser who may be able to help them with a debt negotiation.

#### **Hardship**

Proof of financial hardship shall be provided by the relevant customer. Examples of hardship may include but not be limited to:

- Loss of employment,
- Low income constraints,
- Pensioner (age, disability or other) budget constraints,
- Commercial difficulties (businesses),
- other (undefined)

#### **Assistance**

Assistance may include one or more of the following:

- Deferment of payment for an agreed period of time,
- Incremental instalments to recover the debt over time,
- Regular smaller payments spread over time to assist budgeting by customers exposed to hardship.

#### **Waiver**

Notwithstanding the above commitment, VWS/LLC having taken all steps reasonably practicable in accordance with this code of practice and the customer contract to recover debt and that debt still not paid by the customer may take such further actions as allowable to it in law to recover such debt but not disconnection of services to residential and other small retail customers, nor reduce the flow of non-potable water below necessary for basic hygiene or restrict the flow of sewage into the main.

### **MAINTENANCE AND IMPROVEMENT**

#### **Collection of information**

VWS/LLC shall record the performance of its debt recovery handling process. VWS/LLC shall establish and implement procedures for recording debt and for using these records and managing them, while protecting any personal information and ensuring the confidentiality of complainants. This shall include the following:

- specifying steps for identifying, gathering, classifying, maintaining, storing and disposing of records;
- recording its handling of debt recovery and maintaining these records, taking utmost care to preserve such items as electronic files and magnetic recording media, since records in these media can be lost as a result of mishandling or obsolescence;
- keeping records of the type of training and instruction that individuals involved in the debt recovery process have received;
- specifying VWS's/LLC criteria for responding to requests for record presentation and record submissions made by a debtor or his or her agent; this may include time limits, what kind of information will be provided, to whom, or in what format;
- specifying how and when statistical non-personally identifiable debt data are disclosed to the public.

#### **Analysis and evaluation of debts**

All debt shall be classified and then analysed to identify systematic, recurring and single incident problems and trends, and to help eliminate the underlying causes of debt.

### **Monitoring of the debt recovery process**

Continual monitoring of the debt recovery process, the resources required (including personnel) and the data to be collected shall be undertaken. The performance of the debt recovery process shall be measured against predetermined criteria.

### **Auditing of the debt recovery process**

VWS shall perform or provide for audits of LLC in order to evaluate the performance of the debt recovery process. The audit shall provide information on

- process conformity to debt recovery procedures, and
- process suitability to achieve debt recovery objectives.

The debt recovery audit may be conducted as part of VWS quality management system audit. The audit results shall be taken into account in the management review to identify problems and introduce improvements in the debt recovery process. The audit shall be carried out by competent individuals independent of the activity being audited.

### **Management review of the debt recovery process**

Management of VWS shall review the debt recovery process with LLC on a regular basis in order

- to ensure its continuing suitability, adequacy, effectiveness and efficiency,
- to identify and address instances of nonconformity with health, safety, environmental, customer, regulatory and other legal requirements,
- to identify and correct product deficiencies,
- to identify and correct process deficiencies,
- to assess opportunities for improvement and the need for changes to the complaints handling process and products offered, and
- to evaluate potential changes to the complaints handling policy and objectives.

Records from management review shall be maintained and used to identify opportunities for improvement.

### **Continual improvement**

VWS/LLC shall continually improve the effectiveness and efficiency of the debt recovery process. As a result, VWS can continually improve the quality of its products. This can be achieved through corrective and preventive actions and innovative improvements. VWS/LLC shall take action to eliminate the causes of existing and potential problems leading to customer debt in order to prevent recurrence and occurrence, respectively.

### **DEBTOR DISPUTES AND COMPLAINTS HANDLING**

In the event a customer has a complaint regarding the handling of their debt by VWS/LLC, we shall direct the customer to our complaints handling system.

In the event a customer is not satisfied with the handling of their complaint by VWS, we shall direct the customer to the Energy and Water Ombudsman of NSW (EWON) should they wish to take further action.

### **REFERENCES** (used as necessary)

- Debt Recovery Policy
- Code of Practice for inclusion in Customer Contracts
- Debt Recovery Organisation and Responsibilities
- Debt Recovery Procedure
- Debt Recovery Administration Procedure
- Performance Monitoring - Key Performance Indicators (KPIs)
- Training Program
- Audit

## Appendix 9 Bingara Gorge Water Industry Infrastructure, Site Specific EHS Management Plan

**VEOLIA WATER SOLUTIONS & TECHNOLOGIES (AUSTRALIA) PTY LTD**

**Bingara Gorge Water Industry Infrastructure**

# **SITE SPECIFIC EHS MANAGEMENT PLAN**

**Revision 5 – 12 August 2019**

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## 1 Document control

### 1.1 Revision Summary

Revision	Date	Details	Prepared	Review	Approved
1	16/12/2010	Revised with DLL Review	AB/CW	JVB	CS
2	11/03/2015	Updated to meet contract conditions	KG	JL	GM
3	30/3/2018	Reviewed & updated contents	FH	SK	GM
4	30/3/2018	Reviewed, added in LL comments	CRH	PC/FH/SK	GM
5	07/08/2019	Reviewed & updated content	CRH	PC/FH/SK	GM

#### Notes:

1. Copies are considered uncontrolled
2. Copies of this Plan may be made available by Veolia Water Solutions and Technologies (Australia) Pty. Ltd. (hereinafter termed "VWS" or "Veolia") to third parties on request.
3. This plan is reviewed on a regular basis, with detailed Operational Risk Assessments reviewed usually on a six monthly basis.
4. Key legislative, codes of practice and work standards are referenced within the companies BMS systems and procedures. The BMS systems and procedure, documents are regularly reviewed for compliance and alignment to legislative changes and codes of practice.
5. VWS Internal Audits are conducted periodically as scheduled to review WHSEQ ongoing compliance.



## 2 Purpose

This Plan sets out the arrangements for managing environmental, health and safety matters to ensure:

1. The health safety and welfare at work of workers
2. That environmental and quality objectives are achieved

specific to VWS' operations and maintenance activities carried on under WICA operating licenses for Bingara Gorge Water Industry Infrastructure.

This plan is developed to align with Lend Lease Communities (Wilton) Pty. Ltd. (hereinafter termed "Lend Lease" or "LL") EHS requirements for Assets as specified in the Lend Lease Global Minimum Requirements (GMRs) specifically:

1. Fall prevention
2. Pedestrian and vehicle safety
3. Electrical safety
4. Fire, explosion and emergency management
5. Crane and Lifting Activities
6. Rotating / moving plant / parts of machines
7. Excavation
8. Housekeeping and maintenance
9. Confined Space
10. Health, PPE and welfare
11. Fire and emergency management
12. Personnel & Community Safety
13. Environment
14. Essential service failure

This plan forms Appendix 9 of VWS' Retail Supply Management Plan. It applies to VWS direct staff as well as all resources employed by VWS (Contract Workers, Subcontractors or the like) engaged in the Operations and Maintenance of the treatment infrastructure under the Network Operator License 10\_012 and Retail Supply License 10\_013R as well as all compliance obligatory under Environment Protection Licence EPL 20335.

## 3 Authority and Responsibility

### **General Manager – Services:**

- Implement policies, systems and instructions to be used in relation to the above stated licenses and Bingara Gorge Water and Sewerage Services Operation and Maintenance Agreement.
- Approver of this Plan.

### **Plant Manager:**

- Ensure this Plan is kept current and up to date
- Ensure this plan is distributed and made available to all personnel working in association with the operation and maintenance of Bingara RWTP and associated network
- Keep all persons, involved with the operation and maintenance, informed of safety issues relating to this site
- Ensure site is inspected and that work is being done by workers in accordance with PTW's, SWMS, and or SOP's and the site safety rules
- Ensure that workers, involved with the operation and maintenance, are adequately trained in their duties, via sites Training and Competency Matrix.

### **Workers:**

- Responsible for the health and safety of themselves and their own workers and anyone else who may be affected by their actions
- Ensure that work is done in accordance with SWMS and site safety rules

### **WHSEQ Manager:**

Currently Plant Manager or his authorized delegate acts as WHS point of contact at site.

- Assist with Site Plans, Risk Assessments and SWMS
- Operational support and advice
- Return to work coordination
- WHSEQ administration and team support

## **4 Consultation and Communication**

Veolia promotes the active participation of its workers in WHS decisions.

On a Company level, Worker representatives have been elected for the NSW workgroup and are supported by WHSEQ Team Representatives; but for any avoidance of doubt, so far as Bingara Water Industry Infrastructure is concerned, Plant Manager or his delegated representative on site can discuss EHS matters with LL first and then if and as found appropriate, discuss the matter with VWS WHSEQ and Compliance Systems Manager and / or NSW elected Health and Safety Committee / Safety Representatives.

Consultation takes place, as and when required, Representatives are outlined in BR17:

- With NSW elected Health and Safety Committee / Safety Representatives:
  - Michael McLeod

Worker representatives have access to attend meeting with General Manager- Service and General Counsel, to raise WHS matters.

VWS' WHS Participation and Consultation Procedure covers:

- Processes for resolving WHS disputes
- Mechanisms for consultation
- Arrangements for consultation
- Roles, functions, powers and responsibilities

The following communication methods are also implemented for the site:

- Emergency Contact / Stakeholder Lists: Are displayed on the sites notice board.
- Emergency Response Protocols: Are outlined within the PIRMP document, displayed on the sites notice board. This document includes an escalation protocol to be used should an emergency situation arise. This document is reviewed for currency by site staff as and when a change is required.
- EHS Leadership Team at a field level between VWS and LL has been established. Quarterly meetings are targeted, these are scheduled to be attended by VWS staff and LL staff and key stakeholders. Minutes and action items from these meetings are circulated by Lend Lease. Frequency of these meeting are controlled by Lend lease.
- Inspections and Audits: Inspections and Audits are conducted periodically by VWS and LL. Audit reports are communicated to staff, via the Plant Manager.
- WHSEQ Alerts: Alerts are produced to communicate information relating to serious incidents (external or internal), information from regulators or industry about safety critical issues or issues that require immediate and urgent attention e.g. product recall of safety critical equipment
- Planned Outages: Planned work impacting residents is communicated via Lend Lease, who provide resident notifications.
- Fact Sheets: Fact sheets are produced to provide topical information in a condensed form. Topics may include scorecard measures, changes to legislation, elements of the Business Management System (BMS) and guidance on mandatory requirements. Fact sheets are used as a point of reference for workers in implementing the BMS as well as meeting our performance objectives and targets. Facts sheets can be shared through different means, for example, toolbox talks, WHS Committees and management meetings. Fact sheets can be accessed via the intranet.
- Intranet: Provides staff access to all company Policy Statements, Safety systems, Safety alerts and statistics, Procedures, Guidelines and forms. (BMS system). VWS procedures outline Roles and Responsibilities, within each via a RACI table.
- Plans under WIC Act pertaining to the site: e.g. Combined Sewerage and Water Infrastructure Operating Plan (IOP), Sewerage and Recycled Water Quality Management Plan (SRWQMP), Retail Suppliers Combined Sewerage Services and Recycled Water Supply Retail Supply Management Plan (RSMP) including Emergency Preparedness and Response Plan (EPRP). These are available for Lendlease, staff and contractor reference to the extent necessary.
- Inductions: VWS Employees, Contractors and visitors are fully inducted upon entering site,

currency of this induction is tracked via the on-site Induction register, held by the Plant Manager. High Risk activities within the EHS plan are communicated via the on-site induction process. Inductions are also used outline the availability of welfare and first aid and emergency facilities.

