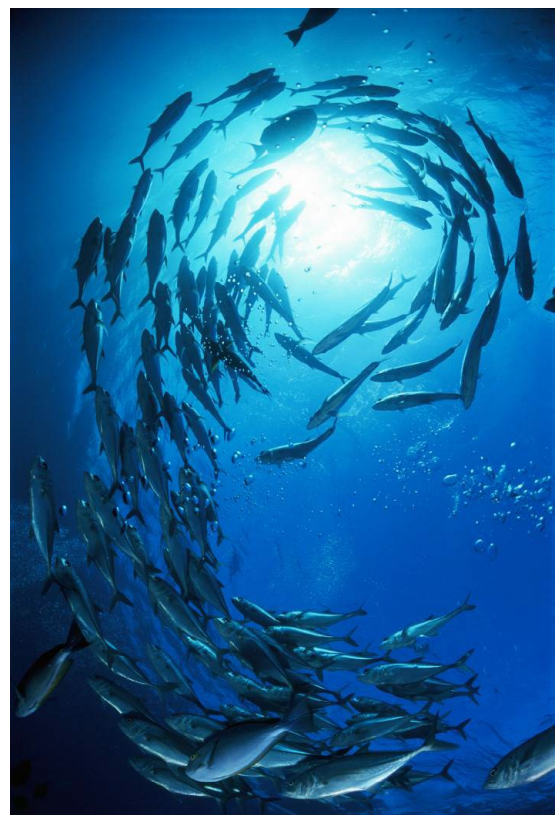




VICTORIAN DESALINATION PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) MANUAL



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0. Document Control

0.1. Authorisation/amendment

This document complies with the requirements of the AquaSure Management System (AMS) and is authorised for use by the undersigned:

Function	Position	Name	Signature	Date
Prepared by	AquaSure EMR	Hilary Chapman		19.06.24
Approved by	AquaSure CEO	Matt Brassington		19.06.24

Date	Rev	Amendment description	By	Initials
02.07.18	AQS 00-06	Changes as per Changes Register	H Chapman	HC
27.11.18	AQS 00-07	Changes as per Changes Register	H Chapman	HC
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05-2023	AQS 00-09	Changes as per Changes Register	H Chapman	HC
12.06.24	AQS 00-10	Changes as per Changes Register	H Chapman	HC
13.06.24	AQS 00-11	Changes as per Changes Register	H Chapman	HC

1. Purpose and application

1.1. Background

This Environmental Management System (EMS) Manual applies to the Operations & Maintenance Activities (O&M) of the Victorian Desalination Project (VDP). AquaSure Pty Ltd (AquaSure) is the proponent for the VDP.

1.2. Purpose

The purpose of this EMS Manual is to:

- provide the AquaSure and Watersure teams with a structured approach to managing environmental outcomes during the operation and maintenance stage of the Desalinated Water Supply System (DWSS);
- outline all Environmental Management Plans (EMPs), whether they be AquaSure or another responsible entity, which are subordinate to this EMS Manual but cover specific areas of the project work; and
- serve as the overarching Project Environmental Management Plan required under the Project Deed Project Scope and Project Requirements Appendix S3, clause 3(a)(i).

By effectively implementing the EMS Manual, AquaSure provides a framework that systematically addresses all the environmental performance requirements (PRs) and assures all stakeholders it has the means to ensure that regulatory and policy requirements can be managed in a systematic and efficient manner while also striving to add value and continually improve its environmental performance.

The EMS Manual sets out the environmental management framework that is implemented for the Project. The EMS Manual is designed to conform with ISO 14001:2015 Environmental Management Systems – Requirements with guidance for use.

1.3. Application

This EMS manual applies to AquaSure, Watersure, and each of their consultants, contractors and associates in delivering the Project, throughout the Project Term.

All personnel must comply with the requirements of this EMS Manual.

1.4. References

The following documents have informed the development of this EMS Manual:

- Project Deed
- Department of Sustainability and Environment. 2008. Victorian Desalination Project – Environment Effects Statement (including EPA Works Approval Application)
- Mitchell K et al. 4 December 2008. Report of the Inquiry to the Minister for Planning - Victorian Desalination Project – Environment Effects Statement
- Minister for Planning. January 2009. Victorian Desalination Project – Assessment under *Environment Effects Act 1978*
- ISO 14001:2015. Environmental management systems – Requirements with guidance for use

1.5. Definitions and acronyms

AquaSure	AquaSure Pty Ltd - the proponent for the Victorian Desalination Project
AMS	AquaSure Management System

AusNet	AusNet Transmission Group Pty Ltd, the operation contractor for the ETCA and the maintenance and repair contractor of the Maintained ETCA
CEO	AquaSure Chief Executive Officer
Contractor	The AquaSure appointed O&M Contractor (Watersure comprising SUEZ Water and Ventia Utility Services)
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DP	Delivery Point
DWSS*	Desalinated Water Supply System, including the Desalination Plant and Transfer Pipeline. The ETCA is not part of the DWSS.
EA	The “Environmental Auditor”, being the IR&EA during the “EA Period” as described in section 5.4 of this EMS Manual.
EE Act	<i>Environment Effects Act 1978</i> (Vic)
EES	Environment Effects Statement
EIRP	Environment Incident Response Plan
Electricity Operator*	The third party operator selected by the State to operate the Electricity Transmission and Connection Assets and maintain the Electricity Transmission and Connection Assets, excluding the Underground Cable Assets.
Electricity Supplier*	AGL
Electricity Transmission and Connection Assets (ETCA)*	<p>The Electricity Transmission and Connection Assets include:</p> <ul style="list-style-type: none"> • 220kV AC underground system and associated reactive compensation stations • underground cables including joints • connecting lines, infrastructure, communications, equipment and all other associated, systems and works between the Cranbourne Terminal Station, Booster Pump Station and the Desalination Plant metering
EMP	Environmental Management Plan
EMR	Environmental Management Representative
EMS	Environmental Management System
EPA	Environment Protection Authority
EP Act	Environment Protection Act 2017 (Vic)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act</i> (Cth) 1999
Expiry date	<p>The date after the Date for RT Finalisation that is:</p> <ol style="list-style-type: none"> a) 27 years and 3 months; plus b) the aggregate period of any extensions of time to the late RTF.
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i> (Vic)
Gigalitres (GL)	Billion litres
IREA or IR&EA	The Independent Reviewer and Environmental Auditor
ISO 14001	ISO 14001:2015 Environmental Management Systems – Requirements with guidance for use

JSEA	Job Safety and Environmental Analysis
O&M	Operations and Maintenance
O&M Activities*	All things and tasks which are, or may be, required to operate, maintain or repair the Desalinated Water Supply System.
O&M Contractor*	Watersure (comprising SUEZ Water and Ventia Utility Services)
O&M EMP	Operations and Maintenance Environmental Management Plan
Project	Victorian Desalination Project
Project Deed (the Deed)	Contractual arrangement between the State and AquaSure Pty Ltd for the delivery of desalinated water from the project to Victoria's water supply system
Project Term	Period beginning Financial Close and ending on the earlier of the expiry date as defined in the Project Deed and the date on which the Project Deed is terminated
PMP	AquaSure Project Management Plan
PR	Performance Requirement
PS&PR*	Project Scope and Performance Requirements set out in Annexure 3 to the Project Deed
REC	Renewable Energy Certificate
REC Contractor*	AGL
Reference document	Reference Documents includes the documents referred to in Appendix S2 (Reference Documents) to the PS&PR (Annexure 3 to the Project Deed)
RO	Reverse Osmosis
SCADA	Supervisory Control and Data Acquisition
SEP	Site Environmental Plan
State	The Minister for Water of the State of Victoria for and on behalf of the Crown in the Right of the State of Victoria

Underground Cable Assets	<p>Has the meaning given in the Underground Cable Assets Deed between the State and AquaSure, being “all parts of the Cable which are below ground, together with some above ground parts of the Cable as described in paragraphs (a) – (g) below, up to the point in each station where the Cable terminates into above ground assets (for example where the cable terminates into the first Gas Insulated Switchgear (GIS) chamber) and includes all:</p> <ul style="list-style-type: none"> (a) sections of the Cable; (b) cable stress cone assemblies within the GIS terminations; (c) joints and joint bays; (d) joint bay earthing systems; (e) all bonding leads; (f) all DTS fibre optic cables and splicing equipment and splicing pits and covers; and (g) all underground link boxes and all component within, link box pits and covers and earthing connections, <p>but excludes all the cable link boxes and sheath earthing connections mounted on the cable termination structures within the stations and all outdoor Cable terminations within the stations and their associated structures, which for information are shown in the diagrams contained in Schedule 1” [being Schedule 1 of the Underground Cable Assets Deed].</p>
VDP	Victorian Desalination Project
Watersure	The AquaSure appointed O&M Contractor, Watersure, comprising SUEZ Water and Ventia Utility Services
WMS	Work Method Statement
<i>* Refer to the Project Deed for complete definitions.</i>	

2. Scope and objectives

2.1. Scope

AquaSure holds a concession from the State of Victoria for the Victorian Desalination Project, which provides high quality desalinated water to Victoria's water supply system. AquaSure's core functions include financing, operating and maintaining Australia's largest desalination plant on the South Gippsland coast in Victoria. The plant is contracted to supply up to 150 billion litres of water a year - a third of Melbourne's annual water needs - with capability to expand to 200 billion litres a year in the future.

This EMS Manual addresses compliance with environmental requirements during the operations and maintenance phase of the Project.

2.2. Environmental objectives

AquaSure's overarching environmental objective is to:

- comply with the environmental standards established for the Project and appropriate risk management
- optimise energy efficiency and offset environmental impact through the purchase and surrender of renewable energy credits for the electricity used at the Desalination Plant and by the Transfer Pipeline
- protect the environmental values and beneficial uses of the coastal and marine environment

such that AquaSure is recognised as a good environmental citizen.

3. Project overview

3.1. AquaSure

AquaSure is the special purpose vehicle established to finance, design, build, operate and maintain the VDP.

The State has contracted with AquaSure to deliver the VDP. As such, AquaSure is the Project proponent for the VDP.

3.2. Project development and approval

The Project was developed by the State and assessed through an Environment Effects Statement which considered the requirements of the various State and Commonwealth legislation, including:

- *Environment Effects Act 1978 (Vic) (EE Act)*
- *Environment Protection Act 1970 (Vic)*
- *Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act).*

The *Environment Protection Act 1970 (Vic)* has been repealed and replaced by the *Environment Protection Act 2017 (EP Act)*

The fundamental output from the Environment Effect Statement (EES) process was the establishment of environmental Project Requirements (PR) for the Project which define the minimum environmental performance required to ensure that the Project will deliver to the environmental expectations of the community and key stakeholders. The environmental PRs and their importance to the Project are discussed further below in Section 3.5.

These environmental Project Requirements have been incorporated into the Project Deed mainly in Annexure 3 - Project Scope and Project Requirements (PS&PR).

The key approval for the Project comprises an Incorporated Document which is attached to a number Planning Scheme Amendments (C107 - Bass Coast, C131 – Cardinia, C140 – Casey). Clause 5 of the Incorporated Document states:

“The use or development and the ancillary activities specified in clause 4 of this document must be for the Victorian Desalination Project as authorised by the State under an agreement between the State and the entity appointed to undertake the Victorian Desalination Project.”

The PRs, as amended by the Inquiry and the Minister for Planning’s assessment and the EPBC Act approval, are as set out in the Project Deed between the State and AquaSure.