- **Permit to Work:** Permits, Standard Operating Procedures (SOP's), Safe Work Method Statements are used to communicate, consultation with workers (both VWS staff and contractors) and to promote safe work. All permits and planned works are approved and coordinated by the Plant Manager or delegate, via application of these procedures and forms.
- **Notice-boards:** Displaying important corporate, health safety and environment information to workers and visitors at a place of work. There are mandatory requirements for the display of information at all workplaces.
- **Site Non- Negotiables:** A list of key site rules have been developed in consultation with VWS site staff and Lend Lease. These key rules are displayed on the site notice board and are reviewed when required.
- **Traffic Management Plan:** Identifies the site, how heavy vehicle access is controlled, evacuation meeting point, key infrastructure within the plant, speed limits.
- **Risk Assessments:** There are four main detailed risk assessments for Operations, these risk assessments are reviewed on a six monthly basis, or as the need arises and both are available and circulated to site staff for reference. RA's are reviewed in consultation with LL to ensure alignment with LL GMR's. Risk Assessments communicate a number of identified operational risks associated with conducting the WIC Act regulated Services within the Infrastructure envelope, these are maintained by the Plant Manager.. For reference,
  - Environmental Risk Assessment
  - Commercial Operations (Safety)
  - Security Risk Assessment
  - Work, Health and Safety Risk Assessment.

## 5 Hazard Identification, Risk Assessment and Control

A high level / High risk activity assessment has been undertaken for this site identifying the following site specific hazards and controls. The four main detailed Risk assessment mentioned above have been derived from the below. High Risk activities are included in the below table and included within the detailed risk assessments. High Risk activities pertaining to the site are also referenced within the site induction.

Site specific safety inspections are carried out periodically, these are scheduled within the CMMS system, the work order process is used to manage and control these tasks. Outcomes of these inspections are reviewed and actioned when required upon closure of individual work orders.

All High Risk activities are individually managed and assessed and planned, prior to

commencement, via VWS Hazard Management procedure, guidelines, permits and forms.

HAZARD	SCOPE	CONTROLS
<b>Work Health and Safety Section</b>		
Stored energy	<ul style="list-style-type: none"> <li>Plant movement, including mechanical drives</li> <li>Power supplies</li> <li>Energy released through direct contact or by combining chemical substances</li> <li>Hydraulic - Fluids</li> <li>Gravity (e.g. elevated materials).</li> <li>Liquid – Sewage</li> <li>Pressure Vessels</li> <li>Diesel Fuel</li> </ul>	<ul style="list-style-type: none"> <li>Follow VWS LOTO processes</li> <li>LOTO Plan to be developed when more than one LOTO device is used</li> </ul>
Security and Access and egress	<ul style="list-style-type: none"> <li>Slips, trips and falls</li> <li>Building fire, vandalism</li> </ul>	<ul style="list-style-type: none"> <li>Emergency Preparedness and Response Plan developed for the site</li> <li>Erecting barriers (including taping off areas), fitting appropriate safety / hazard signs around work areas</li> <li>Housekeeping maintained</li> <li>No working from a ladder</li> <li>Fixed handrails on work platforms</li> </ul>
Manual tasks	<ul style="list-style-type: none"> <li>Lifting, lowering, carrying, or restraining plant and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Risk assessment completed for tasks deemed hazardous, manual handling tasks in accordance with VWS Manual Tasks processes</li> <li>Use of mechanical lifting devices when possible</li> </ul>
Loss of power	<ul style="list-style-type: none"> <li>Utilities and external suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Key contact lists developed including details of utilities providers and this list displayed on site.</li> <li>Emergency diesel generator</li> <li>Scada UPS backup</li> </ul>
Chemical exposure, chemical burns, fire	<ul style="list-style-type: none"> <li>Hazardous chemicals</li> </ul>	<ul style="list-style-type: none"> <li>SDS available and accessible</li> <li>Register &amp; manifest available and maintained</li> <li>Storage and segregation of chemicals</li> <li>Labelling of all containers</li> <li>Spill kits available</li> <li>Ventilation</li> <li>Eye Wash Stations installed on site</li> <li>First Aid Trained staff / First Aid Kits</li> </ul>
Working at heights	<ul style="list-style-type: none"> <li>Fall whilst accessing assets</li> </ul>	<ul style="list-style-type: none"> <li>Ladder is only used as access point, not work</li> <li>Platform ladder to be used as work platform when required</li> <li>Working at Heights trained staff.</li> <li>Use of SWMS &amp; permit if there is potential fall of 2m or more.</li> </ul>

Confined Space	<ul style="list-style-type: none"> <li>Working within a confined space</li> </ul>	<ul style="list-style-type: none"> <li>Confined Space trained staff</li> <li>Designation of confined space with confined space register.</li> <li>Use of SWMS &amp; CS permit, prior to entry.</li> <li>All confined space entry is planned and approved by a holder of CS certificate.</li> </ul>
Biological hazards	<ul style="list-style-type: none"> <li>Working in or visiting active sewage treatment facilities</li> <li>Sewer inspection and maintenance work</li> <li>Repairing or replacing live sewers</li> <li>Operating equipment used to collect and transport sewage sludge</li> </ul>	<ul style="list-style-type: none"> <li>Induction and in formation for working with sewage</li> <li>Provision of clean water, soap, disposable paper towels</li> <li>Do not eat, drink or smoke in sewage handling areas</li> <li>Clean and disinfect the area after the task</li> <li>Use dedicated tools / equipment</li> <li>Clean hands before opening vehicle doors and handling steering wheels and controls</li> <li>Segregate contaminated equipment</li> <li>Disinfect or sterilize reusable work equipment</li> <li>Change out of contaminated clothing and wash hands well with soap and clean water (preferably hot) before eating or smoking. Also wash hands after removing gloves to prevent cross- contamination</li> <li>Shower and change out of your work clothes (including footwear) before leaving. Do not keep soiled work clothes with your other clothes. Launder work clothes separately or discard</li> <li>Use personal protective equipment: <ul style="list-style-type: none"> <li>Eye protection. Goggles are recommended if using a hose and / or any chemicals</li> <li>Rubber boots</li> <li>Rubber gloves</li> <li>Impervious coveralls</li> </ul> </li> <li>Ensure vaccinations are up to date for workers coming in contact with sewerage for tetanus and Hepatitis A and Hepatitis B. Contact a doctor immediately if illness occurs.</li> </ul>

HAZARD	SCOPE	CONTROLS
Legal and Regulatory Section		
<ul style="list-style-type: none"> <li>WICA license breach</li> <li>Loss of certification</li> <li>Contract breach</li> </ul>	<ul style="list-style-type: none"> <li>Non-conformances</li> </ul>	<ul style="list-style-type: none"> <li>IPART Documentation.</li> <li>Licenses, License Conditions</li> <li>Compliance Policy, Compliance Procedure and register outlining requirements and responsibilities forms part of the VWS Business Management System (BMS)</li> <li>Audit program and procedure forms part of BMS</li> </ul>

		<ul style="list-style-type: none"> <li>Monthly Performance reporting (on a business wide basis) to identify and address negative trends</li> <li>Contract management, service management and compliance resources, if and as required</li> </ul>
Community Complaints	<ul style="list-style-type: none"> <li>Impact from operations</li> <li>Impact from design and implementation of infrastructure (by others)</li> </ul>	<ul style="list-style-type: none"> <li>Customer complaints are received via Lend Lease call center and relayed through to Operational staff.</li> <li>Customer complaints are treated as improvement opportunities and are registered and investigated through Lend Lease's incidents and audits database, 'Enablon'. Plant Manager is responsible for ensuring that appropriate actions are implemented and the effectiveness verified to prevent recurrence.</li> <li>Incidents arising from Customer complaints are captured with VWS incident reporting procedures.</li> <li>Customers have access to a complaint escalation mechanism if not satisfied.</li> <li>Additionally Customer Requirements procedures form part of our integrated management system to ensure clear understanding of expectations and that all our tenders and contracts are reviewed and documented to enable the required level of service to be provided in respect of WHSEQ</li> </ul>

HAZARD	SCOPE	CONTROLS
<b>Environment Section</b>		
<ul style="list-style-type: none"> <li>Air pollution</li> <li>Noise</li> <li>Odour</li> </ul>	<ul style="list-style-type: none"> <li>Engine / pumps</li> <li>Plant and equipment</li> <li>Chemical handling</li> </ul>	<ul style="list-style-type: none"> <li>Design of plant</li> <li>Plant noise assessments</li> <li>Well-ventilated area</li> <li>Scheduled and regular collection of waste</li> <li>Facility positioned away from residential property</li> <li>Plant maintenance programs</li> <li>Plant and equipment inspected before use</li> <li>Daytime operation</li> <li>Sealed chemical containers</li> </ul>
Energy Impacts	<ul style="list-style-type: none"> <li>Servicing plant</li> <li>Cleaning assets</li> </ul>	<ul style="list-style-type: none"> <li>Proactive maintenance programs to ensure operational efficiency</li> <li>Site specific risk assessments</li> <li>Procurement specification include energy efficiency requirements where applicable</li> <li>Energy reduction initiatives including: <ul style="list-style-type: none"> <li>Switching off lights and appliances when not in use</li> <li>Repair leaks as soon as they are discovered</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>○ Unplug unused electrical devices</li> <li>• Use energy efficient cycle settings on equipment (in co-ordination with LL)</li> </ul>
Impacts to flora and fauna	<ul style="list-style-type: none"> <li>• Wildlife scavenging waste</li> <li>• Wildlife injury / mortality from vehicle movements</li> <li>• Exposure to snakes and spiders</li> </ul>	<ul style="list-style-type: none"> <li>• Waste systems</li> <li>• Containment systems</li> <li>• Obey speed limits</li> <li>• Minimize driving during dawn and dusk</li> <li>• Toolbox talks</li> <li>• Environmental alerts</li> </ul>
Hazardous materials and waste	<ul style="list-style-type: none"> <li>• Cleaning</li> <li>• Chemical handling and storage</li> <li>• Sewage</li> </ul>	<ul style="list-style-type: none"> <li>• Bunding</li> <li>• Awareness training</li> <li>• Procedures</li> <li>• All other recyclable or non-recyclable wastes are to be stored in appropriate covered receptacles (e.g. bins or skips) in appropriate locations</li> <li>• Contractors commissioned to regularly remove/empty the bins to approved disposal or recycling facilities</li> <li>• Maintenance of system</li> <li>• Spill kits</li> <li>• Notification / escalation protocols</li> <li>• Restricted access</li> <li>• Isolation</li> <li>• Maintain licence</li> </ul>

## 6 Safe Work Method Statements

SWMS are developed and maintained in accordance with VWS BMS requirements (refer BR18-GU01 Manage SWMS Guideline) and WHS legislative requirements. Contractor SWMS are reviewed during issue of PTW's and appended as and when required.



## 7 Site Specific Rules

'Also refer to Site Non-Negotiables displayed at site'.