The plant at Wonthaggi operates under a licence (OL000008693) issued under the *EP Act*

The requirements of the EPBC Act approval related to the construction of the project and all requirements have been completed.

3.3. Project components

The Project is located near Wonthaggi in the Bass Coast region south east of Melbourne.

During Operations and Maintenance, the Project involves three components:

- Desalination Plant (including marine structures)
- Transfer Pipeline
- Power Supply (outside the scope of this EMS Manual).

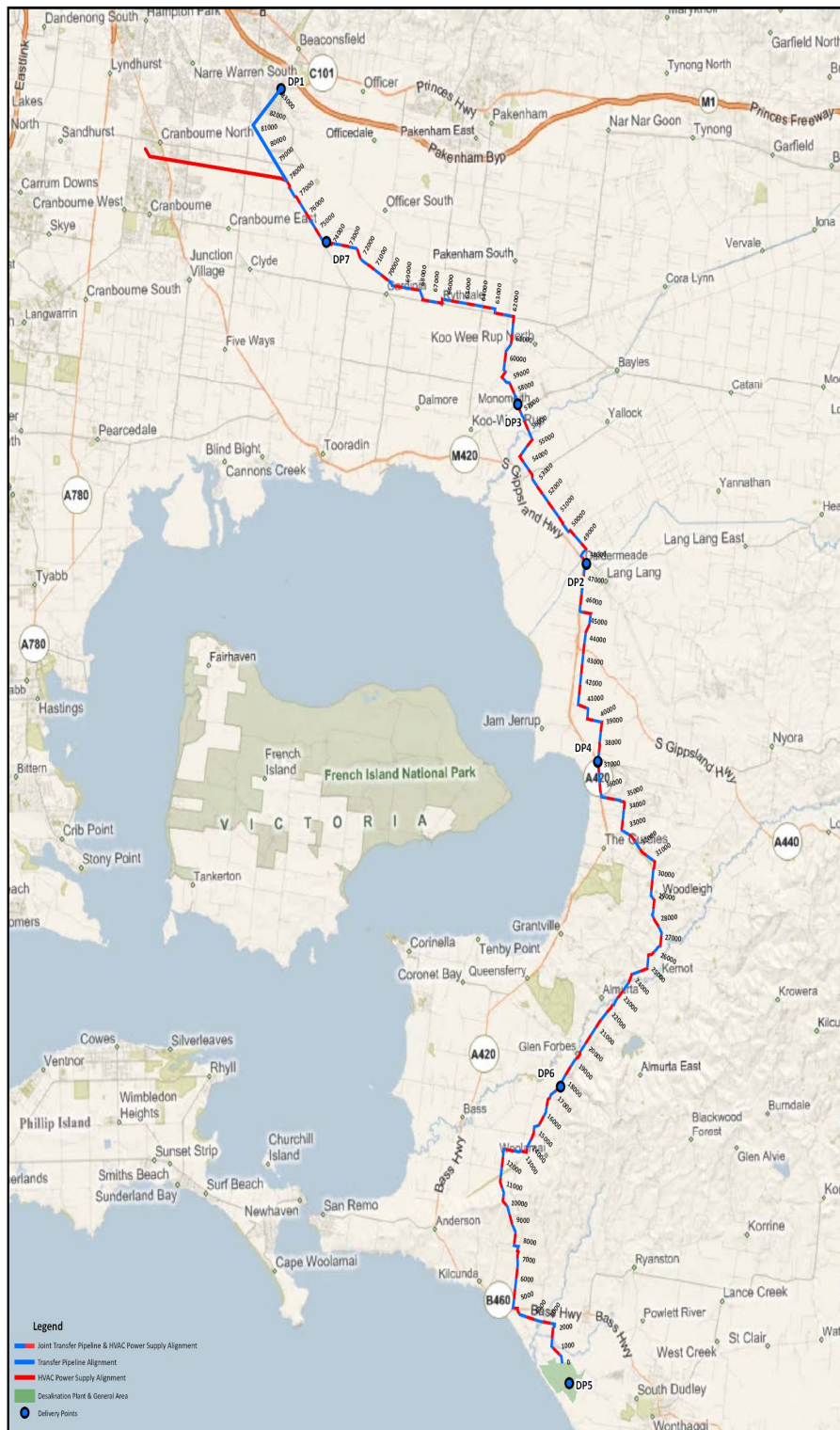


Figure 1: Regional view of Victorian Desalination Project

The following sections provide a brief description of each component of the Project.

3.3.1. Marine intake and outlet structures

The Project required that structures be constructed in the ocean to deliver seawater to the desalination plant and return the concentrated saline brine stream to the ocean.

There are two intake structures which are designed to control the flow velocity of the water at the intake. They are also fitted with screens to reduce entrainment of fish and other marine biota. Intake heads are connected to the intake tunnel via a vertical conduit referred to as a riser. An underground tunnel then transfers the water to the desalination plant via a pump station.

The brine produced as a result of the desalination process contains concentrations of sea salts found naturally in seawater and trace amounts of chemicals added throughout the desalination process. The concentrate is discharged from the plant into the sea via an underground outlet tunnel and then through two outlet diffusers. The intake and outlet structures are located approximately 1150m and 1450m respectively from the plant site in approximately 20m depth of water.

Two significant marine and coastal protected areas are located in the region within approximately 30km of the intake and outlet structures. These are the Bunurong Marine National Park and the Yallock–Bulluk Marine and Coastal Park – which is located immediately adjacent to and offshore from the plant site.

3.3.2. Desalination plant and facilities

The desalination plant draws water from Bass Strait and treats it to potable standards using reverse osmosis (RO) technology. The quality of the product water is specified in the Project Deed. The major infrastructure components in the desalination plant include the following:

- ~ Seawater intake tunnels with pumps and screens
- ~ Pre-treatment plant and buildings
- ~ Reverse Osmosis plant and buildings
- ~ Clear water storage
- ~ Electrical substation
- ~ Ancillary buildings e.g. chemicals storage.

The desalination plant site is located in a rural area with the towns of Dalyston to the north, Wonthaggi to the east and Kilcunda to the west. The access road to the site is the Lower Powlett Road which connects to the Bass Highway. There is a coastal park open to the public which comprises the eastern part of the site. An area of public land comprising of vegetated coastal dunes and foreshore reserve lies between the site and Williamson Beach to the South. The Powlett River is located to the north east of the site, and its floodplain extends into the north-east of the site.

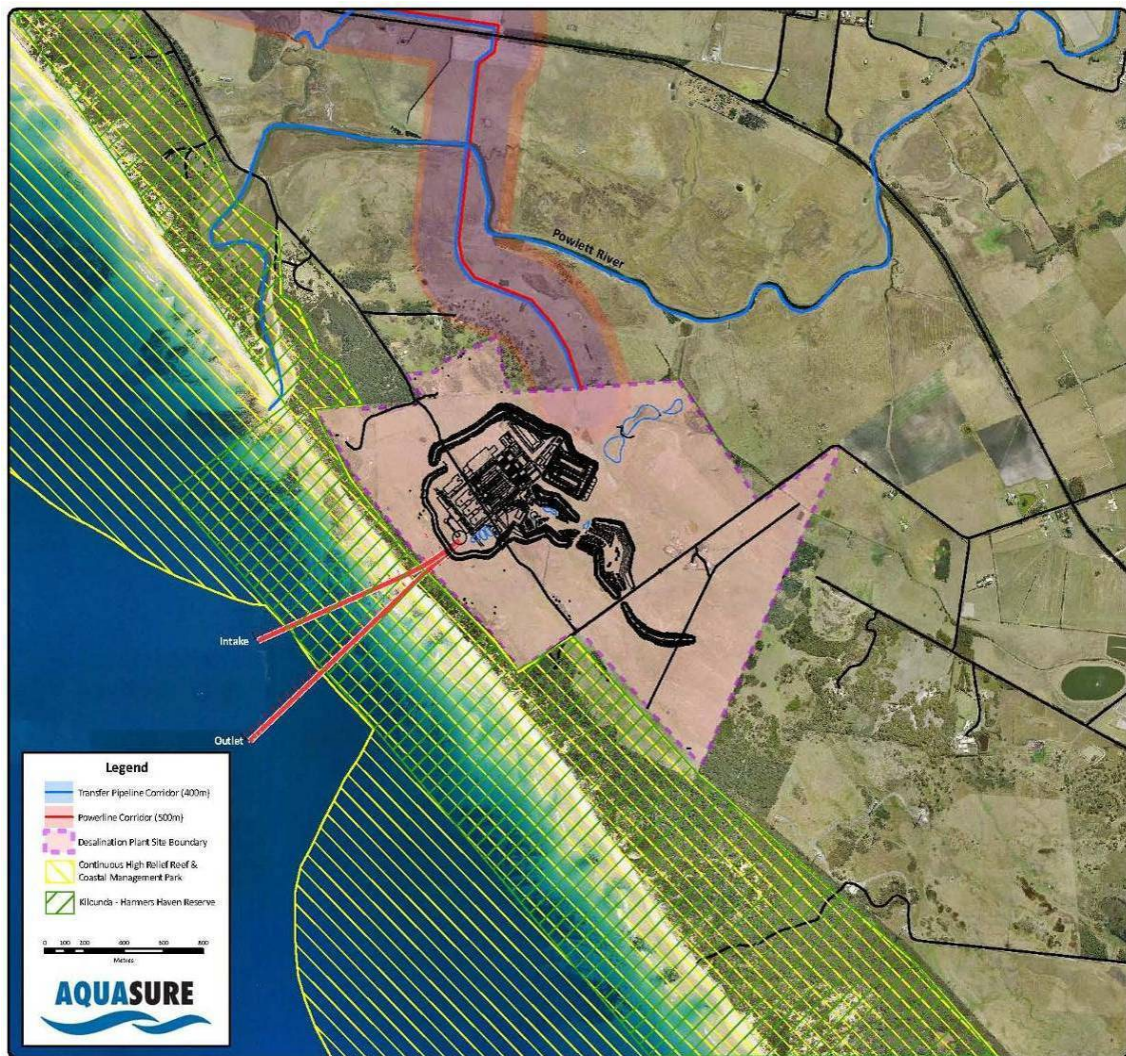


Figure 2: General location of Victorian Desalination Plant and Marine Structures

3.3.3. Utilities

3.3.3.1. Transfer pipeline

The transfer pipeline transports desalinated water from the plant 84 km north to the Melbourne Water supply system in Berwick. Custody transfer occurs at Delivery Point 1 (DP1) north of O'Shea Road in Berwick. There are several intermediate distribution points along the transfer pipeline. The transfer pipeline passes nearby the rural townships of Wonthaggi, Lang Lang and Koo Wee Rup before terminating in Berwick. A number of receptors located in proximity to the transfer pipeline corridor, such as schools, residential premises, sports grounds, clinics, hospitals and wetlands were considered to be sensitive locations in regards to works during construction. Third-Party work enquiries interacting with the transfer pipeline are managed on a case-by-case basis by the State in consultation with AquaSure and AusNet Services.

In addition there is a booster pump station approximately 74.5km north of the desalination plant near the intersection of Pound Road and McCormacks Road. The booster pump station houses pumps which only operate when the desalination plant is operating at or above a capacity of 300 ML per day (i.e when all three production streams are in operation). The pumps are located in a concrete lined excavation approximately 5m deep. The building over the excavation is a simple structure made of tilt up concrete slabs.

3.3.3.2. Power supply

The Desalination Plant has an ultimate power demand of about 140MW (assuming a delivery requirement of 200 GL). The Desalination Plant has its own supply connected to the existing electricity grid at Cranbourne – some 88km to the north west – by means of high voltage (220 kV) alternate current (HVAC) underground cable.

There are intermediate stations at the Booster Pump Station and a mid point site near the intersection of Rayner Hoff Drive and the Bass Highway. The northern intermediate station houses transformers to facilitate the supply of power to the Booster Pump Station. The southern intermediate station houses reactive compensation devices which facilitate the efficient operation of the underground cable. Both intermediate stations are screened from view by earth bunds and vegetative screening.

The 88km long power supply was constructed in the same corridor as the transfer pipeline, except for the final 8km at the Cranbourne end where the electricity corridor diverts along an existing power easement to the Cranbourne Terminal Station.

The power supply passes nearby the rural townships of Wonthaggi, Lang Lang and Koo Wee Rup and terminates in Cranbourne. A number of receptors located in proximity to the construction corridor, such as schools, residential premises, sports grounds, clinics, hospitals and wetlands were considered to be sensitive locations in regards to works during construction. Third-Party work enquiries interacting with the underground cables are managed on a case-by-case basis by the State in consultation with AquaSure and AusNet Services.

3.3.3.1. Fibre-optic cables

Two fibre optic cables were installed in the power supply trench. One SCADA (supervisory control and data acquisition) cable to provide communication along the power supply and one distributed temperature sensing cable to monitor the temperature of the power supply cables. These cables follow the power cable alignment from the Desalination Plant to the Cranbourne Terminal Station.

A third fibre-optic SCADA cable was laid in a separate trench on the eastern side of the pipeline to provide communication along the transfer pipeline. The pipeline SCADA cable is in a separate trench, except at crossings where it is in a PVC conduit. This cable follows the pipeline alignment from the Desalination Plant to Berwick. The SCADA cables also provide back up for one another and capacity for community purposes.

3.4. Environmental context and significant environmental aspects risks

The existing conditions and potentially significant environmental risks relating to the O&M Phase for each Project component were set out in the EES from additional information obtained during the Design and Construction phase, and updated to reflect changes over time.

3.4.1. Marine intake and outlet structures

3.4.1.1. Environmental context

The marine area is an active water environment, frequently exposed to strong waves and winds. Local currents are dominated by wind-driven longshore currents with low tidal currents that run parallel to the coast. Water quality at the Project area is primarily oceanic, with occasional influences from the Powlett River and Western Port.

The marine area is approximately one kilometre from the Powlett River. The estuary wetland of this river supports a number of protected species.

Two significant protected areas are located along the coast: Yallock–Bulluk Marine and Coastal Park and the Bunurong Marine National Park. These areas protect significant marine habitat and species. The Yallock–Bullock Marine and Coastal Park was declared in 2020 and encompasses the former Bunurong Marine Park, Bunurong Coastal Reserve and Kilcunda-Harmers Haven Coastal Reserve.

The intertidal habitat is largely sandy beach inhabited by infaunal species with scattered sandstone and mudstone reef platforms that support a diverse array of flora and faunal species.

Most of the subtidal habitat (to 2.5 kilometres offshore) is dominated by rocky reefs. The reef community is dominated by kelp in shallower waters and red macroalgal and invertebrates in deeper waters with increasing dominance of invertebrates in deeper waters. A variety of reef fish live in these areas.

Biota that may occur in the area include (as at the time of the EES):

- Phytoplankton and zooplankton
- Seven EPBC protected and three *Flora and Fauna Guarantee Act 1988* (FFG) protected whale species
- Three EPBC protected fish species
- Three seal species including the Australian Fur Seal, New Zealand Fur Seal and the Australian Sea Lion
- Thirty-one seabird species including eleven EPBC or FFG listed species, including the Hooded Plover.

Commercial and recreational fishing occurs in the surrounding coastal waters. Commercial fishing operations in the Project area target abalone, rock lobster, finfish, and scallops. The western sector of the South East Trawl Fishery extends to the Project area.

Recreational angling is popular along the coastline encompassing the Project area. The mouth of the Powlett River is a popular area for beach fishing. Locals and visitors swim and surf at Williamsons Beach and recreational boating is common along the coastline.

3.4.1.2. Significant environmental aspects

The controls set out in the Contractor's Environmental Management Plan were implemented during the Design and Construction phase to manage the potentially significant environmental risks identified in the EES.

The potentially significant environmental effects associated with the operation of Marine Structures were identified in the EES as follows:

- entrainment of eggs/larvae, fish, penguins, and consequent effects on marine ecosystem interactions due to intake of seawater
- flow on effects from concentrate discharge.

The design of the marine structures is world best practice and minimises the potential footprint of the VDP in Bass Strait. The impacts of both the intake and outlet, to date, have only been detectable in the immediate vicinity of the structures themselves, within the range anticipated.

3.4.2. Desalination plant and facilities

3.4.2.1. Environmental context

The Desalination Plant site was mostly agricultural land, historically used for grazing. A number of small remnant native vegetation patches remained within the farmed land. These patches contained a low diversity of indigenous species and high weed cover. These patches of vegetation may have acted as 'stepping stones' between habitats for a number of bird species and possibly small mammal species. There were also a number of damp depressions and farm dams in the site which provided habitat for native species.

An area of public land comprising vegetated coastal dunes and foreshore reserve lies between the site and Williamsons Beach. The beach is used for a range of recreational activities all year round. A number of Aboriginal artefact scatters were found on the site and adjoining coastal dunes, the most significant sites, including middens, occur in the dunes and will not be disturbed by the project. The Powlett River is located to the north-east of the site, and its floodplain extends into the north-east area of the site.

The Desalination Plant site is located within the Gippsland Plain Bioregion. There are a number of different Ecological Vegetation Classes (EVCs) present as remnant vegetation patches within the site area, EVCs are the standard unit for classifying vegetation types in Victoria. EVCs identified (at the time of the EES) include:

- Coast Banksia Woodland

- Swamp Scrub
- Modified Coast Banksia Woodland
- Coastal Dune Scrub/Coastal Dune Grassland Mosaic
- Damp Sands Herb-Rich Woodland
- Aquatic Herbland
- Riparian Scrub.

At the time of the EES, a total of 118 indigenous and 64 introduced vascular plant species had been recorded in the Project area. This includes one EPBC-listed flora species, River Swamp Wallaby Grass which was recorded in small numbers in low lying parts of the site. One FFG-listed flora species, Merran's Sun-orchid, has potential to occur on the plant site and foreshore reserve but was not recorded during recent surveys.

A total of 114 vertebrate fauna species including birds, mammals, reptiles, frogs and fish species were recorded during field investigations.

Protected species associated that occur within the vicinity of the plant site include a number of EPBC and FFG listed species including:

- Orange-bellied Parrot (EPBC, FFG listed)
- Growling Grass Frog (EPBC listed)
- Dwarf Galaxias (EPBC, FFG listed)
- Southern Brown Bandicoot (EPBC listed)
- Little Egret (FFG listed)
- White-bellied Sea-eagle (FFG listed).

However, none of these species are dependent on the plant site.

3.4.2.1. Significant environmental aspects

The controls set out in the D&C Contractor's Environmental Management Plan were implemented during the Design and Construction phase to manage the potentially significant environmental risks identified in the EES.

The potentially significant environmental effects associated with operation of the Desalination Plant are:

- visual impacts of the Desalination Plant
- noise generated from the plant affecting sensitive locations.

The design of the Desalination Plant has minimised the potential for these effects to occur during operation.

3.4.3. Utilities

3.4.3.1. Environmental context

The utilities are located within a corridor that traverses the low-lying areas of Corinella, Koo Wee Rup and Lang Lang. Land use in these areas is predominantly agricultural and larger sized rural residential landholdings. There are a number of waterways ranging from rivers, streams and drains along the utilities corridor. Many of these waterways rarely contain water. The utilities cross a number of major waterways.

Vegetation within the utilities corridor is mostly introduced, with areas of scattered native vegetation at the Holden Proving Ground, along road reserves and next to waterways. The utilities alignment crosses mostly pasture and other areas of introduced vegetation, which have a low likelihood of supporting threatened fauna species.

Threatened fauna species which may occur include, as identified at the time of the EES:

- Giant Gippsland Earthworm (Earthworm habitat has been found along utilities corridor)

- Australian Grayling (exists in waterways crossed by the utilities corridor including Cardinia Creek, Bunyip and Lang Lang Rivers)
- Dwarf Galaxias (known to occur in Yallock Creek in the vicinity of the utilities crossing and is likely to inhabit other waterways intersected by the utilities).
- Growling Grass Frog (inhabits six drains at or close to where the proposed intersect with the utilities would occur)
- Southern Brown Bandicoot (potential habitat within the utilities corridor)
- Orange-bellied Parrot (utilities corridor intersects a very small area of habitat for this species).

There are twenty previously recorded Aboriginal cultural heritage sites within the 400-metre corridor assessed for the utilities; four of these were within the proposed construction easement. An Aboriginal heritage field study identified three new sites within the utilities construction corridor. The sandy rises along the Koo Wee Rup Swamp and the low hills of The Gurdies are highly sensitive landforms. However no additional Aboriginal heritage sites were found along the utilities corridor during construction.

3.4.3.1. Significant environmental aspects

The controls set out in the D&C Contractor's Environmental Management Plan were implemented during the Design and Construction phase to manage the potentially significant environmental risks identified in the EES.

The impacts of operation of the utilities are expected to be negligible. Any excavation during repair and maintenance would be within the existing pipeline/power supply disturbance footprint. Any discharge of surplus water which may be required from valves on the pipeline during maintenance is subject to a protocol implemented by the O&M Contractor.

3.5. Performance requirements

Environmental PRs were developed during the EES process to specify the performance that the actual project must achieve rather than the process used to achieve it. This performance based requirements approach ensures a balance between:

- ~ Achieving acceptable outcomes for the community and environmental values
- ~ A delivery mode with sufficient flexibility to accommodate specific challenges and that optimises potential efficiencies in construction and operation.

The performance requirements set the environmental parameters for the Project and form part of the Project Deed which includes the PS&PR as Annexure 3.

The Project Deed (including the PS&PR) specifies the environmental management framework to be implemented. This framework is discussed in detail in Appendix S3 of the PS&PR (Environmental Requirements). It identifies the requirement for the preparation of an EMS, Project Environmental Management Plan (EMP), and Component EMPs for each Project area. Subsequently, it was agreed that during the operation and maintenance phase, the Component EMPs for the Desalination Plant and the Transfer Pipeline could be incorporated into a single environmental management plan (the O&M EMP). This O&M EMP is maintained by Watersure. Separately AusNet maintains its own EMP in relation to the Power Supply, and AquaSure maintains a specific Management Plan (including environmental management) for its role in undertaking repair and maintenance of the Underground Cable Assets.

The Project Deed also requires the engagement of and defines the role of the Environmental Management Representative (EMR). The role of the Environmental Auditor (EA) is defined in Clause 8 of the Project Deed.

Further details on the role of the EA and EMR, and more broadly AquaSure's response to the requirements of the Project Deed, are described below in Section 5.

4. Environmental Management Framework – O&M Phase

4.1. Project Components

During the O&M phase, AquaSure is responsible for operating, maintaining and repairing the Desalinated Water Supply System.