REQUIREMENT	SCOPE
<b>Site security and operation</b>	<ul style="list-style-type: none"> <li>The facility is occupied, Monday to Friday, between hours of 7.30am to 5.30pm. Staff work 7.5hrs per day during this window.</li> <li>The facility is secured by LL, when work is not being performed on-site.</li> <li>Community Security services are controlled by LL.</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>All incidents and injuries shall be reported</li> <li>Non-conformances may be received as a result of an audit, incident, or safety inspection or issued by LL and must be reported as per VWS and LL process (Reporting to Regulatory Bodies only as per WIC Act and EPL obligations).</li> </ul>
<b>Permit to Work</b>	<ul style="list-style-type: none"> <li>Permits are issued in accordance with VWS permit to work procedures</li> <li>All site EH&amp;S related matters will be managed by the Plant Manager or his delegate as appropriate</li> </ul>
<b>Total Fire Bans</b>	<ul style="list-style-type: none"> <li>Hot Works are not to be undertaken during Total Fire Ban Periods</li> </ul>
<b>Vaccinations</b>	<ul style="list-style-type: none"> <li>Workers in contact with sewerage require the following vaccinations because of workplace exposure to biological hazards: <ul style="list-style-type: none"> <li>Tetanus</li> <li>Hepatitis A</li> <li>Hepatitis B</li> </ul> </li> <li>Workers must produce evidence of vaccinations or of immunity as required</li> </ul>
<b>LOTO</b>	<ul style="list-style-type: none"> <li>All Isolations are to be undertaken using either a lock or a tag or both as required.</li> <li>Veolia only uses Danger Tags as part of the tag system.</li> <li>A LOTO Plan has been developed when the isolation of plant / equipment requires more than one LOTO device</li> <li>For a simple Isolation sequence, hazards, controls and verification of the isolation shall be detailed in the SWMS.</li> <li>Do not share or loan locks</li> <li>Danger tags must be: <ul style="list-style-type: none"> <li>Used as a warning to personnel that operating the plant / equipment will endanger life</li> <li>Used in conjunction with a locking device</li> <li>Secured at a location that allows others to see the tag clearly, e.g. on main console, at main isolating point</li> </ul> </li> <li>Placed at all points of isolation in conjunction with lockout devices</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>Only inducted workers have access to the site</li> <li>Adjacent works will be barricaded to prevent unauthorized access</li> <li>Comply with car park signs/rules</li> </ul>
<b>PPE</b>	<p>Minimum PPE on site is as follows:</p> <ul style="list-style-type: none"> <li>High Visibility, in production areas</li> <li>Safety footwear</li> <li>Long pants, Long sleeves, in production areas.</li> <li>Other PPE is to be worn as per SWMS and Safety Data Sheet (SDS) during specific work activities.</li> </ul>

<b>Training</b>	<ul style="list-style-type: none"> <li>• Training needs shall be identified via Sites Training and Competency Matrix.</li> <li>• Legislative training records are kept via VWS HR department.</li> <li>• Training records conducted via Toolbox talks are kept on site.</li> <li>• Subcontractors are responsible for ensuring workers are competent for the work being undertaken and are licenced to perform the work.</li> </ul>
<b>Plant and Equipment</b>	<ul style="list-style-type: none"> <li>• No person may operate equipment without receiving training from a suitably qualified person or being assessed as competent</li> <li>• Prestart inspections shall be carried out on the plant each day it is used</li> <li>• No work is to be performed from a ladder – ladders are to be used for access purposes only</li> <li>• All electrical equipment shall be tested and tagged</li> <li>• Electrical equipment including leads are to be maintained in locations where they are not likely to be damaged or create a trip hazard</li> <li>• All electrical equipment is to protected by a portable RCD</li> <li>• Portable RCDs are to be tested immediately before use every day</li> <li>• No work on energized parts is permitted on VWS sites</li> <li>• All Scaffolds and working platforms are to be fitted with a “Scaftag”, noting the date of erection, next inspection date and weight limits</li> <li>• A spotter will guide vehicles or equipment reversing onto or off the site</li> </ul>
<b>Fit for Work</b>	<ul style="list-style-type: none"> <li>• No alcohol or illegal drugs are permitted on site. Any person affected by these will be required to leave site and will not be permitted back until an investigation is satisfactorily completed</li> </ul>
<b>Smoking</b>	<ul style="list-style-type: none"> <li>• Smoking is to be conducted not less than 10m away from work areas and entry to buildings or facilities</li> </ul>
<b>Visitors</b>	<ul style="list-style-type: none"> <li>• All visitors will be accompanied by a person working at the site who has been fully inducted as per the requirements of persons working at the site. In addition, visitors will undergo: <ul style="list-style-type: none"> <li>○ Familiarization with the site emergency response</li> <li>○ Familiarization with site features and hazard awareness.</li> </ul> </li> </ul>
<b>Sign-In register</b>	<ul style="list-style-type: none"> <li>• All contractors and visitors are to sign in and out on the site register</li> </ul>
<b>Housekeeping</b>	<ul style="list-style-type: none"> <li>• All workers are responsible for maintaining a clean and tidy site</li> <li>• Use rubbish and recycle bins provided</li> </ul>

## 8 Environmental

VWS BMS includes environmental procedures that explain how VWS expects its workers to act in relation to the assessment of environmental impacts in the course of their duties as well as outlines the minimum environmental controls for our work sites.

Environmental Guidelines are also available to provide more detailed information on managing environmental aspects and impacts in six major environmental categories.

The approach for managing works is to avoid or minimize environmental harm and is summarized below:

- Water / Land - prevent pollutants such as oil, fuel, chemicals or sediment from escaping into the environment
- Oil / Liquid - store oil and other liquids in appropriately contained and maintained areas. Keep spill kits accessible, labelled and ready for use
- Noise / Air - Operate and maintain plant and equipment to minimize noise and air pollution. Schedule works and notify affected stakeholders
- Heritage - Consider aboriginal and non-aboriginal heritage
- Flora - Minimize impacts on vegetation, take precautions within tree protection zones and follow trenching and pruning procedure if required
- Fauna - Protect animals and their habitats
- Bush fire - Reduce bush fire risk and work in accordance with Total Fire Ban requirements
- Resource Use - Minimize the use of materials, energy and water by avoiding reducing, recovering and reusing (reprocessing recycling and energy recovery)
- Waste - Classify then store, handle, transport and dispose of waste in accordance with its classification and any license or tracking conditions. Waste streams are outlined within the plants Operation and Maintenance Manual (O&M). Biosolids generated at the end of the process are recycled within landscaping supplies. Screenings are disposed of at designated disposal locations.

## 9 Reporting Hazards and Incidents

All incidents must be reported then recorded on the online reporting system for VWS as per BR09 Incident Management Procedure.

Incidents and actions are also reported within the Lend Lease 'Enablon' online portal, by the Plant Manager.

The VWS procedure:

- Describes the process for managing incidents in terms of:
  - Immediate response (in conjunction with Emergency Response Procedures refer BR01 Emergency Preparedness and Response Procedure)

- Internal and external notifications
- Welfare
- Reporting / recording and the requirement to commence an investigation
- Provides:
  - Internal and external systems to communicate that an incident has occurred
  - The immediate actions taken (or required to be taken) to eliminate or reduce the potential for a re-occurrence of the incident
  - Communication / escalation protocols regarding a significant issue that is relevant to our organization

For the avoidance of any doubt, incidents to be reported to regulatory bodies such as IPART and EPA follow separate process as per WIC Act and [Protection of the Environment Operations Act 1997 \(POEO Act\)](#).

## 9.1 Return to Work

Arrangements for Return to Work are documented in Veolia Water Technologies Return to Work Program (BR09-GU01) and displayed on site.

## 10 Emergency management

The procedure for responding to emergencies is detailed in the Emergency Preparedness and Response Plan (EPRP), specific to WIC Act mandated IOP and RSMP Plans of which this Plan is an Appendix and as applicable in relation to the O & M Agreement between VWS and LL.

Emergency contact details are displayed on site.

## Appendix 10 Network Operators, Retail Suppliers Site Specific Emergency Preparedness and Response Plan

**BINGARA GORGE DEVELOPMENT  
SEWERAGE AND RECYCLED WATER INDUSTRY INFRASTRUCTURE**

**NETWORK OPERATOR'S, RETAIL SUPPLIER'S  
SITE SPECIFIC EMERGENCY PREPAREDNESS AND RESPONSE PLAN**

**Pursuant to  
(NSW) Water Industry Competition (General) Regulation  
and  
(NSW) Work Health and Safety Act and Work Health and  
Safety Regulations**

Prepared by and for  
Veolia Water Solutions & Technologies (Australia) Pty Ltd  
( V W S )  
ABN 35 055 254 003  
Level 3  
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**09 August, 2019  
Revision 5**

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## DOCUMENT REVISION SUMMARY & DISTRIBUTION

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Emergency Preparedness & Response Plan

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Plant Manager

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General Manager – Services

### Revision Summary

Revision	Date	Issued for	Remarks	Prepared	Review	Approved
A WIP-D	08Aug11		General Update	R Harkness	Inshan Sheriff	
0	15May12		General Update	D Supierz	Peter Gendle	
1	15May13		General Update	D.Supierz	D.Supierz	
2	15 March 2015		General Update	S Kar	Jed Lindley	Grant McNay
3	08 May 2017		General Update	C. Hancock	Inshan Sheriff	Grant McNay
4	27 April 2018		General Update	F. Hidayat/ P Coulton	S Kar / Craig Hancock	Grant McNay
5	06 August 2019	Currency	General Update	P Coulton	Craig Hancock / S Kar/ Filbert Hidayat	Grant McNay

Note the only controlled copy is that electronic version located on VWS server.



## Purpose

Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWS) is the licensee for the following Water Industry Competition Act (WICA) Licences (the Licences):

- Network Operator's Licence No 10\_012 (July 2017), and
- Retail Supplier's Licence No 10\_013R (July 2017)

VWS has been contracted Lend Lease Communities (Wilton) Pty Ltd (LLCW) to operate and maintain (O&M contract) the water industry infrastructure described in the above Licences.

Pursuant to the requirements of the Licences, the O&M contract and to meet VWS's own certified Integrated Management System (IMS), VWS has prepared this Emergency Preparedness and Response Plan (EPRP).

This EPRP documents the following for reference and implementation by VWS:

- Scope
- Definitions
- Incident management
- Types of emergencies
- Emergency contacts
- Evacuation and assembly areas
- Responsibilities
- Training and practice drills
- Media policy
- Records
- Audit
- Appendices
  - 12-steps of incident management
  - Notifiable incidents
  - Incident reporting card
  - Individual ERPs

## Scope

This EPRP covers the water industry infrastructure described in the Licences; such infrastructure is as follows:

- A treatment plant for non-potable water and other water infrastructure used, or to be used, in connection with the treatment plant, where components of the treatment plant or other water infrastructure may also be used for one or more of production, treatment, filtration, storage and conveyance of non-potable water
- A reticulation network for non-potable water and other water infrastructure used, or to be used, in connection with the reticulation network, where components of the reticulation network or other water infrastructure may also be used for one or more of storage, conveyance and treatment of non-potable water.

## Relationship to other plans

This EPRP forms an integral part (Appendix 10) of the Retail Supply Management Plan (RSMP) (BG-RSMP-001-5) which addresses all events and circumstances that could adversely affect the operation of the Recycled Water Treatment plant (RWTP).

VWS also complies with a business wide Incident Management, Emergency Preparedness Response Procedure with associated guidelines on Return to Work and Incident Investigation.

This EPRP is referred to in the EHS Management Plan prepared by VWS in compliance with NSW WHS legislation (WHS Act 2011 No. 10) The EHS Plan addresses how VWS operates and maintains the RWTP in a safe manner.

## Definitions

### Incident

An incident, as per VWS management process, is defined as an unplanned and unexpected event with undesirable or unfortunate consequences or an unintentional act, results in injury or property damage or near miss.

### Emergency

An emergency is defined as an abnormal, dangerous or potentially dangerous situation, which requires urgent action to control, correct and return to a safe condition and which affects Veolia's assets, its workers, the public and the environment.

Emergencies may be classified as follows depending on the severity of the incident or the severity of the consequence of the incident:

- Minor - Incident can be controlled quickly by normal staff without involvement of external emergency services and there is no impact on third parties.
- Major - Incident when special resources or external emergency services are required or third parties including community or other stakeholders are impacted. These are addressed in this Plan by way of individual ERPs.
- Crisis - Major incident wherein serious injury or fatality, threat to personnel or to the reputation of the company. These are addressed as major emergencies above as well as the requirement to notify through to Higher Level Management beyond Australia and New Zealand, such as Veolia Global Safety Management

### Notifiable incidents

Certain incidents are notifiable under legislations; the following summarizes; refer to Appendix 2 for details.

- WHS  
Pursuant to section 35 and related section of the WHS Act 2011, certain incidents are notifiable to SafeWork NSW; further details are provided in Appendix 2.
- WICA  
Pursuant to the Network Operators' Reporting Manual and Retail Suppliers' Reporting Manual (Current version, March 2019) by IPART any incident that threatens or could threaten water quality, public health or safety must be notified to The Minister for Health, Minister for Energy and Utilities, IPART and affected parties;
- Office of Environment and Heritage  
  
Pursuant to Office of Environment and Heritage policies, if the incident presents an immediate threat to human health or property, such as toxic fumes or a large chemical spill, call 000 to report it immediately to emergency services. As first responders, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are responsible for controlling and containing incidents. Non-emergency incidents should be reported to the organization responsible for regulating pollution from that activity.
- Relevant Authority as defined under Section 148(8) of the POEO Act  
(With reference to NSW EPA Duty to notify pollution incidents)

Anyone engaged in the activity resulting in the pollution incident has a duty to report the incident. Whoever occupies land where a pollution incident occurs must also report it. Failure to do so is an offence and carries a fine.

Further details of same have been provided in Appendix 2.

### Emergency Management

The twelve specific steps for the response, notification, management including recovery, reporting and investigation of all incident types are contained in Appendix 1. The RSMP, PIRMP the Operations & Maintenance Manuals, VWS's IMS and LL Incident Escalation Flow Chart address all other incidents and minor emergencies and their management. The stepwise approach and methodology for emergency management can be distilled from the above approach:

- Identify and categorize emergencies
- Emergency preparedness
- Emergency response (following proven 12 steps)
- Control and Recovery

### Emergency identification

The most critical potential incidents have been determined through a number of risk assessments which have been summarized below. Consideration was provided to Operation and Maintenance activities, Fixed Plant and Infrastructure and the development of ongoing community based infrastructure and stakeholders.

<b>Type of emergency</b>	<b>Event / scenarios</b>	<b>Consequences</b>
Human	Injury, illness Bomb threat	Medical treatment required Evacuation of building
Natural	Localised flooding Fire, Major Access Disruption, Extreme Weather, Earthquake, Fire, Subsidence and the like	Plant Damage, Plant failure, local evacuation
Technological	Fire Power disruption Chemical spill Loss of containment UV / chlorination failure Illegal discharge of contaminants Loss of PLC/SCADA system; Significant Damage to Lilac Infrastructure Sewage Pumping Station Failure	Biological hazard, chemical hazard, fumes, odour Water specifications not met Pollution, contamination
Integrity Breach	Lagoon Integrity Breach	Biological hazard, contamination
Security Risks	High Security Risk, Threat to Human Life	Plant Failure, Fatalities, Epidemic risk

Emergency prevention

The key prevention measures are:

Lend Lease	VWS
<p>Maintain Emergency Response Master Plan for Bingara George and associated contact lists</p>	<p>Workplace fire protection and fire-fighting equipment installed. Control room Fire Alarm System.</p> <p>Control and management of work sites, across the licensed infrastructure, within VWST scope</p> <p>Fire protection and fire-fighting equipment suitable for the types of risks at the workplace (e.g. foam or dry powder type extinguishers for fires that involve flammable liquids)</p> <p>Equipment regularly tested by a competent person Equipment kept clear of obstructions</p> <p>Workers educated on fire danger periods and total fire ban days</p> <p>Good house keeping</p> <p>Trained and Competent On-site Personnel</p> <p>Regular workplace inspections</p> <p>Workers inspect and can report any articles that are unusual, suspicious or unaccounted for</p> <p>Plant Inspection checklist available for recording adverse safety aspects.</p> <p>Current safety data sheets available for all hazardous chemicals on site</p> <p>Hazardous chemicals labelled and stored in a safe manner</p> <p>Equipment available to initially respond to a hazardous chemical incident, such as absorbent material to contain a liquid spill</p> <p>Workers educated on health and hygiene practices Established Health monitoring and biological hazard processes</p> <p>PPE and first aid facilities, trained First Aiders.</p> <p>Consultation with public health organization as required</p> <p>First Aid kit/s installed, AED installed</p> <p>Established Incident Management and Investigation Processes</p> <p>PPE available for Operators and Visitors</p>

	<p>Site access controlled – site secured out of hours.</p> <p>Tested and tagged electrical equipment</p> <p>When employees are working alone or in isolation, employees follow “Lone Worker” procedures and SOPs established for site activities.</p> <p>Communication equipment such as mobile phones are utilized</p>
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### Emergency Preparedness

So far as the Operation and Maintenance of a live treatment infrastructure is concerned, preparedness is a continuous cycle of identification, mitigation, planning, training, resourcing and practice drills, followed by evaluation and improvement in order to prevent or mitigate the potential for, respond to, recover from, and mitigate the effects of those adverse events and circumstances that could potentially arise and be identified as emergencies.

All service personnel engaged in this project are trained in the handling of the emergencies identified in this Plan. Training has also been provided for High Risk activities identified on site.

### Emergency Response

#### NOTIFICATION

Upon discovering an emergency situation:

1. The person discovering the emergency must immediately contact the NSW Servicer Manager and/or Plant Manager.
2. The following information (non-exhaustive) must be obtained:
  - ☐ Type of emergency
  - ☐ Location
  - ☐ Actions being taken at the scene
  - ☐ Any persons injured
  - ☐ Whether emergency services have been notified or are required
3. The Plant Manager or delegate (most senior site person), will then contact VWS Senior Management.
4. The Plant Manager or delegate (most senior site person), will then contact the Asset Owner, following the Incident Escalation Flow Chart, provided by Lend Lease communities. This is to be displayed within the control room.

#### EVACUATION PROCEDURE

On being instructed to evacuate, all relevant personnel (VWS field staff, LLU staff, any subcontractors, workers or visitors present as well as any affected community members, if any) shall:

- Remain calm
- Collect personal belongings
- Follow instructions of wardens
- Leave via the nearest safe exit and proceed to the designated Assembly Area
- Remain at the Assembly Area and report any missing persons to the Chief Warden

Once the facility has been evacuated, re-entering is not permitted until directed by the senior person on site or

The twelve specific steps in incident response, notification, management, recovery, reporting and investigation are contained in Appendix 1.

The Emergency Response component of the 12 steps are generally as follows, **escalating with the severity of the emergency** noting that there are specific sub actions to follow specific to the particular emergency (refer to the individual emergency sub plans).

- Follow the incident management 12 steps as applicable to the incident
- Contact the applicable emergency services listed in the contacts table
- Follow the standard operating procedure contained in the appendices.
- *Follow the Veolia Crisis Notification protocols*
- Follow Lend Lease Notification protocols

## Recovery

The aim of the recovery phase is to restore the affected part of the RWTP to its safe operational state.

Reinstatement of plant operation is only permitted after the emergency response protocol has been completed or it is determined by Emergency Services and / NSW Service Manager, the plant is safe to operate.

The plant is safe to operate following, the root cause of the emergency has been initially identified and any necessary corrective actions completed to ensure safe recommencement of operations.

## Emergency Contacts

CONTACT	NAME	PHONE NUMBER
Emergency Services, External		
Combined Emergency Services	fire, Ambulance, Police	000
Poison Information Center	Poison Information Center	131 126
NSW Ambulance	Illawarra Ambulance Service	4227 0222 131 233
NSW Fire Brigades (Wilton Rural Fire Service)	Wilton Rural Fire Service	4630 9450
NSW Fire Brigades (Picton) Service)	Fire Brigade at Picton	4677 7000
State Emergency Services	SES	13 25 00
NSW Police (Picton)	NSW Police (Local)	4677 8999
NSW Police (Narellan)	NSW Police (Local)	4632 4499
Health Services		
Wilton Medical Centre	Wilton Medical Centre	4630 9900
Picton Family Medical Centre	Picton Family Medical Centre	4677 0533
Campbelltown Hospital	Campbelltown Hospital	4634 3000
Site / Infrastructure Security		
Clublinks - Security	Clublinks	0409 145 000 1300 880 809
Emergency Control Organisation (ECO)		

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CONTACT	NAME	PHONE NUMBER
Central Call Centre	Call Centre	1300 552 120
Chief Warden	Patrick Coulton	0477 325 366
Deputy Chief Warden	Bowden Grace	0409 601 875
First Aid Officers	Patrick Coulton	0477 325 366
	Craig Hancock	0418 538 708
	Bowden Grace	0409 601 875
	David Field	0467 716 307
<b>Utilities</b>		
Power failure	Endeavour Energy	131 003
Potable Water Interruption	Sydney Water	13 20 90

**Immediate Contact Points for all Incidents that are reportable as per IPART**

NSW Health PHU (Public Health Unit)	South Western Sydney Public Health Unit (John Birkett), Ask for ... "On call Environmental Health Officer"	02 8778 0855 (Bus Hrs) 02 8738 3000 (After Hrs) Email: <a href="mailto:waterqual@doh.health.nsw.gov.au">waterqual@doh.health.nsw.gov.au</a>
Ministry of Energy and Utilities	Division of Energy, Water and Portfolio Strategy in the Department of Planning and Environment	(02) 8275 1914 Contact Person: Colette.grigg@planning.nsw.gov.au
Director, Water Licensing and Compliance	IPART	02 9113 7722 Contact: compliance@ipart.nsw.gov.au

**Regulatory / Compliance Bodies**

Wollondilly Shire Council	Local Council	4677 1100
Safe Work NSW	Safe Work NSW	131 050
IPART	IPART	9113 7722
EWON	Energy and Water Ombudsman	1800 246 545
Minister for Health	NSW Minister Office (Health)	9391 9000
Office of Environment & Heritage	Head Office	9995 5000
	Picton Office	4640 0500
Department of Planning, Industry and Environment / Department of Primary Industry	NSW Office of Water	1300 662 077

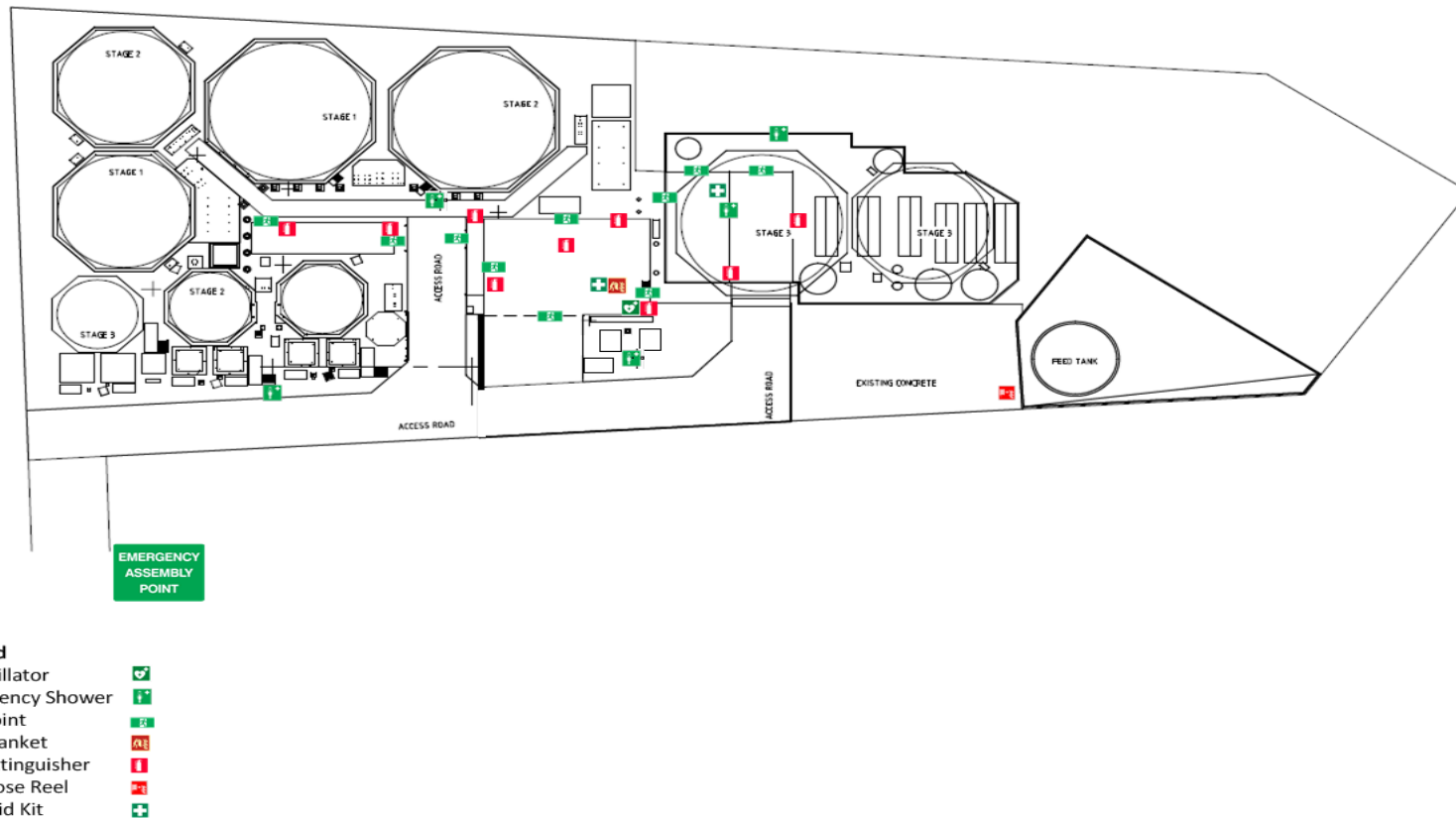
**Bingara Gorge Network Operator's and Retail Supplier's Emergency Preparedness and Response Plan**