AquaSure is also responsible for arranging electricity supply to the desalination plant, and must arrange offset the electricity used in the operation of the desalination plant and water transfer pipeline by purchasing and surrendering Renewable Energy Certificates (RECs) (or by utilising an equivalent alternative arrangement following the end of the REC scheme).

4.2. DWSS

AquaSure has subcontracted responsibility for operating, maintaining and repairing the DWSS to the O&M Contractor, under the O&M Contract, which is largely a pass through of the O&M components of the Project Deed. For the Desalination Plant and Transfer Pipeline, for the period of the O&M phase following RTF until the Expiry Date, the O&M EMP will be the responsibility of Watersure.

Through the implementation of this EMS Manual, AquaSure will continue to ensure that Watersure has appropriate management systems in place and meets their obligations under the Project Deed and environmental legislation.

4.3. Electricity Supply and RECs

AquaSure has entered into the Power Sale Agreement and the REC Supply Agreement with AGL Energy for the purchase of electricity and RECs as required by clause 33 of the Project Deed.

The RECs must be in accordance with the requirements of the Project Deed, including the *Renewable Energy (Electricity) Act 2000* (Cth) and the Victorian *Renewable Energy Act 2006* (Vic).

AquaSure transfers the required RECs to the State after the end of each Supply Period (ie 30 June of each year) in accordance with Clause 33 of the Project Deed, to allow the Project to meet its objective of offsetting 100% of the Project's Electricity Usage with renewal energy.

AquaSure's CEO and CFO are responsible for ensuring that the Project Deed requirements for transfer and surrender of RECs are met.

4.4. ETCA

As noted elsewhere in this EMS Manual, the ETCA does not form part of the DWSS, and therefore following "Electricity Handover" under the Project Deed (which occurred in December 2012), there are no "O&M Activities" relating to the ETCA under the Project Deed.

The ETCA is operated by AusNet, as the "Electricity Operator" under the HVAC Operation Agreement between AusNet and AquaSure, which maintains the component EMP for the Power Supply. AusNet is not subject to this EMS Manual.

Separate to the Project Deed, AquaSure has entered into a separate agreement with the State, pursuant to which AquaSure is responsible for the maintenance and repair of the Underground Cable Assets which form part of the ETCA. As noted elsewhere in this EMS Manual, these maintenance and repair activities have dedicated documentation and are not subject to this EMS Manual.

4.5. Environmental Management Approach

The following environmental management approach will be implemented during the O&M phase:

- Implementation of the operating and maintenance protocols that address the environmental aspects of the Project.
- Specific environmental risks associated with shut down and maintenance periods are identified and addressed.
- Clear environmental management standards are set, communicated and enforced for personnel, consultants, subcontractors and suppliers.
- Clear environmental accountabilities and responsibilities are established for all key management positions.
- Inspection, monitoring, auditing and reporting is in place to establish performance against the requirements of the O&M EMP.
- All personnel are aware of their environmental responsibilities in so far as they are relevant to the work they are undertaking.

5. Organisational structure and resourcing

5.1. AquaSure's Organisational structure

The key management roles in AquaSure are:

- Chief Executive Officer
- General Counsel & Company Secretary
- Chief Financial Officer
- Environmental Management Representative.

AquaSure, with the support of the EMR, has ultimate responsibility for ensuring that all the necessary activities are undertaken to comply with regulatory and contractual requirements and mitigate identified environmental risks through implementation of strategies and plans. The EMR is also a key member of the Project leadership team. Where AquaSure is the approval holder, ultimate responsibility remains with AquaSure, even where management is delegated to the O&M Contractor.

The O&M Contractor is accountable to AquaSure for its environmental performance. To achieve the environmental PRs there is close liaison and cooperation between the AquaSure EMR and the O&M Contractor, particularly the designated O&M Contractor representative, the Environmental Managers and associated teams.

5.2. Collaborative approach

Throughout every stage of the Project, the development and implementation of AquaSure's Environmental Management Framework will be influenced by a number of key stakeholders via approvals or audit and performance review processes. AquaSure recognises the importance of this approach to ensure that performance requirements are met and continuous improvement is achieved.

Throughout the Project, comments from relevant government agencies will be sought, as required, in the development and continual improvement of the AquaSure Environmental Management Framework. These government agencies are:

- ~ the State – regarding planning matters and terrestrial and marine flora and fauna impacts
- ~ EPA – regarding pollution issues in relation to land, water, air and noise/ vibration.

5.3. Roles and responsibilities under the EMS

5.3.1. AquaSure

AquaSure's Project Management Plan describes the roles and responsibilities of AquaSure top management. Key roles for environmental responsibility are summarised below

- The Chief Executive Officer (CEO) is accountable for facilitating and adequately resourcing the achievement of the project objectives, including the environmental objectives and the operation of the project. The CEO is also responsible for relationships with regulatory authorities. The CEO is the key interface between AquaSure, internal and external stakeholders and the community.
- The EMR is required under the Project Deed. The EMR plays a fundamental role on the project in assessing that the PRs are understood and met by AquaSure and the O&M Contractor. The role of the EMR is defined in Appendix S3 of the PS&PR. The EMR is responsible for ensuring the effectiveness of the EMS as well as liaison between the State, the O&M Contractor and other affected groups. The EMR is responsible for ensuring that the EMS conforms to the requirements of ISO 14001. The roles and responsibilities for the EMR under this EMS Manual are summarised in Table 1.

Table 1: Responsibilities of Environmental Management Representative

Responsibilities	Section of EMS Manual
<ul style="list-style-type: none"> liaising with and keeping the State informed on issues relating to environmental compliance affecting the Project and environmental requirements through the D&C and O&M Contracts 	<ul style="list-style-type: none"> 8.3
<ul style="list-style-type: none"> monitor, audit and report on environmental performance including the performance of each of the various EMS Manual, EMP and all subsidiary environmental plans 	<ul style="list-style-type: none"> 9, 10.1
<ul style="list-style-type: none"> monitor the status and development in legal requirements, stakeholder concerns and best practice 	<ul style="list-style-type: none"> 7.5, 9.2
<ul style="list-style-type: none"> review each of the EMPs and the EMS Manual 	<ul style="list-style-type: none"> 6.3, 9.5, 10.2
<ul style="list-style-type: none"> investigate environmental incidents and implement emergency responses and corrective actions 	<ul style="list-style-type: none"> 8.6
<ul style="list-style-type: none"> deliver training and awareness programs to all Project team members 	<ul style="list-style-type: none"> 8.2
<ul style="list-style-type: none"> implement a system of corrective actions and continuous improvements 	<ul style="list-style-type: none"> 9.3
<ul style="list-style-type: none"> establish environmental communication channels, including processes for managing external communications and addressing environmental issues raised by stakeholders, including complaints 	<ul style="list-style-type: none"> 8.3
<ul style="list-style-type: none"> recommend practicable changes in order to improve environmental performance 	<ul style="list-style-type: none"> 9.5, 10.2
<ul style="list-style-type: none"> provide timely and high quality environmental advice 	<ul style="list-style-type: none"> 9.5, 10.1, 10.2
<ul style="list-style-type: none"> The EMR will be responsible for maintaining and updating the EMS Manual in accordance with the AquaSure Project Management Plan 	<ul style="list-style-type: none"> 6.3, 6.6

5.3.2. O&M Contractor

The O&M EMP details the specific roles and responsibilities of personnel, including the environmental manager. AquaSure has delegated the performance of the project activities, including environmental management, to the O&M Contractor. Therefore, the day to day management of environmental issues on the Project are managed by the O&M Contractor.

5.4. Environmental Auditor

The Project Deed requires the engagement of the EA. The EA is a joint appointment of the State and AquaSure under Clause 8 of the Project Deed. The EA was appointed pursuant to the IR&EA Deed of Appointment (which was amended and restated on 28 August 2009).

The key function of the EA with respect to environmental matters is carrying out audits on the Project Activities to determine whether they have been undertaken in accordance with the EMS Manual, EMP and the Environmental Requirements. The EA will issue Environmental Audit Reports to the State and AquaSure.

6. Environmental Management Documentation

6.1. Overview

The EMS manual is part of AquaSure's integrated management system, as described in the Project Management Plan.

The PS&PRs state that AquaSure is required to develop, implement and maintain an overarching Project EMP and discrete EMPs (Component Specific EMPs) consistent with the EMP. Table 2 shows how the EMS integrates with AquaSure's contractual and regulatory requirements.

Table 2: Environmental Management Documentation Hierarchy

Documentation level	Documentation elements
State requirements	Project Deed and PS&PR incorporating the requirements of: <ul style="list-style-type: none"> Performance Requirements specified by the Minister for Planning as a result of the Environment Effects Statement process Regulatory requirements
Project Environmental Management System	AquaSure EMS Manual setting out: <ul style="list-style-type: none"> AquaSure's EMS the framework for development of the O&M EMP and other requirements
Project Environmental Management Plan	Comprising: <ul style="list-style-type: none"> This EMS Manual O&M EMP
Operations & Maintenance EMP	Comprising O&M EMP addressing O&M activities (incorporating desalination plant (including marine structures) and transfer pipeline)
Subject-specific documents	Tailored to each EMP, including: <ul style="list-style-type: none"> Attachments (e.g. risk register, obligations register, monitoring schedule) Sub plans, manuals and procedures
Records and checklists	Tailored to each EMP, including: <ul style="list-style-type: none"> Monitoring and inspection records Checklists Reports

The EMS Manual is an AquaSure document prepared in accordance with the AquaSure PMP. The EMS Manual will be maintained by and be the responsibility of the AquaSure EMR. AquaSure has delegated to the O&M Contractor to prepare, finalise, implement and update the project specific EMP (and associated plans) as outlined in Appendix S11 of the PS&PR. The O&M Contractor is responsible for developing and conducting the works associated with its contract with AquaSure, including achieving the environmental PRs.

AquaSure retains the responsibility of ensuring that the framework for development of project specific EMPs is developed in accordance with EMS requirements. Therefore, the O&M EMP requires review and approval by the AquaSure EMR (see Section 6.3).

The PRs specified in the PS&PRs have been set as the objectives and targets for the Project. These are reflected within the O&M EMP.

Given that the environmental objectives are specified in the Project Deed and are contractual requirements, the performance criteria are also contained within the Obligations Register of the O&M Contractor. This register identifies the contractual, statutory and other requirements for the Project and describes how the obligations will be complied with. The Obligations Register ensures that appropriate management measures and controls are in place to address the PS&PR. PRs are addressed through the O&M EMP. These provide the environmental management programmes to address the requirements.

6.2. Documentation

6.2.1. EMS manual

6.2.1.1. Purpose

The EMS Manual is a guidance document that provides a structured approach to managing environmental outcomes during all stages of the Project. This EMS Manual has also been developed to enable AquaSure to comply with international environmental management standard AS/NZS ISO14001: 2015.

The EMS Manual has four primary user groups:

- ~ The AquaSure EMR and O&M Contractor team who will use it as a tool for managing environmental outcomes throughout the project and obtain/maintain certification to ISO14001:2015
- ~ the State and other regulatory authorities who can refer to this manual to gain assurance that AquaSure have the necessary processes in place to manage and champion the Project environmental outcomes
- ~ Independent, external auditors who will be commissioned to regularly verify AquaSure's compliance with ISO 14001
- ~ Environmental Auditor who reviews AquaSure's compliance with the Project Deed.