Environment Protection Authority	NSW EPA	131 555
<b>VWST Contacts</b>		
VWST WHSEQ Representative	Filbert Hidayat	0418 404 961
VWST Senior Contracts Manager	Subrat Kar	0459 818 644
VWST General Manager-Services	Grant McNay	0429 845 875
VWST NSW Service Manager	Inshan Sheriff	0438 880 219
VWST APAC – Mobile Water Services Manager	Craig Hancock	0418 538 708
VWST Plant Manager	Patrick Coulton	0477 325 366
VWST General Counsel	Martin Reid	0428 816 972
VWST IT Manager (LAN Administrator)	Steve Polchleb	0438 716 986
VWST Scada Support / PLC Support	Tom Lappalainen	0467 766 911
<b>Stakeholders</b>		
GM – Asset Management Australia (Lend lease)	Duncan St Clair	0427 869 321
LLLU Assistant Asset Manager	Alex Day	0448 271 291
LLLU EHS, Risk and Compliance operations Coordinator	Louise Reeves	0400 389 136
LLCW Development Manager	Rich Boers	0400 298 839
LLCW Development Manager	Kaitlin Rideout	0437 422 375
LL Properties, NSW EHS Manager	Lincoln Mountseer	0412 302 103

This list of contacts shall be posted at the RWTP in clear view of and be otherwise promptly available to the VWS Plant Manager and Operators.



Figure 1: Treatment Plant emergency assembly area in the event of evacuation



This layout shall be posted at the RWP in clear view of the operator.

## Responsibilities

The responsibilities of the following personnel relate to emergency preparedness and response only. These responsibilities are in addition to these personnel's normal duties.

### General Manager–Services

- Ensure this Plan is kept current and up to date with respect to the information and instructions provided herein
- Ensure this plan is distributed and made available to all personnel working in association with the Bingara RWTP and associated network including VWS staff and LLCW staff.
- All subcontractors and that visitors to the plant are made aware of this plan's existence and application in the event of an emergency, via on-site Inductions
- Ensure that all necessary PPE (Personal Protective Equipment), RPE (Respiratory Protective Equipment), spill kits are available at the RWP site to assist in managing each of the potential emergencies.
- Ensure that personnel are adequately trained in their duties including the EPRP.
- Ensure personnel participate in practice drills to ensure their preparedness.
- Ensure that important stakeholders in the contacts list are made aware of this plan and are made aware of VWS operations. In doing so each such stakeholder shall be made aware of the applicable hazards and risks which they may be confronted with in an emergency. This is a most important part of preparedness.
- Arrange for internal audits of the function of this EPRP; at regular intervals; especially if there is major changes in the infrastructure being operated and maintained.

### Plant Manager

- Makes this plan, available to all personnel working in association with the Bingara RWTP and associated network. Subcontractors and visitors to the plant are made aware of this plan's existence and application in the event of an emergency, via the site Induction.
- Arrange for the supply of correct PPE, RPE and spill kits are available at the RWP site.
- Provide information to personnel on their duties including the EPRP
- Carry out practice drills to ensure preparedness from time to time.
- Meet important stakeholders in the contacts list and make them aware of this plan and of VWS operations. In doing so important stakeholders shall be made aware of the applicable hazards and risks which they may be confronted with in an emergency.
- Review site Risk assessments in collaboration with Lend Lease, with reference to the EPRP and its intent.
- Follow through corrective actions arising from internal audits of the function of this EPRP.

### Plant Operators

- Post this plan at site for easy access. Access this plan via the sites Google Drive or central document repository. Make it available to all personnel working in association with the Bingara RWTP and associated network including VWS staff, LLCW staff, all subcontractors and visitors.
- Wear and apply correct PPE, RPE and spill kits are available at the RWTP site.
- Participate in practice drills
- As necessary, identify yourself to stakeholders in the contacts list.

### **Training and practice drills**

All service personnel appointed to this project shall be trained in the handling of the emergencies identified in this Plan including participating in practice drills from time to time, if and as necessary.

### **Media policy**

In the event of media interest, the following rules apply.

- Site to be closed to all persons other than VWS and LLCW Management, Emergency Services, Police and Government officials.
- Media to be barred from site.
- No comments whatsoever are to be made to the media by any employee except by VWS' General Manager-Service or General Counsel.

### **Records**

Legible records shall be maintained of the following:

- Emergency description, date and time
- Emergency response taken
- Recovery Plan or actions taken
- Investigation / Incident report including root cause analysis and recommended corrective actions
- Corrective action close out
- Photographic evidence, where applicable.
- Correspondence with authorities and stakeholders

### **Audit**

This Plan and its requirements shall be audited from time to time (in accordance with VWS corporate audit schedule) and as and when necessary. Audit outcomes may be shared with Stakeholders as approved by the General Manager- Services.

### **Appendices**

- Appendix 1            VWS Incident Management steps
- Appendix 2            Notifiable incidents
- Appendix 3            VWS Incident Management Procedure

## **Appendix 1 Incident management steps**

The twelve specific steps in incident response, notification, management, recovery, reporting and investigation are tabled below:

<b>Step</b>	<b>Action</b>	<b>Responsible Person</b>	<b>Reference/Remarks</b>
1	Identify the Incident. All employees must be trained in the capability to identify and respond to an Incident and distinguish if an emergency	Usually the rostered Service Engineer	Full knowledge regarding Customer Call Centre Process Adequate HSE training and compliance with BR09 Incident Management procedure
2	Protect yourself and others	Usually the rostered Service Engineer	Wear Applicable PPE and use RPE; as applicable
3	Identify the injured person(s), rescue as applicable and provide first aid.	Usually the rostered Service Engineer	First aid training. Rescue training depending on conditions
4	Take action against further incidents as applicable to incident; e.g. isolate electrically, mechanically and hydraulically	Usually the rostered Service Engineer	By following items 1, 2 and 3
5	Notify internally: report Incident Internally once step 1-4 completed	Usually the rostered Service Engineer	Refer contact list for Line Manager (Plant Manager & Service Manager NSW) and WHSEQ Manager in writing for input to VWS incident reporting and management system.
6	If the incident is a major or crisis emergency contact the relevant authorities as applicable in the contact listing noting the General Manager – Services and General Counsel in concert with Senior Contracts Manager decides severity of incident and whether the incident must be reported to senior management and the relevant authorities or other stakeholders (e.g. Ministers, IPART, SafeWork NSW, affected parties).	General Manager-Services, General Counsel and Senior Contracts Manager	Refer to Authority and Stakeholder in Contacts list
7	Appoint an Incident Site Manager. Appointed before commencement in anticipation of an emergency by the NSW Service manager	General Manager appoints or delegates responsibilities of the Incident Site Manager.	The Site Incident manager manages using this plan
8	The Incident Site Manager immediately takes responsibility for the Incident Site. The Incident Site Manager secures the incident area (refer to OHS Regulation obligation), gathers and records as much information as possible in relation to the Incident including taking photographs, obtaining records of interview, and making relevant notes, and diagrams as soon as possible.	This shall be the General Manager – Services or competent delegate; otherwise the WHSEQ Manager.	Refer to BR09 Incident Management procedure and the relevant tools
9	Recovery: Take the necessary actions to recover normal operations by way of a recovery plan	Service Manager / Plant Manager and his team	As applicable to the severity of the incident and its consequences
10	Appoint the Incident Communications Person	This is the VWS General Manager – Services together with General Counsel, if necessary, unless noted otherwise.	

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- |  |   |   |  |
|--|---|---|--|
| 11   | Appoint Internal Incident Investigator within 24 hours after the Incident. The Internal Incident Investigator also collects and maintains all incident records and shall be the contact for SafeWork NSW. | General Counsel together with VWS Senior Contracts Manager, unless advised otherwise                  | Refer Incident Management procedure (BR09)and relevant tools |
| <p>The Internal Incident Investigation Manager conducts the investigation without fear or favour and prepares report on Form BR09-TOOL-05 and determines root cause in consultation with relevant personnel including Design and WHSEQ. The time frame of any report shall not exceed 3 – 4 weeks.</p> |   |   |  |
| 12   | Develop and implement corrective actions to address the identified root cause/s. Close Incident and record in the Incident reporting system when all actions have been certified as complete.             | Service Manager in concert with the Internal Incident Investigator, and other personnel as applicable | Refer Incident Management procedure (BR09)and relevant tools |

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All procedures and forms as stated above are located on the VWS Server.

## Appendix 2 Notifiable Incidents

### IPART Notifiable events under WICA 2006

VWS complies to Water Industry Competition Act 2006 (WICA) current version- WICA regulation was last amended on 07 July 2017.

Reference is made to Schedule 1 1 (2) of the Water Industry Competition (General) Regulation 2008 which provides the type of incidents that are notifiable by VWS to IPART as well as the Minister of Health, Minister for Energy and Utilities, any licensed retail supplier that supplies water or water or provides sewerage services by means of the licensee's infrastructure, and any other licensed network operator or public water utility whose infrastructure is connected to the licensee's infrastructure.

Both the Network Operators' Reporting Manual and Retail Suppliers' Reporting Manual (Current version, March 2019) by IPART via Section 3.1 advises how the events or incidents that require immediate notification are to be reported.

It has been left to the duty of reasonable prudence of the licensee to assess the likelihood of an incident impacting water quality, public health or safety in its risk assessment for specific scheme.

Considering the present requirements of Bingara Gorge RWTP, VWS provides the following listing some examples of the types of incidents that may threaten water quality, public health or safety that may be considered as notifiable to The Minister of Health, the Minister for Finance and Services, IPART and affected parties:

- Non-compliance with health related guidelines.
- Cross-connection of sewer, wastewater, recycled water and potable water pipes.
- Use of water not authorized under the licence (e.g. accidental ingestion of recycled water only authorized for irrigation uses).
- Interruption of service to customers.
- Failure of treatment system.
- Sewer overflows (at sewage treatment plant and in the reticulation system, with potential to affect public health).
- Consumer complaints of illness potentially associated with the water supplied.
- Prolonged power outage (if this affects quality of water).
- Extreme weather events (e.g. flash flooding, cyclone affecting treatment and reticulation capabilities).
- Natural disaster (eg, fire, earthquakes, lightning damage to electrical equipment).
- Serious Operational error or strike action.
- Other events that could affect water quality.