The requirements described within this EMS Manual represent the minimum standard to be implemented by AquaSure's employees, the O&M contractor and other AquaSure subcontractors and consultants as applicable to their specific roles and responsibilities.

6.2.2. O&M environmental management plan

6.2.2.1. Purpose

The O&M EMP must be prepared to comply with AS/NZS ISO 14001:2015.

Its key purpose is to:

- ~ Ensure compliance with the contractual Project Deed including the PS&PR
- ~ Implement the AquaSure Environmental Policy
- ~ Provide certainty of delivery of the prescribed environmental outcomes for relevant activities
- ~ Implement a system for legislative and contractual compliance
- ~ Establish design, mitigation and management measures to achieve the Environmental Requirements of the Project, having regard to risks the project poses to the environment.
- ~ Ensure that Project design and change management processes incorporate leading practice environmental design and sustainability principles to minimise the potential impacts of construction and operation to the environment and community
- ~ Ensure that construction and operational work method statements effectively manage potential impacts to the environment and community
- ~ Develop, implement and monitor management measures
- ~ Enable continual improvement.

6.2.2.2. Structure

The O&M EMP must include the following components:

- ~ **Introduction, purpose and scope:** Establish the background to the Project and set the context of the Project phase
- ~ **Environmental management framework structure:** Summarise the framework in place.
- ~ **Planning:** Describe the set up and planning requirements that ensures that all environmental compliance can be achieved. This can be broken into:
 - Identify, plan and track EMS Manual, legal, contractual and other requirements
 - Define the Project objectives and targets
 - Identify and prioritise environmental aspects and impacts through the Environmental Risk Register
 - Identify legal and licence requirements through the Environmental Legislation and Licence Registers
 - Define project obligations including performance criteria and PRs in the PR Register
- ~ **Implementation and operation:** Describe how and who is responsible for the implementation of the EMP including the maintenance of all attachments.
- ~ **Checking:** Describe what monitoring, evaluation and auditing is being undertaken to demonstrate that all activities are complying with the requirements of the EMP. This includes demonstrating compliance using the Environmental Inspection Checklist
- ~ **Review, reporting and improvement:** Describe how and who is responsible for the implementation of the EMP.
 - Establish and maintain programs and compliance to achieve obligations including Monitoring, Inspection Auditing and Reporting schedule, Environmental Training Matrix and List of Technical Reports and Documents

6.3. Authorisation

Without limiting AquaSure's obligation to notify any revisions or amendments to the EMS Manual to the State and EA and AquaSure overall responsibility for the EMS Manual, revisions or amendments to this EMS Manual and subsidiary EMPs are subject to the authorisation process set out in the tables below (whether for a major or minor revision).

Table 3: EMS Manual authorisation

Action	Responsibility
Consultation with relevant government agencies	AquaSure EMR
Consultation with the Contractor	AquaSure EMR
Approval	AquaSure EMR
Approval	CEO, AquaSure
Consent	The State
Review and Assent	Environmental Auditor

Table 4: O&M EMP authorisation

Action	Responsibility
Consultation with relevant government agencies	Contractor
Consultation with AquaSure	Contractor
Approval	Project Director, Contractor
Approval	AquaSure EMR
Consent	The State
Review and Assent	Environmental Auditor

Major revisions to this EMS and/or the O&M EMP will occur where there is a significant change to environmental requirements, methodology and/or scope that change the approach to the works. This includes comments from relevant government agencies that will be sought throughout the Project in the development and continual improvement of the EMS Manual and EMPs.

Minor revisions are those that do not change the approach to the works or the environmental performance standards and may include changes to the EMS Manual or EMPs which:

- ☐ Provide clarification or improvement to environmental management practices
- ☐ Add / modify activities and associated controls such that there is no increase in level of environmental risks
- ☐ Add new obligations and associated controls e.g. for a new environmental permit
- ☐ Update background information to more accurately reflect the status of the Project or redraft sections of the manual to improve readability, without changing the approach to the works or the environmental performance standards

All revisions deemed to be minor by AquaSure will be discussed with the State on a case by case basis, to confirm agreement on the classification. Minor revisions require State consent and will be undertaken as per the following protocol:

Minor revision protocol:

Proposed minor changes to either the EMS Manual or the EMP will be provided informally to the State and the EA for review, prior to formal submission. The proposed changes will be accompanied by a Changes Register.

The approved documents will be uploaded to AquaSure Website and contractor document management system.

The process for the development of revisions, amendments and additions to the EMS Manual and EMPs shall take into account the time required for the relevant consultation and authorisation processes for major and minor revisions, prior to the commencement of any work activities.

The EMS Manual and the EMPs and associated documents must comply with the Reference Documents. These are set out in Appendix S2 to the PS&PR. The environmental management document must comply with the current version at the time

The hierarchy of reference documents is:

- If a reference document provides for a 'desirable' and an 'absolute' design limit, the desirable design limit is to apply unless other design limits are approved by the State.

6.5.1. EMS manual

Document management system G: drive on AquaSure server

If necessary, hard copies are to be derived from the signed electronic master and are deemed 'uncontrolled'

Master documents that have been superseded are identified and located within the controlled documents/drawings file of the above mentioned system.

6.5.2. O&M EMP

The O&M Contractor is responsible for maintaining the master of the O&M EMP in its document management system along with all related management and associated documentation. Masters that have been superseded must be identified and located within the controlled documents/ drawings file of the above mentioned system.

6.6. Control of documents

6.6.1. EMS manual

This EMS Manual and associated documents are controlled in accordance with “Document and Record Management” AQS-SYS-PR001.

6.6.2. O&M EMP

The O&M EMP and associated documents will be controlled by a Contractor document control procedure consistent with clause 7.5 (Documented Information) of ISO 14001.

6.7. Confidentiality

Any management plan/attachments/references associated with this EMS are copyright protected and will not be copied or reproduced without the express permission of an AquaSure authorised representative.

6.8. Distribution

6.8.1. EMS manual

The AquaSure EMR ensures that the current version of this document is available to all AquaSure staff and the Contractor, and issues controlled or uncontrolled copies to applicable external organisations where necessary.

Issue details are recorded in the AQS document management system. When issued, it is the responsibility of the user to replace superseded material with the current issue.

6.8.2. EMP and associated documentation

The O&M Contractor Project Director ensures that the current version of the EMPs is available to all O&M Contractor personnel and issues controlled or uncontrolled copies to applicable external organisations where necessary.

Issue details are recorded in the O&M Contractor’s document management system. When issued, it is the responsibility of the user to replace superseded material with the current issue.

The O&M Contractor must provide full and current access to the AquaSure EMR of all:

- EMPs and associated documentation
- documents and records relevant to environmental management.

7. Planning

This section of the manual describes the “planning” phase of the EMS Manual and how this will be implemented. In this context, the EMS Manual provides the O&M Contractor with the tools to:

- ~ Prepare and maintain the O&M EMP
- ~ Identify and prioritise environmental aspects and impacts that require management
- ~ Identify legal and other regulatory requirements that need to be considered
- ~ Establish environmental objectives and targets
- ~ Establish and maintain programs for achieving these objectives and targets.

7.1. AquaSure environmental policy

AquaSure understands that managing its environmental outcomes is a key component in achieving sustainable development outcomes for the VDP, local and regional economies, and the people directly and indirectly affected by the Project.

AquaSure has established an Environmental Policy (Attachment B) which describes the AquaSure commitment to seeking best value solutions for managing its environmental outcomes, complying with its applicable legal requirements and other obligations, and seeking to continually improve the project’s environmental performance.

The Environmental Policy will be available to the public via the AquaSure website. It will also be displayed at all AquaSure work sites and communicated to staff and other interested parties via inductions and ongoing awareness and training programs.

The policy is issued under the authority of the AquaSure CEO and will be reviewed every two years or sooner if warranted. The O&M EMP will provide the tools for the Contractor and its subcontractors to fulfil this policy.

7.2. Objectives and targets

7.2.1. State

The EES and the State defined the Project objectives and targets. The relevant environmental objectives for the Project are listed as:

- ~ To minimise the environmental impact of the Project through design and appropriate risk management and mitigation measures and in particular, to minimise adverse impacts on the coastal and marine environment from construction activity, visual intrusion, noise and waste discharge and disposal.
- ~ To protect the beneficial uses of the coastal and marine environment, including the landscape and recreational values of the adjacent coastal reserve.

These objectives form the core of the contractual Project Deed environmental requirements including PS&PR.

7.2.2. AquaSure

AquaSure’s overarching environmental objective is to:

- comply with the environmental standards established for the Project through appropriate risk management
 - optimise energy efficiency and offset any impact through the purchase of renewable energy credits for 100% of the electricity used at the Desalination Plant and Transfer Pipeline
 - protect the environmental values and beneficial uses of the coastal and marine environment
- such that AquaSure is recognised as a good environmental citizen.

AquaSure's policy commitment to minimise resource usage, pollution and generation of wastes is given effect through requirements on the Contractor (see Section 7.2.3).

7.2.3. O&M Contractor

The O&M Contractor is responsible for identifying and achieving the objectives and targets (PRs) associated with their activities, consistent with clause 6.2 (Environmental objectives and planning to achieve them) of ISO 14001.

The O&M Contractor must develop annual measurable targets for energy, water and chemical use, and waste reduction and detail how these will be achieved in an action plan. The O&M Contractor must review the extent to which these targets have been met and report annually to AquaSure.

The O&M Contractor is responsible for maintaining this register.

7.3. Existing environmental conditions and issues

The O&M Contractor must identify and regularly review the issues, risks and opportunities which affect the environmental outcomes of the Project.

This involves the environmental aspects and impacts associated with activities, products, and services that AquaSure can control or influence. The means by which this can be done includes, but is not restricted to:

- ~ Review of the EES and associated documents (e.g. Minister's assessment)
- ~ Review of tender and contract documents
- ~ Review of other technical and non-technical references, studies, data, reports, and other sources of public media, including the reference documents described in Section 6.4
- ~ Review of plant design, methodologies, and risk assessments
- ~ Collective knowledge, professional experiences and judgments of the team
- ~ Requirements, management systems and contributory insights of consortium members.

A list of technical reference documents used for identifying and assessing environmental risks and opportunities will be included in the respective O&M EMP. The reference list must include:

- Bibliographic citation
- Revision status / date
- Relevance to the project

7.4. Environmental aspects and impacts

7.4.1. EES risk assessment

The EES environmental risk assessment process is described in detail in Volume 1, Chapter 5 of the EES and in the Risk Assessment Report (Maunsell 2008, Technical Appendix 6 of the EES). Key aspects of this process are summarised below:

- ~ The potential impact pathways associated with each Project activity were identified and assigned a consequence rating to the impact if it materialised. A single action or activity may have a number of impact pathways, for example trenching through a waterway may affect native flora and fauna, surface water and groundwater users.

- ~ A consequence level was assigned after taking into account Project controls that would be in place to reduce risk. Project controls are defined as existing processes, policies, devices, practices or other actions that are in place to minimise the negative impacts of the Project D&C activities. For the EES reference project the controls included the requirements of applicable legislation and policy, operating procedures required for equipment and machinery and the design features of the reference project. The risks detailed in the EES process do not take into account the PRs as these were developed from the iterative process during the panel inquiry and finalised in the Minister's assessment. These PRs are detailed in the Obligations Register.
- ~ Once a consequence rating has been developed for an impact pathway, the likelihood of the impact occurring was also identified.
- ~ The risk rating is then developed as a combination of consequence and likelihood.

The EES environmental risk assessment was undertaken on the reference project developed in the EES and not the finalised project design as developed by AquaSure. Therefore AquaSure required the D&C Contractor to complete an additional and specific project environmental risk assessment in relation to the D&C Contractor's project design, using the EES risk assessment as a reference point. Details regarding this risk assessment process are provided in the following sections.

7.4.2. AquaSure

The role of AquaSure in delivery of the Project is described in section 3. Roles and responsibilities of key AquaSure staff in establishment and maintenance of appropriate environmental performance to meet the Project Deed and other regulatory obligations is summarised in section 5.3, with further detail provided in the AquaSure PMP.

Environmental aspects and impacts of AquaSure functions, and associated risk assessment, are provided in the AquaSure Environmental Risk Register. The risk assessment process is developed in accordance with AquaSure "Risk Management Plan" AQS-RIS-PL001, for identified environmental aspects and impacts associated with these activities, and includes taking into account:

- Change, including planned or new developments, and new or modified activities
- Abnormal conditions and reasonably foreseeable emergency situations.

The identification of these aspects and impacts will be undertaken and maintained by the EMR or suitably qualified and experienced environmental professionals.

The AquaSure EMR is responsible for providing input to the AquaSure Risk Register, in accordance with the AquaSure "Risk Management Plan" AQS-RIS-PL001.

In providing input to the Risk Register, the AquaSure EMR will take into account:

- The O&M environmental risk registers
- The status of the PRs
- The views of key stakeholders.

7.4.3. Contractor

The Contractor is responsible for identifying and managing the significant environmental aspects of their activities, consistent with clause 6.1.2 (Environmental aspects) of ISO 14001. The Contractor will maintain an environmental risk register. The Environmental Risk Register must be referenced in the O&M EMP.

The Environmental Risk Register must include:

- Area and activity/service
- Potential Hazard (Environmental Aspect)
- Asset at Risk (Potential Impact)
- Probability

- Consequence
- Inherent Risk (Before Controls)
- Controls: current or planned prior to work
- Control effectiveness
- Residual Risk (After Controls)

In accordance with clause 4 (b) of Annexure 3 of the PS&PR, the environmental risk assessment must detail the preventative measures required to minimise the risk of incidents and emergencies.

The purpose of the Environmental Risk Register is to detail the activity or methods to be used on the Project, the potential hazard (environmental aspect) and the environmental risks (potential impacts) to determine an inherent environmental risk associated with the activity. The register then lists an appropriate control measure to be implemented to lower this inherent risk to an acceptable level.

The Contractor must review the risk register annually as a minimum. The review takes account of any new or revised activities, procedures, environmental context or issues raised by stakeholders. The review may also be done at other times such as when new aspects or impacts are identified or new activities proposed.

The Contractor will conduct a risk assessment for each activity to determine the severity and likelihood of an impact on the environment and to prioritise its significance in accordance with ISO 31000:2018 Risk management - Principles and guidelines. This process considers potential regulatory and legal risks as well as taking into consideration the concerns of community and other key stakeholders. It also builds on the information generated through the EES risk assessment.

The O&M Contractor will retain records associated with identifying and assessing the significance of environmental aspects and impacts. These records could include annual reports, strategic plans, minutes of environment team meetings and workshops.

The O&M Contractor will establish and implement risk assessment methods for identifying and managing the environmental aspects of specific activities. This can include tools such as:

- Work method statements (WMS) - a high level, activity-specific risk assessment and planning tool. WMS detail all steps involved in an activity to be undertaken along with their respective risk control measures.
- Job Safety and Environmental Analysis (JSEA) – a tool to identify risks in hands-on type activities

7.5. Compliance obligations

7.5.1. AquaSure

AquaSure has access to a suitable independent source (Environment Essentials Pty Ltd) in order to maintain access to applicable legal and other relevant environmental requirements. The AquaSure EMR is responsible for confirming how these requirements apply to the environmental aspects of the Project.

The PRs specified in the Project Scope and Performance Requirements (PS&PRs) are obligations on the project, particularly Appendix S3 Environmental Requirements to Annexure 3 of the PS&PRs. These are implemented through the O&M EMP, except for the provision of renewable energy certificates which is addressed by the Electricity Supplier and REC Contractor.

The AquaSure EMR has access to the Contractor's compliance obligations register and therefore has current access to all of the licences, permits and approvals, where these are not held directly by AquaSure.

7.5.2. O&M Contractor

The O&M Contractor will establish and maintain registers of legal, contract and other obligations as specified in this EMS Manual as follows:

- ~ Environmental Legislation Register

- ~ Licences, Permits and Approvals Register, including identification of the approval holder
- ~ Environmental Obligations Register.

The O&M Contractor will:

- ~ Ensure current and new obligations are recognised and captured in these registers as they arise, and ensure that subsequent amendments to the O&M EMP or other management tools are made to ensure relevancy and compliance
- ~ Ensure that superseded and out-dated requirements are removed from the O&M EMP and management tools
- ~ Be responsible for communicating and implementing means to demonstrate compliance with current and new legal and other requirements to members of the team who are accountable for, or can influence, AquaSure's ability to comply with those requirements
- ~ Notify AquaSure when a new or revised approval, licence or permit is issued.

The O&M EMP will define the means by which the O&M Contractor will be kept informed of changes to legislation and other obligations, consistent with clause 6.1.3 (Compliance obligations) of ISO 14001.

Issues relating to problems with compliance with statutory approvals must be notified promptly to AquaSure, in addition to the reporting requirements in Section 10.1.3

7.5.2.1. Legal requirements and regulatory framework

The Legislation Register will:

- ~ Identify all relevant international, Commonwealth, State and Local Government legislation, Codes of Practice, and Australian Standards (or those which have the potential to be relevant if a realistic change in scope or method occurred)
- ~ Identify its relevance to the Project (particularly if it is relevant to an AquaSure governance or management requirement, or if an operational requirement preferably linked to affected areas and/or activities).

The Legislation Register is associated with the O&M EMP.

7.5.2.2. Licence, permit and approval requirements

The Licence, Permit and Approvals Register will:

- ~ Identify and track all regulatory approvals known will be needed throughout the life of the respective construct or operate stage
- ~ Collate planning information about who and how each approval can be obtained
- ~ Track the expiration dates of approvals to ensure approvals remain in place
- ~ Provide contact details with relevant regulatory authorities

Identify the timeframes and information needed for obtaining the approval.

The Licence, Permit and Approvals Register is referenced in the O&M EMP.

7.5.2.3. Obligations Register

The O&M EMP describes how the O&M Contractor will achieve the PRs, legislative requirements and approval conditions, consistent with clause 6.1.3 (Compliance obligations) of ISO 14001.

The Environmental Obligations Register will identify:

- ~ relevant contract requirements, legislative requirements, approval conditions, and other environmental obligations not captured in the legislation register
- ~ relevant PRs
- ~ the obligation's relevance to the Project (particularly if it is relevant to an AquaSure governance or management requirement, or if an operational requirement preferably linked to affected areas and/or activities)

- ~ the means by which the requirement will be complied with
- ~ the means/tools by which the Contractor will regularly demonstrate compliance with the requirement

The Environmental Obligations Register are referenced in the O&M EMP.

8. Implementation and operation

This section of the EMS Manual describes how AquaSure will manage activities and operations so that environmental impacts are effectively controlled or minimised. The following support mechanisms are outlined to ensure that environmental commitments will be met:

- ~ Structure and responsibility
- ~ Inductions, training, awareness and competence
- ~ Environmental communications
- ~ EMS Manual documentation
- ~ Document control
- ~ Operational control (including procurement and sub-contractor management)
- ~ Emergency preparedness and response.

8.1. Organisation structure, resources, roles, responsibilities and authorities

8.1.1. General

Organisation charts will be referred to in inductions for both AquaSure and the O&M Contractor.

All organisation charts are reviewed and updated on an as-needs basis to reflect any changes to the management structure. In the event of absences, delegation of authority is to the next upward level as shown on the chart, unless specifically agreed otherwise by the CEO or O&M Contractor Project Director.

Relevant managers are responsible for defining and communicating relevant environmental responsibilities and accountabilities for employees within their area of responsibility.

All employees and subcontractors are responsible for performing and managing their activities and operations according to the requirements in this EMS Manual and the O&M EMP. Individual responsibilities will vary with the work performed and its potential impact on the environment.

8.1.2. AquaSure

The AquaSure organisational structure and responsibilities and resourcing is described in Section 5. The AquaSure CEO is responsible for ensuring the availability of resources essential to establish, implement, maintain and improve the EMS. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.

8.1.3. O&M Contractor

The O&M Contractor is responsible for:

- Defining, documenting and communicating roles, responsibilities and authorities in order to facilitate effective environmental management
- Appointing a manager accountable for maintaining the O&M EMP, including preparing reports for submission to AquaSure
- Making resources available to establish, implement, maintain and improve the O&M EMP consistent with clause 7.1 (Resources) of ISO 14001.

The O&M Contractor Project Director is responsible for establishing, approving and communicating an organisation structure that is best suited for the delivery of the Project's environmental objectives. Detailed environment organisational charts for O&M are referenced in the O&M EMP.

8.1.3.1. Levels of authority

Levels of authority for the different roles and responsibilities are to be defined in the O&M EMP.

8.1.3.2. Environmental roles and responsibilities

Key O&M roles with environmental responsibilities for the Project include the Project Director and Environment Manager.

A detailed description of the environmental responsibilities of each of these positions is to be provided in the O&M EMP.

8.2. Competence, training and awareness

8.2.1. AquaSure

To ensure that the EMS Manual is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are appropriately trained; however this does not detract from the AquaSure EMR's overall responsibility for this requirement. All personnel are to be trained so that they are aware of the expectations and potential consequences that their job could have on the environment.

The AquaSure EMR is responsible for:

- ensuring that AquaSure staff, including associates and visitors where applicable, are:
 - inducted into the requirements of the Environmental Policy, this EMS Manual and their roles and responsibilities
 - made aware of the significant environmental aspects of their work, the environmental benefits of improved personal performance and the potential consequences of departure from specified procedures, including not fulfilling AquaSure's compliance obligations.
- ensuring that appropriate training and awareness programs are delivered to all O&M project team members. This is achieved by specifying the requirements in this EMS, approving materials used for training and auditing implementation. The Contractor, particularly the Environmental Manager, is required to assist the AquaSure EMR where appropriate to effectively fulfil the requirement.

The key competencies of the AquaSure EMR role include:

- appropriate environmental qualifications
- extensive experience in environmental management of infrastructure projects, including compliance with applicable environmental standards
- knowledge of applicable environmental regulatory framework

These core competencies have been assessed by a selection process carried out as part of the Project start up phase. A change in the person fulfilling the EMR role is subject to the State's consent.

8.2.2. O&M Contractor

The O&M Contractor is responsible for establishing and implementing competence, training and awareness consistent with clause 7.2 (Competence) and clause 7.3 (Awareness) of ISO 14001. This section outlines AquaSure's requirements for this management system element.

The requirements include:

- Identifying training needs and skill gaps
- Developing and sourcing appropriate training programmes
- Scheduling and delivering training
- Maintaining qualifications/skills and records.