The above list is not exhaustive and not all instances of the listed events or incidents will require immediate notification. Not all of Notifiable Events would be defined as emergencies. Licensee, as stated earlier, will take due diligence in notifying suitable incidences only.

### WHS Act Notifiable events

Pursuant to Section 35 and related section of Work Health and Safety Act 2011, all **notifiable incidents** are notifiable to SafeWork NSW.

**notifiable incident** means:

- (a) the death of a person; or
- (b) a serious injury or illness of a person; or
- (c) a dangerous incident.

**serious injury or illness** of a person means an injury or illness requiring the person to have:

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- (a) immediate treatment as an in-patient in a hospital; or
- (b) immediate treatment for:
  - (i) the amputation of any part of his or her body; or
  - (ii) a serious head injury; or
  - (iii) a serious eye injury; or
  - (iv) a serious burn; or
  - (v) the separation of his or her skin from an underlying tissue (such as degloving or scalping); or
  - (vi) a spinal injury; or
  - (vii) the loss of a bodily function; or
  - (viii) serious lacerations; or
- (c) medical treatment within 48 hours of exposure to a substance;

and includes any other injury or illness prescribed by the regulations but does not include an illness or injury of a prescribed kind.

**dangerous incident** means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to:

- (a) an uncontrolled escape, spillage or leakage of a substance; or
- (b) an uncontrolled implosion, explosion or fire; or
- (c) an uncontrolled escape of gas or steam; or
- (d) an uncontrolled escape of a pressurised substance; or
- (e) electric shock; or
- (f) the fall or release from a height of any plant, substance or thing; or
- (g) the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations; or
- (h) the collapse or partial collapse of a structure; or
- (i) the collapse or failure of an excavation or of any shoring supporting an excavation; or
- (j) the inrush of water, mud or gas in workings, in an underground excavation or tunnel; or
- (k) the interruption of the main system of ventilation in an underground excavation or tunnel; or
- (l) any other event prescribed by the regulations;

but does not include an incident of a prescribed kind.

It does not matter whether a person actually received the treatment referred to in this definition, just that the injury or illness could reasonably be considered to warrant such treatment.

Office of Environment and Heritage Notifiable Events

If the incident presents an immediate threat to human health or property, such as toxic fumes or a large chemical spill, call 000 to report it immediately to emergency services. As first responders, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are responsible for controlling and containing incidents. Non-emergency incidents should be reported to the organisation responsible for regulating pollution from that activity; such as EPA NSW.

EPA NSW Notifiable Events

There is a duty to report pollution incidents under section 148 of the Protection of the Environment Operations Act 1997 (POEO Act).

Under this Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- a. the person carrying on the activity
- b. an employee or agent carrying on the activity
- c. an employer carrying on the activity
- d. the occupier of the premises where the incident occurs.

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident. The notification should have sufficient detail of the incident to enable appropriate follow-up action, per Section 150 of the Act. Any required information that is not known when the incident is notified must be notified immediately once it becomes known.

A person as listed above may not report if he knows that all relevant authorities have already been notified by the licensee, as per Section 151 of this Act.

Only persons engaged in the activity resulting in the pollution incident, and occupiers of the land where the incident occurs, have a duty to report the incident. However, If a person outside the above list is concerned about pollution, and an approach to the person causing the problem is not possible or is unlikely to be successful, he/she may raise the concern with the relevant authority.

It is to be noted that important changes have been made to the duty to notify provisions as a result of the [Protection of the Environment Legislation Amendment Act 2014](#) (Amendment Act). Those changes have commenced since 28 October 2014, and are designed to ensure that appropriate authorities have the information they need to respond within an appropriate time.

Pollution incidents that cause or threaten material harm to the environment must be notified.

A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. '[Pollution incident](#)' is a defined term in the Act and covers Excursions to local waterways, Noise and Odour complaints.

'Material harm to the environment' is defined in section 147. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

The notification would be to each of the following authorities, as appropriate:

- the appropriate regulatory authority (ARA)
- the Environment Protection Authority (EPA) if they are not the ARA
- the Ministry of Health
- the Safe Work Authority
- the local authority, e.g. the local council, if this is not the ARA
- Fire and Rescue NSW.

If a pollution incident occurs, all necessary action should be taken to minimise the size and any adverse effects of the release. If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted first for emergency assistance - phone 000. The other response agencies must still be contacted after that to satisfy notification obligations.

As spill or leak associated with VWS' operations may harm the environment, people carrying out the activity, including casual or shift workers, or contractors, aware of their duty to notify, know who to notify and the need for such notification. In doing so, they follow Spill control protocols as outlined in BR09 Incident Management.



### **Appendix 3 Listing of VWS Incident Management Procedure\***

#### **BR01: Emergency Preparedness and Response Procedure**

Tools for the above:

BR01-TOOL01 Emergency Identification and Analysis Form

BR01-TOOL02 Emergency Plan Template

BR01-TOOL03 Emergency Contact List

BR01-TOOL04 Personal Emergency Evacuation Plan

BR01-TOOL05 Emergency Evacuation Exercise Observer Checklist

#### **BR01-GU01: First Aid Guideline**

Tools for the above:

BR01-GU01-TOOL01 First Aid Assessment and Planning Form

#### **BR09: Incident Management Procedure**

Tools for the above:

BR09-TOOL01 Near Miss Hazard Report Form

BR09-TOOL04 InjuryNet Information Sheet

BR09-TOOL06 Incident Notification Contact Information

BR09-TOOL07 Hazard reporting Information Sheet

#### **BR09-GU01 Return to Work Guideline**

Tools for the above:

BR09-GU01-TOOL01 Return to Work Program Template

BR09-GU01-TOOL02 Return to Work Plan

BR09-GU01-TOOL03 Consent to Disclose Medical Information

#### **BR09-GU02 Incident Investigation Guideline**

Tools for the above:

BR09-GU02-TOOL01 Witness Statement

BR09-GU02-TOOL02 Detailed Investigation Report Template

BR09-GU02-TOOL03 Standard Investigation Report Template

*\* - Copies available upon request to VWS and acceptance of such request by VWS*

# Pollution Incident Response Management Plan

Veolia Water Solutions and Technologies holds an Environmental Protection License (Number 20335) for the Bingara Gorge Wastewater and Water Recycling Scheme located at Condell Park Road Wilton NSW 2571.

## 1. Purpose

This is a site specific plan developed to:

1. Guide workers in the event of a pollution incident associated with the Bingara Recycled Water Treatment Plant (RWTP) and all existing networks infrastructure within the licensed area of operations (Water Industry Infrastructure)
2. Comply with the preparation of pollution incident response management plans under the Protection of Environment Operations Act 1997 (POEO Act 1997)
3. Meet element 6 of the framework for management for recycled water quality and use in the Australian Guidelines for Water Recycling 2006
4. Summarise notification requirements to relevant authorities and the community

In addition to this PIRMP, Veolia Water Solutions & Technologies (Australia) Pty Ltd (VWST) has established Incident Management and Emergency Preparedness and Response Procedures (Site Specific Emergency Preparedness and Response Plan, "EPRP"), as part of its regulatory requirements and certified Business Management System (BMS). Relevant parts of these procedures will be deployed in conjunction with this Pollution Incident Response Management Plan (PIRMP), as needed.

For reference the current version of the EPRP, is located on the Site specific 'Shared Drive' (was Team Drive) and central document directory, these are VWST internal locations only.

This plan must be tested on at least an annual basis, currently scheduled for March of each Calendar year. The plan will be tested in relation to a potential site / network incident, involving all site operations staff and where applicable select Sub-Contractor. The scenario will be proposed by the Plant Manager.

A copy of this plan is available on site and electronically.

This plan is maintained in accordance with Veolia Water Solutions & Technologies (Australia) Pty Ltd Document Control Procedure. The plan is reviewed annually for currency, the version control of the plan will be updated if changes are required. As a minimum the plan must be formally updated every three years.

## 2. Contact Details

NAME	POSITION	TITLE
Martin Reid	Legal Counsel	0428 816 972
Inshan Sheriff	NSW Service Manager	0438 880 219
Patrick Coulton	Bingara Plant Manager	0477 325 366

## 3. Communications with Neighbours and the Community

Veolia Water Solutions and Technologies is committed to ensuring that those in our local community who may be potentially impacted by a pollution incident are adequately notified. Notifications to the community are the responsibility of the Plant Manager coordinated with Lend Lease Communities, if the Plant Manager is unavailable the responsibility lies with the NSW Service Manager.

Notification with the community will occur under consultation with Lend Lease Communities, as appropriate to the location and scale of the incident.

### 3.1 For Reticulation Network Incidents, Emergencies and Properties Surrounding the Wastewater Treatment Plant

Owners and occupiers of premises who may be affected by an incident occurring within the reticulation network may be advised through one or more of the following means:

- Via the Wilton Recycled Water Treatment plant website: [myrecycledwater.com.au](http://myrecycledwater.com.au)
- Email dispatched by Lend Lease Communities or Veolia Water Solutions and Technologies.
- Door knocking of affected community members and groups
- Signage
- Posted Mail

They will be provided with advice to:

- avoid contact with the sewage or discharge; and
- options to disinfect and hand wash.

### 3.2 Complaints

Complaints can be made via:

- The Wilton Recycled Water Treatment plant website: [myrecycledwater.com.au](http://myrecycledwater.com.au)
- Telephone 1300 552 120
- Email [info@myrecycledwater.com.au](mailto:info@myrecycledwater.com.au)

## 4. Training and Awareness

Training and awareness sessions will be held with the following stakeholders upon implementation of the PIRMP:

- NSW Service Team Plant operators
- Authorised sub-contractors (as required)
- Other authorised persons (as required)

Site evacuation procedure is included in the site induction process for all workers. PIRMP induction for Emergency Control Organisation is done annually.

Additionally, workers receive information and training on emergency preparedness, incident management, environmental impacts and controls through:

- Toolbox talks or team meetings
- fact sheets / safety alerts
- Emergency drills
- High risk activity training e.g working at heights / confined space
- SOPs, work instructions, SWMS, Permit, or procedures
- Intranet / BMS

Training records are maintained in the Veolia Water Solution and Technologies training database, maintained by Plant Manager.

Site specific training records are referenced within the sites training matrix. Currency of training is reviewed annually.