8.2.2.1. Identifying training needs and skill gaps

Several levels of training activity are managed within the Project. Training will be developed to incorporate the requirements of the contract and will include:

- ~ Site induction (including subcontractors and, where applicable, visitors). The induction will contain content on the environmental aspects, risks, management and mitigation measure for the Project. The induction will include appropriate information on the significant environmental risks (high and extreme risks) for the Project as defined in the Environmental Risk Register.
- ~ Familiarization with the environmental performance criteria, minimum procedural requirements and other environmental management measures to be met
- ~ Emergency and incident response training
- ~ Non compliance action training
- ~ Monitoring, reporting and auditing obligations
- ~ Ongoing training and awareness activities throughout the Project Term
- ~ Competency based training (e.g. erosion sediment control for construction work)
- ~ On-the-job training (e.g. tool box talks, training in system procedures, construction work method statements and JSEAs particularly those which include significant environmental risks (high and extreme risks) for the project as defined in the Environmental Risk Register.
- ~ Consortium member specific training (e.g. training to use HSE Reporting System, non-compliance, monitoring, reporting and auditing obligations)
- ~ Employee awareness programs providing case studies of relevant innovations and case studies demonstrated in the industry (optional).

The O&M EMP will nominate appropriate minimum training and awareness requirements for employees and subcontractors. The training matrix will include:

- Categories of personnel (staff, subcontractors, suppliers and consultants)
- Training required (mandatory and desirable).

8.2.2.2. Developing and sourcing appropriate training programmes

The AquaSure EMR, or delegates, will be responsible for ensuring the development of training programmes for the O&M Contractor and will source materials from joint venture partners or external providers in preference to developing in-house material and programmes. The O&M Contractor Environment Manager will be responsible for assisting the AquaSure EMR in ensuring development of inductions and training programmes.

All training materials prepared by the O&M Contractor will be submitted to the AquaSure EMR for approval.

8.2.2.3. Scheduling and delivering training

The AquaSure EMR has delegated the responsibility for ensuring delivery of training and awareness programs to the O&M Contractor.

The O&M Contractor may engage suppliers, consultants and subcontractors to conduct special or specific project activities from time to time.

8.2.2.4. Maintaining qualifications/skills and records

Records and means to maintain competencies, skills and qualifications will be in accordance with the O&M Contractor Management Plan.

The following details must be included in environmental training records:

- Name of project personnel attending the training
- Type of training attended
- Date of attendance
- Name of trainer
- Name of the organisation providing the training
- Refresher training requirements.

8.3. Communication

Effective and well-planned communications is one of the keys to the project team achieving its environmental objectives.

8.3.1. AquaSure

The “Project Management Plan” AQS-PRO-PL-001 sets out the interfaces within the Project and with key stakeholders.

Internal communications and communications with statutory authorities regarding environmental issues and outcomes are facilitated by the AquaSure EMR, through:

- ~ Communication with senior management
- ~ Regular meetings with the O&M Contractor, quarterly as a minimum
- ~ Quarterly Environmental Working Group meetings with the key stakeholders including the State and the O&M Contractor, or on a frequency to be determined with the State
- ~ Quarterly meetings with the EA, or on a frequency to be determined with the EA
- ~ Attendance at meetings of environmental agencies, convened by the State, if required
- ~ Inclusion of relevant information in the AQS and Watersure Monthly reports

AquaSure will not generally communicate specific details externally about its significant environmental aspects beyond the information included in the O&M EMP, except in those circumstances when:

- ~ Obligated by law
- ~ AquaSure deems it appropriate from time to time.

Any external communication, including responding to external interested parties, must be agreed with the State under the terms of the Project Deed. The AquaSure EMR will support the AquaSure CEO in addressing environmental issues raised by stakeholders including complaints and with any other communications as required. Strict requirements apply to the handling of complaints to ensure the cause of all justified complaints is rectified as soon as practically possible.

8.3.2. O&M Contractor

The O&M Contractor is responsible for establishing and implementing communication consistent with clause 7.4 (Communication) of ISO 14001.

Internal communications will include:

- ~ Regular meetings including senior management, site and tool box meetings
- ~ Distribution of a monthly report, which includes information relating to environmental compliance
- ~ Periodically releasing information handouts and posters detailing specific environmental aspects.

Details on Internal Communications are provided in the O&M EMP.

All external communications will be conducted in accordance with the AquaSure Community Involvement Plan (CIP) and the O&M Community Involvement Plans (OM-CIP).

Details on external communications, including management of enquiries and complaints, are provided in the O&M EMP.

8.4. Control of environmental documents

Documents will be controlled as set out in Section 6.6.

A range of environmental documents and their corresponding minimum retention periods have been nominated in Attachment C.

8.5. Operational management control

The key operational management controls for managing the environmental aspects of the VDP are implemented through the O&M EMP. Elements relating to public communication are addressed in the Community Involvement Plan.

8.5.1. AquaSure

As set out in Section 6, AquaSure has contracted to the O&M Contractor the obligation to prepare, finalise, implement and update the O&M EMP (and associated plans), including the operational controls. The O&M EMP is reviewed and approved in accordance with Table 5.

The broad purpose of an EMP is to:

- ~ Identify the requirements of the approval documents to be complied with
- ~ Provide specific protection controls that can be applied on-site to minimise environmental impacts
- ~ Provide specific mechanisms for compliance with relevant approvals, licences, permits, consultation agreements and legislation
- ~ State performance indicators for activities that are important to the environmental performance of the Project component
- ~ Outline a monitoring and inspection regime to check the adequacy of controls as they are implemented during construction
- ~ Clarify the roles and responsibilities of personnel relevant to the EMP.

8.5.2. Contractor

The Contractor will use a variety of operational controls to manage the environmental outcomes of the Project.

The operational controls will be consistent with clause 8.1 (Operational control) of ISO 14001.

The O&M EMP will succinctly and precisely describe the controls in a manner which enables project teams to easily understand and practically implement as required.

The process for considering environmental hazards and risks must be described. This includes an assessment of post-control risks.

8.5.3. Subcontractor management

Environmental management requirements and responsibilities for subcontractors are to be included in the O&M EMP and Subcontractor Agreements. Subcontractors must meet the relevant requirements of the Contractor's O&M EMP, as a minimum.

8.6. Incident and emergency preparedness and response

8.6.1. AquaSure

AquaSure's direct activities are almost entirely office-based and unlikely to result in an environmental incident. There is some scope for incidents in the repair and maintenance obligations in relation to the Underground Cable Assets forming part of the ETCA. This is addressed through specific documentation relating to those obligations, and is outside the scope of this EMS Manual.

Significant environmental incidents and emergencies may occur as a result of the O&M activities.

The AquaSure EMR will review environmental incident investigation reports and participate in managing, responding to and investigating incidents as set out in the Contractor Environmental Incident Response Plan (EIRP).

AquaSure's role in response to a significant incident (including environmental issues) is described in the AquaSure Crisis Management Plan which operates in conjunction with the Contractor's Incident Management Plan.

8.6.2. O&M Contractor

The O&M Contractor is responsible for establishing, implementing and testing incident response emergency preparedness and response consistent with clause 8.2 (Emergency preparedness and response) of ISO 14001.

The role of AquaSure, including the AquaSure EMR, in managing, responding to and investigating incidents will be documented in the Contractor EIRP, subject to approval by the AquaSure EMR.

Potential environmental emergencies and incidents are identified through a risk assessment process documented within the respective EMPs. In accordance with clause 4 (b) of Appendix S3 PS&PR the environmental risk assessment details the preventative measures required to minimise the risk of incidents and emergencies.

The Contractor will develop an EIRP which will provide:

- ~ An assessment of the types of incidents and emergencies that might impact on the environment and their potential causes and consequences
- ~ Preventative measures required to minimize the risk of incidents and emergencies
- ~ Processes for systematically notifying, responding to and managing environmental emergency situations
- ~ Pertinent contact information for emergency and regulatory authorities (e.g. telephone numbers for EPA, Fire Brigade, SES etc)
- ~ Names of key project response personnel and contact details (including after hours telephone numbers)
- ~ Project personnel responsibilities
- ~ Location of on-site information on hazardous materials and dangerous substances, and spill containment equipment or structures
- ~ Procedure to follow to minimise/control the emergency/Incident e.g. spill management
- ~ Procedures for notifying the on-site staff, contractors, regulatory agencies and public if required.

All personnel have the responsibility to report any incident. Staff with specific responsibilities are clearly identified in the EIRP. All incidents and complaints will followed up and investigated to ensure that all agreed actions are appropriately followed up and closed-out, and that essential information is recorded.

All environmental incidents are reported in accordance with the incident management. All records of environmental incidents are also maintained for the Project in accordance with the incident management plan.

In accordance with clause 4 (f) of Appendix S3 PS&PR the location of on-site information on hazardous material and dangerous substances and location of spill containment equipment or structures is required to be detailed in the O&M EMP.

9. Checking

This section provides a description of the:

- ~ Manner in which environmental performance is monitored and measured
- ~ Approach used for managing non-conformances and system improvements
- ~ Manner in which environmental records are managed
- ~ Manner in which environmental inspections and audits are conducted.

The O&M Contractor will develop a monitoring, inspection, reporting and auditing schedule for inclusion in the O&M EMP. The schedule will include:

- Scope
- Frequency
- Responsibility
- Form used
- Reporting procedure.

9.1. Monitoring and measurement

9.1.1. AquaSure

The responsibility for monitoring and measuring is contracted to the Contractor. The role of the EMR in overseeing these monitoring activities is summarised in Table 1 of section 5.3.

The monitoring program developed and implemented under the O&M EMP must be approved by the EMR.

9.1.2. O&M Contractor

The O&M Contractor is responsible for implementing monitoring and measurement consistent with clause 9.1.1 (Monitoring and measurement) of ISO 14001.

The O&M EMP will include means for:

- ~ Tracking progress of achieving objectives and targets
- ~ Tracking the implementation of new legal or other requirements
- ~ Inspecting the effectiveness of operational controls relevant to environmental management.

The monitoring and measuring requirements for the Project will be detailed in the O&M EMP and specific procedures will be developed for each type of monitoring to be undertaken. These identify specific outcomes that are to be monitored, their location, frequency, reporting requirements and associated responsibilities. A monitoring program providing a centralised database of all environmental monitoring requirements will be maintained by the O&M Contractor.

All environmental measurement or monitoring equipment used on the program will be calibrated and maintained in accordance with the manufacturers' specifications and as described in the specific monitoring and measuring procedures.

The results of monitoring and measuring results will be regularly reported as set out in the EMP.

9.2. Evaluation of compliance

9.2.1. Certificate of compliance

A Certificate of Compliance to the State and EA is required, in accordance with clause 13.9(a) of the Project Deed, confirming that AquaSure is satisfied that the Project Activities have been undertaken in accordance with the EMP and Environmental Requirements. The Certificate is due on the first business day of the period, on a quarterly basis.

The O&M Contractor will provide a Certificate of Compliance to AquaSure and the EA, in accordance with clause 13.9(a) of the O&M Contract in advance of AquaSure's certificate.