## 5. Risk Assessment and Management

The primary hazards to human health or the environment associated with operation of the waste water treatment plant are:

HAZARD	SOURCE	LIKELIHOOD	PRE-EMPTIVE AND CORRECTIVE ACTIONS
Chemical exposure, chemical burns, fire	<ul style="list-style-type: none"> <li>Hazardous chemicals</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Safety Data Sheets (SDS) available and accessible</li> <li>Register &amp; manifest available and maintained</li> <li>Storage and segregation of chemicals</li> <li>Labelling of all containers</li> <li>Spill kits made available</li> <li>Ventilation</li> </ul>
Biological hazards	<ul style="list-style-type: none"> <li>Working in or visiting active sewage treatment facilities</li> <li>Sewer inspection and maintenance work</li> <li>Repairing or replacing live sewers</li> <li>Operating equipment used to collect and transport sewage sludge</li> <li>Discharge</li> </ul>	High	<ul style="list-style-type: none"> <li>Water discharged is tested as per licence conditions to ensure quality falls within parameters for TSS, BOD and pH</li> <li>Information for working with sewage</li> <li>Provision of clean water, soap, disposable paper towels</li> <li>Do not eat, drink or smoke in sewage handling areas</li> <li>Clean and disinfect the area after the task</li> <li>Use dedicated tools / equipment</li> <li>Clean hands before opening vehicle doors and handling steering wheels and controls</li> <li>Segregate contaminated equipment</li> <li>Disinfect or sterilise reusable work equipment</li> <li>Change out of contaminated clothing and wash hands well with soap and clean water (preferably hot) before eating or smoking. Also wash hands after removing gloves to prevent cross-contamination</li> <li>Use personal protective equipment: <ul style="list-style-type: none"> <li>Eye protection. Goggles are recommended if using a hose and / or any chemicals</li> <li>Rubber boots</li> <li>Rubber gloves</li> <li>Impervious coveralls</li> </ul> </li> <li>Ensure vaccinations are up to date for tetanus and Hepatitis A and Hepatitis B</li> <li>Contact a doctor immediately if illness occurs</li> </ul>
Air pollution: <ul style="list-style-type: none"> <li>Noise</li> <li>Odour</li> </ul>	<ul style="list-style-type: none"> <li>Engine / pumps</li> <li>Plant and equipment</li> <li>Chemical handling</li> </ul>	Low	<ul style="list-style-type: none"> <li>Plant noise assessments</li> <li>Well ventilated area</li> <li>Odour extraction</li> <li>Scheduled and regular collection of waste</li> </ul>

HAZARD	SOURCE	LIKELIHOOD	PRE-EMPTIVE AND CORRECTIVE ACTIONS
			<ul style="list-style-type: none"> <li>Plant maintenance programs</li> <li>Plant and equipment inspected before use</li> <li>Daytime operation</li> <li>Sealed chemical containers</li> <li>Maintain housekeeping</li> <li>Venting system with carbon filters</li> </ul>
Energy Impacts	<ul style="list-style-type: none"> <li>Servicing plant</li> <li>Cleaning assets</li> </ul>	Low	<ul style="list-style-type: none"> <li>Proactive maintenance programs to ensure operational efficiency</li> <li>Apply energy hierarchy</li> <li>Energy reduction initiatives including: <ul style="list-style-type: none"> <li>Switching off lights and appliances when not in use</li> <li>Repairing leaks as soon as they are discovered</li> <li>Unplug unused electrical devices</li> <li>Use energy efficient cycle settings on equipment</li> </ul> </li> </ul>
Impacts to flora and fauna	<ul style="list-style-type: none"> <li>Wildlife scavenging waste</li> <li>Wildlife injury / mortality from vehicle movements</li> <li>Exposure to snakes and spiders</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Waste segregation systems established</li> <li>Containment systems</li> <li>Obey speed limits</li> <li>Minimise driving during dawn and dusk</li> <li>Toolbox talks</li> <li>Environmental alerts</li> </ul>
Hazardous materials and waste	<ul style="list-style-type: none"> <li>Cleaning</li> <li>Chemical handling and storage</li> <li>Sewage</li> </ul>	High	<ul style="list-style-type: none"> <li>Bunding</li> <li>Administrative controls (Awareness training, established procedures)</li> <li>All other recyclable or non-recyclable wastes are to be stored in appropriate covered receptacles (e.g. bins or skips)</li> <li>Contractors commissioned to regularly remove / empty the bins to approved disposal or recycling facilities</li> <li>Maintenance of system</li> <li>Spill kits</li> <li>Restricted access</li> </ul>

## 6. Safety Equipment

TYPE	DESCRIPTION	LOCATION
Spill kits	Equipment to absorb spills at designated locations.	Process building
Safety Data Sheets	Information regarding chemicals.	<ul style="list-style-type: none"> <li>Chemical storage area</li> <li>Office</li> <li>Electronic files</li> </ul>
Fire and emergency equipment	<ul style="list-style-type: none"> <li>Safety shower</li> <li>Emergency eye wash</li> <li>fire blanket</li> <li>fire extinguishers</li> <li>Hose reel</li> <li>first Aid kits / AED</li> </ul>	<ul style="list-style-type: none"> <li>Main control room</li> <li>Various plant locations</li> <li>Chemical area</li> <li>Vehicles</li> <li>Laboratory</li> </ul>
PPE	<p>Minimum PPE on site is as follows:</p> <ul style="list-style-type: none"> <li>Steel cap footwear</li> <li>High Visibility</li> <li>Long sleeves / pants</li> </ul> <p>Additional PPE may be required according to the task or activity being performed.</p>	<ul style="list-style-type: none"> <li>Issued to persons</li> <li>Main control room</li> </ul>
Plant monitoring equipment	<p>SCADA remote monitoring, operation and alarm system (initial warning and critical control points).</p> <p>CMMS (GAMA), asset management system</p>	Process building

## 7. Inventory of Pollutants

### 7.1 TRWP Plant Facility decommissioned October 2017.

Note, the TRWP has been mothballed for potential future re-instatement. The below information is included for future reference only.

POLLUTANT	SOURCE	QUANTITY
Used in the process		
Polyaluminium chlorosulphate	Chemical supplier (Aquapac)	current 500L (IBC tank 1 000L storage capacity)
Sodium hydroxide	Chemical supplier (Aquapac)	current 500L (IBC tank 1 000L storage capacity)
ferric (III) Chloride	Chemical supplier (Aquapac)	current 30L (poly tank 200L storage capacity)
Sodium hypochlorite	Chemical supplier (Aquapac)	current 50L (poly tank 200L storage capacity)
Used in the CMF membrane		

Hydrex 4301 (Sodium metabisulphite)	Chemical supplier (Veolia)	current 4 nos. x 15L drum
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POLLUTANT	SOURCE	QUANTITY
Hydrex 4701 (citric acid)	Chemical supplier (Veolia)	current 2 nos. x 15L drum
Sodium hypochlorite	Chemical supplier (Aquapac)	current 10 nos. x 15L drum
Lubricant used in the ecodisk rotating motor		
SF06 perma liquid grease	Veolia France	current 16 nos. x 30 mL (cartridge)
Waste Material		
Drum screen screening waste	Raw sewage	current 100 L ( dewatering bag 2000L storage capacity)
Sludge	Backwash byproduct waste from the CMF, Ecodisk drum filter and the Hydrotech drum filter process	current 20kL (sludge holding tank 100KL storage capacity)
Storage Tank		
Raw Sewage	Underground redundancy tank adjacent to Sewage Pumping Station	current 0L (redundancy tank 110kL storage capacity)
Raw Sewage	Above ground redundancy tank at the RWTP	current 70kL (redundancy tank 350kL storage capacity)

7.2 PRWP (1M/ Day Plant) Facility commissioned in September 2017, following practical completion, is currently in operation.

Location ID	POLLUTANT	SOURCE	QUANTITY
Chemicals used in process			
1	Ferric Chloride	Chemical Storage Tank	10 Kiloliters
2	Sodium Hypochlorite	Chemical Storage Tank	10 Kiloliters
3	Sodium Carbonate (Soda Ash)	Chemical Storage Tank	10 Kiloliters
4	Sodium Hypochlorite	Portable container adjacent to BioSep, 15L drums are used for top up, stored within the TRWP	200liters
5	Citric Acid	Portable container adjacent to BioSep, 15L drums are used for top up, stored within the TRWP	200liters
6	Anti foam Agent	Tank adjacent to BioSep Unit	20 liters
7	Polymer Emulsion	Polymer batching unit adjacent to centrifuge	80 Liter container
Fluids associated with Mechanical Equipment			
8	Diesel	Generator Set	1000 Liters (Within Generator Set)
Influent Storage Tanks			
9	Raw Sewage	Underground redundancy tank adjacent to Sewage Pumping Station	Current 0L (redundancy tank 110kL storage capacity)
10	Raw Sewerage	Above ground storage tanks at PRWP	Rated Capacity 1 ML x 2, expected storage level 20%



11	Raw Sewage	Above ground redundancy tank at the RWTP	current 100kL (redundancy tank 350kL storage capacity)
Location ID	POLLUTANT	SOURCE	QUANTITY
Waste Material			
12	Mechanical Screens	Influent mechanically screened to 1 mm and held in closed 3m3 bins (Two Bins on Site)	Max 6 m3
13	Bio-solids	Dewatered sludge held in Closed Bin	Max 10 m3

## 8. Notifications

Veolia Water Solutions and Technologies are required to report any Reportable (within the meaning of WICA Act) incidents to the below authorities.

- Division of Energy, Water and Portfolio Strategy in the Department of Planning and Environment under Ministry of Energy and Utilities – Ms Colette Grigg, Tel: (02) 8275 1914, Email: [Colette.grigg@planning.nsw.gov.au](mailto:Colette.grigg@planning.nsw.gov.au)
- NSW Health (Ministry of Health) – 9391 9000 via South Western Sydney Public Health Unit, On call Environmental Health Officer, 02 8778 0855 (Bus Hrs), 02 8738 3000 (After Hrs) and Email: [waterqual@doh.health.nsw.gov.au](mailto:waterqual@doh.health.nsw.gov.au)
- IPART – 9113 7722 (Director, Water Licensing and Compliance), Email: [compliance@ipart.nsw.gov.au](mailto:compliance@ipart.nsw.gov.au)

The notification requirements apply to any incident in the conduct of VWST activities “that threatens, or could threaten, water quality, public health or safety”

In addition to this VWST also complies to section 148 of the POEO Act 1997 in that it is obliged to notify any pollution incident where a material harm to the environment is caused or threatened.

This requirement means that any incident that involves harm to the health or safety of a person or an ecosystem of Energy and Utilities to

- EPA – 131 555
- WorkCover – 131 050
- fire and Rescue / Emergency Services – 000
- Wollondilly Council – 4677 1100

A risk of material harm to the environment is defined in section 147 of the POEO Act 1997 as:

- Harm to the environment is material if:
  - It involves actual or potential harm to the health or safety of human beings or ecosystems that is not trivial, or
  - It results in actual or potential loss or property damage of an amount or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations) and
- Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment

Protocols for managing incident response, escalation and notification to regulators are further detailed in the Veolia Water Solutions and Technologies Incident Management Procedure.

## 9. Incident Response

Immediate action is to ensure the safety of people and containment of pollution if safe

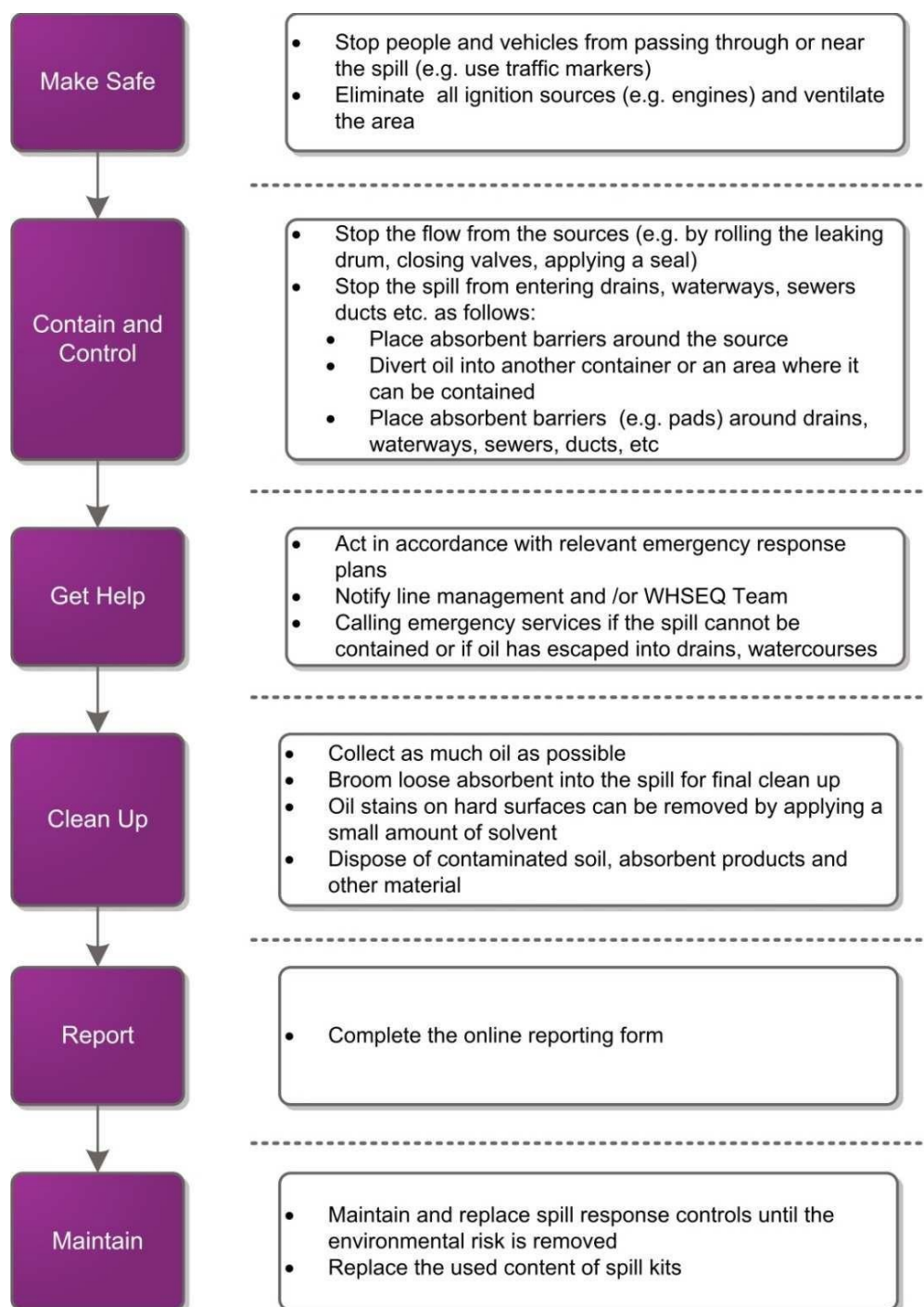
to do so. Upon discovering an emergency situation:

1. The person discovering the emergency should immediately contact the Bingara Plant Manager. Bingara Plant Manager depending on circumstances may escalate the matter to NSW Service Manager
2. The following information should be obtained:
  - a. Type of emergency
  - b. Location
  - c. Actions being taken at the scene
  - d. Any persons injured
  - e. Whether emergency services have been notified or are required

The response process is summarized below:



## 9.1 Oil Spill Containment and Clean up



## 9.2 Chemical Spill Clean-up

The primary concern is to protect health and safety. No action should be taken during an emergency response that directly or indirectly puts human health and safety at risk.

Do not attempt to clean up spill unless it is safe to do so. There may be a risk from:

- Fire or explosion
- Toxic fumes
- Chemical burns

CONTROLS	CHECK
<b>CONTAIN:</b> 1. Stop spill at the source: <ol style="list-style-type: none"> <li>i. Turn off pump / Emergency shut-off</li> <li>ii. Turn drum upright or plug hole</li> <li>iii. Turn off valve</li> </ol> 2. Remove bystanders 3. Secure the spill area to prevent unauthorised entry (use emergency tape, cones) 4. Protect drains with PVC curb / mats (if spill occurs in field locations)	<ul style="list-style-type: none"> <li>• Assess the spill</li> <li>• Identify the chemical and read corresponding SDS</li> <li>• Incompatible substances, and reactivity with substances such as water or air</li> <li>• Do I need assistance?</li> <li>• Is it safe to approach?</li> <li>• Is site evacuation required?</li> </ul>
<b>REPORT:</b> 1. Alert NSW Service Manager 2. For major spill or spills outside the capability of Veolia Water Technologies call 000 for fire brigade	<b>PPE REQUIREMENTS (as per the SDS)</b> Consider: <ul style="list-style-type: none"> <li>• Safety Glasses and / or face Shield</li> <li>• Safety footwear</li> <li>• Hand protection</li> <li>• Chemical Apron</li> <li>• Respirator</li> </ul>
<b>CLEAN-UP:</b> 1. Surround the spill by using absorbent socks and pillow from chemical spill kits 2. Cover the spill area with absorbent particles / pads 3. Sweep loose absorbent over spill area with a broom from around the edges of the spill <ol style="list-style-type: none"> <li>a. Dispose of used products in waste bags as prescribed waste</li> </ol> 4. Restock spill kit 5. Investigate causes of spill and on how to prevent such incident from occurring again	<b>BMS PROCEDURES</b> <ul style="list-style-type: none"> <li>• BR01 Emergency Preparedness and Response Procedure</li> <li>• BR01-GU01 First Aid Guideline</li> <li>• BR06 Incident Management Procedure</li> <li>• BR18-GU03 PPE and Workwear Guideline</li> </ul>

## 9.3 Sewage Spills

- Secure the area immediately
- Use spill kits for small spills
- Clean all contaminated objects and surfaces immediately to reduce the risk of infection and to prevent further microbial growth
- Barricade affected areas if sewage spills are ongoing
- Erect signage to notify residents of sewage spill (when a public area or waterway has been impacted)
- Divert sewage flows
- Get tankers to pump sewage directly from the system

## 10. Recovery

Ensure environmentally responsible disposal of contaminated material as per:

- Safety Data Sheet
- Hazardous chemicals Guideline
- Legislation

Cleaning up after sewage spills:

INDOORS	OUTDOORS
<ul style="list-style-type: none"> <li>• Remove any gross contamination and dispose of in a sewage treatment facility and not into storm drains or landfill</li> <li>• Open all windows and use fans where available to increase ventilation and reduce humidity</li> <li>• Excess water should be removed by pumps, wet vacs or mopping, empty into sewage system and not into storm drains</li> <li>• Place discarded contaminated materials in plastic bags. Discard all objects that are porous or difficult to clean</li> <li>• Wash affected areas and furnishings with a detergent solution to remove contamination, then disinfect, rinse with clean water and allow to dry thoroughly, preferably outside where UV light aids decontamination</li> <li>• Clean all equipment used and personal protective equipment with a detergent then disinfect (or use a combined product) or discard if possible (e.g. mop heads).</li> </ul>	<ul style="list-style-type: none"> <li>• Remove any gross contamination and dispose of in a sewage treatment facility and not into storm drains or landfill.</li> <li>• Clean hard surfaces such as paving, concrete and tarmac with a detergent solution then disinfect. Use only approved disinfectants. Do not allow wastewater to enter the storm drains. For large spills it may be necessary to construct bunds of earth, brick, stone or other suitable material to retain liquid. Liquid should be disposed of to sewer or a suitable workplace collection pit</li> </ul>

## 11. Disposal

General	<ul style="list-style-type: none"> <li>• All workplace hazardous chemicals will be recycled where possible</li> <li>• Disposal of workplace hazardous chemicals may arise if the product: <ul style="list-style-type: none"> <li>○ Is no longer used</li> <li>○ Is out of date</li> <li>○ Has been damaged</li> <li>○ Is being replaced</li> </ul> </li> <li>• Only authorised chemical waste contractors will be contracted to carry out waste disposal</li> <li>• Disposal material from the clean-up of spills of fuel, oil, chemicals and other hazardous materials shall be in accordance with the requirements of local authorities</li> </ul>
Dangerous Goods And Hazardous Chemicals Disposal	<ul style="list-style-type: none"> <li>• The disposal of any Hazardous chemicals / Dangerous Goods on site must comply with relevant Australian Standards, local authorities, SDS and supplier's instructions</li> <li>• Waste will be classified as hazardous or non-hazardous to determine whether waste will be removed as non-hazardous waste or by trade waste transporters</li> </ul>
Non-Hazardous / Non-Dangerous Goods	<ul style="list-style-type: none"> <li>• Non-hazardous / non-dangerous goods will be disposed of into regular waste disposal bins to ensure no leaks and contamination when transported from site</li> </ul>
Sewage sludge and Contaminated soil	<ul style="list-style-type: none"> <li>• Disposal at a license waste facility under POEO Act 1997 for composting</li> </ul>
Screening (dewatered)	<ul style="list-style-type: none"> <li>• Treat as general waste</li> </ul>

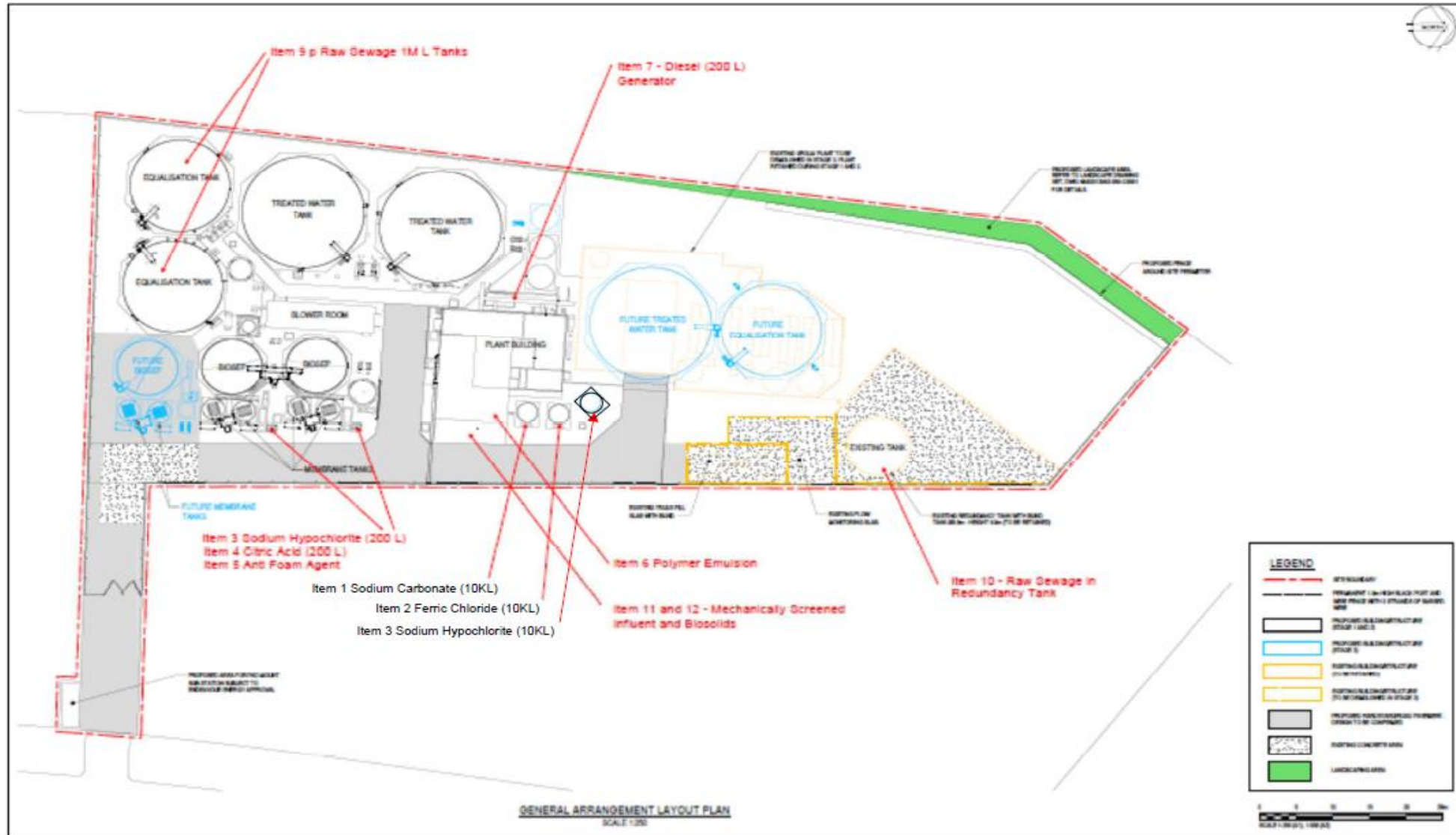


12. Site Map





## 13. Location of Pollutants for Permanent Plant



# Storm Water Drainage