A Certificate of Compliance may be issued where the organisation has met the requirements to develop and implement Plans of Environmental Remediation in response to EA audits, as set out in clauses 13.9(h), 13.9(j) and 13.9(k), as follows:

- If an EA Environmental Audit Report includes an opinion that the EMP or Environmental Requirements have not been complied with, within 5 Business Days after receipt of that report, the organisation (AquaSure or the Contractor) has provided to AquaSure (for the Contractor) the State (for AquaSure) and the EA a plan and program for the rectification or remediation of any non-compliance and to ensure future compliance (Plan for Environmental Remediation).
- To the extent that the Plan for Environmental Remediation does not satisfactorily address the EA's concern and subject to the bullet point below, the organisation must continue to consult with EA and amend its Plan for Environmental Remediation until the EA is satisfied with the Plan for Environmental Remediation.
- When the EA notifies the organisation that the Plan for Environmental Remediation is satisfactory, the organisation must comply with the Plan for Environmental Remediation and, when the organisation (AquaSure or the Contractor) believes it has rectified the non-compliance, provide a certificate, confirming that the non-compliance has been rectified in accordance with Plan for Environmental Remediation.

9.2.2. AquaSure's Evaluation of Compliance

In evaluating whether a Certificate of Compliance can be issued for the Project Activities, AquaSure will consider the following:

- Reports
- Obligations Register
- Compliance Tracker
- Monitoring and inspection results
- Results of environmental audits, including EA, AquaSure, Contractor and independent audits
- Details of non-conformances and corrective actions/improvements
- Status of Plans of Environmental Remediation
- Incident reports
- Results of management reviews
- Correspondence
- Outcomes of meetings and site visits.

A record of the key documents and evidence reviewed in evaluating compliance will be maintained.

AquaSure will provide a Certificate of Compliance, as set out in Section 9.2.1, to the State and the EA confirming that AquaSure is satisfied that the project activities have been undertaken in accordance with the O&M EMP and Environmental Requirements.

The AquaSure EMR will provide advice to the AquaSure CEO on the Certificate of Compliance required. The Certificate of Compliance will be authorised by the AquaSure CEO.

9.2.3. Contractor's Evaluation of Compliance

The O&M Contractor is responsible for evaluating compliance, consistent with clause 9.1.2 (Evaluation of compliance) of ISO 14001.

The O&M Contractor will provide a Certificate of Compliance, as set out in Section 9.2.1, to AquaSure confirming that the Contractor is satisfied that the project activities have been undertaken in accordance with the EMP and Environmental Requirements.

The O&M Contractor will provide a monthly report to the AquaSure EMR as set out in Section 10.1.

As described in Section 7.5 of this EMS Manual, the means by which the Contractor will comply with each obligation is described within the O&M EMP's Legislation Register and Obligations Register. These registers will also describe the means by which project teams will regularly demonstrate compliance with each relevant obligation, making specific reference to the inspections form, environmental programs or other checklist to be used in the field.

Inspections and reviews will occur on a frequency nominated in the EMPs and described in a Monitoring, Inspection, Auditing and Reporting Schedule as described in Sections 9 and 10.

This schedule will form the basis of the environment performance reports that will be issued to stakeholders.

Mechanisms for rectifying any non-compliances identified will be as per Section 9.3 below.

9.3. Non-conformity and corrective actions

A non-conformance is an incident/s that is a failure to comply with environmental legislation or with the intent or objectives of the EMS Manual and/or EMP requirements. Once a non-conformance has been identified, corrective action will be initiated. Also, any EMS Manual improvement opportunities, identified as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews, will be documented. These may also lead to corrective actions. All employees have the authority to raise a non-conformance should it occur.

9.3.1. AquaSure

Non-conformances will be managed in accordance with the AquaSure procedure "Non Compliance, Corrective and Preventive Action" AQS-SYS-PR003, with the EMR maintaining a separate NCR Register in G:Drive_9 – Environment – Sub Directory 9.17. Where an AquaSure employee identifies a non-conformance or hazardous situation on site, this shall be promptly notified to the O&M Contractor in accordance with this procedure.

9.3.2. O&M Contractor

The O&M Contractor is responsible for establishing and maintaining procedures for nonconformity and corrective actions consistent with clause 10.2 (Nonconformity and corrective action) of ISO 14001. These are to be documented in the O&M EMP. Priorities for response shall be determined based on the risk to the environment. As guidance, an extreme priority action should be allocated to prevent immediate risk to the environment. Low priority actions should be allocated to prevent long-term recurrence of the inappropriate situation.

All corrective actions from reviews, audits or incidents or new controls to be implemented shall be recorded in the Contractor reporting and action database to ensure all actions have been assigned to the responsible person(s) and actions have been tracked and closed out in the appropriate timeframe. The database will be used to track and manage corrective actions and continuous improvements.

Implementation of corrective actions or controls shall adhere to the following timeframes:

- ~ Extreme Priority Actions completed immediately
- ~ High Priority Actions completed within 7 days
- ~ Normal Priority Actions completed within 7 – 14 days

~ Low Priority Actions completed within 14 – 21 days.

The response to incidents will be managed in accordance with the O&M EMP and EIRP. The method for notification and escalation to AquaSure personnel will adhere to the EIRP. Where the incident is notifiable under the EP Act 2017, the incident will be notified to the EPA as soon as practicable after becoming aware there is a notifiable incident. Class 1 environmental incidents will be reported to the State within 30 minutes of becoming aware of the notifiable incident, all other regulatory authorities requiring notification will be contacted within 24 hours. For a class 2 incident the State, and all other regulatory authorities requiring notification will be contacted within 24 hours of the incident occurring.

Accountabilities for tracking closure of non-conformances will be nominated in the O&M EMP.

Where appropriate, work on non-conforming activities on-site may be stopped by the Contractor Environment Managers, Environment Officers, Managers or their nominees. This stoppage will remain in force until corrective actions are implemented or authority is given to continue.

9.4. Control of records

9.4.1. AquaSure

AquaSure records will be managed in accordance with the AquaSure procedure “Document and Record Control” AQS-SYS-PR001.

9.4.2. O&M Contractor

The O&M Contractor is responsible for controlling records consistent with clause 7.5 (Documented information) of ISO 14001. This will be documented in the O&M EMP. The O&M EMP will also identify how long these records need to be retained if variations to the retention times noted in Attachment C exist.

Where appropriate, the environmental records set out in Attachment C will be maintained and are managed as ‘quality records’.

All records are to be:

- ~ Legible and clearly identifiable
- ~ Traceable via referencing to a specific requirement, procedure or the O&M EMP.

The O&M Contractor Environment Manager is responsible for maintaining environmental records for the project unless delegated.

All environmental documents, records and written communication will be managed in accordance with the document management requirements set out in the Contractor Management Plans.

9.5. Audits

9.5.1. AquaSure

AquaSure audits of the EMS Manual will be managed in accordance with the AquaSure procedure “Internal and External Audits” AQS-SYS-PR002. These audits will include annual internal audits of the conformance of the EMS Manual with the requirements of ISO14001. This audit may be conducted as part of a broader management systems audit.

In accordance with Section 2 (d) (i) of Annexure S3, PS&PR, the AquaSure EMR will regularly audit environmental performance including the Contractor’s performance in relation to this EMS Manual and the EMPs (including AEMPs and sub plans). Audits of the Contractor will be conducted in accordance with the AquaSure Environmental Audits procedure (Attachment D). Audits are used as a systematic and documented method of verifying environmental performance and compliance.

The environmental auditing procedure defines the process for:

- ~ Establishing an audit schedule
- ~ Planning audits
- ~ Conducting audits
- ~ Reporting audit findings.

The purpose of the auditing process is to ensure:

- ~ Compliance with the PRs
- ~ Compliance with environmental regulatory requirements not specified in the PRs
- ~ The EMS Manual is effectively implemented
- ~ Compliance with the AS/NZS ISO 14001:2015 standard
- ~ A process of continual improvement is maintained, including reports at the annual management review meeting.

Audits may be routine or random. An audit schedule will be prepared that is consistent with the monitoring program in the O&M EMP. The audit schedule will be developed in discussion with relevant Government Agencies, particularly the State, in accordance with clause 7(b) of Appendix 3 to the PS&PR. The audit frequency will depend upon the status and importance of the process or activity to be audited, as well as the results of any previous audits. The scope of the audit may include any activity that contributes to the impacts listed in the environmental aspects and impacts registers.

Representatives of the State and the EA may be present during any audit, in accordance with clause 14.6(c) of the PS&PR.

AquaSure will deliver copies of audit reports of the O&M EMP to the State and the EA within 5 Business Days of the report's completion, in accordance with clause 14.6(c) of the PS&PR.

Where an audit identifies any corrective actions that require modification to the EMS Manual, the AquaSure EMR will modify the EMS Manual or procedures as required as described by Section 9.3.

9.5.2. O&M Contractor

The O&M Contractor will facilitate audits by other parties including the AquaSure EMR, the EA and the State.

9.5.2.1. EMR audits

The O&M Contractor will respond to findings included in final audit reports of the O&M EMP within 5 working days of receiving the final audit report from the AquaSure EMR. The O&M Contractor must formulate a plan of action to follow-up the findings and recommendations of the audit, including:

- ~ Describing the planned corrective action/s for each finding
- ~ Nominating a time frame to complete the corrective actions
- ~ Nominating the responsible persons to carry out the corrective actions.

It is the O&M Contractor's responsibility to:

- ~ Implement remedial/corrective actions within the agreed timeframes
- ~ Notify the EMR of close-out
- ~ Provide evidence of completion where agreed.

The EMR will review the close out of the audit findings.

9.5.2.2. Internal audits

The O&M Contractor is responsible for conducting internal audits consistent with clause 9.2 (Internal audit) of ISO 14001. This will be documented in the EMPs.

Internal auditing of EMPs and associated documentation will occur on a frequency approved by the AquaSure EMR and described in a Monitoring Inspection Reporting and Auditing Schedule. The audits may be conducted by the AquaSure EMR, the Contractor Environmental Managers (or nominated delegate) as defined in the respective EMPs.

If the AquaSure EMR conducts an audit on an EMS component, that is also scheduled to be audited by the O&M Contractor, the EMR's audit may suffice as the O&M Contractor audit, with the consent of the EMR.

9.5.3. External auditing

External audits of the AquaSure EMS will also be carried out by appropriately qualified external auditors to ensure compliance with AS/NZS ISO 14001:2015 standard.

In addition, the EA or the State may audit any part of the project or EMS Manual or other environmental documentation with reasonable notice for the purposes of confirming compliance with Project Environmental PRs.

The AquaSure EMR will facilitate audits by other parties, including the EA and the State.

Where the EA provides a draft environmental audit report to AquaSure, the AquaSure EMR and, if relevant, the O&M Contractor will review the report and provide comments to the EA within 5 business days.

If an environmental audit report from the EA includes an opinion that the EMP or Environmental Requirements have not been complied with, within 5 business days after receipt of that report, AquaSure must provide to the State and the EA plan and program for the rectification or remediation of any non-compliance and to ensure future compliance (Plan for Environmental Remediation). Where the report relates to the O&M EMP or responsibility, the Plan for Environmental Remediation will be prepared by the O&M Contractor and submitted via AquaSure, in accordance with clause 13.9(h) of the Deed

Should the Plan for Environmental Remediation not satisfy the EA's concern, AquaSure/the O&M Contractor will continue to consult with the EA and amend the Plan until it satisfies the EA's concern.

AquaSure/the O&M Contractor will implement the Plan for Environmental Remediation and provide a certificate once the issue has been rectified and the Plan closed out.

10. Review and reporting

10.1. Reporting environmental performance

10.1.1. General

A monthly report to the State is required during the Project Term in accordance with clause 63.2 of the Project Deed and clause 16.1 and Annexure 3 Environmental Requirements clause 7 of the PS&PR, including:

- Significant environmental issues and the response to these issues (including project changes)
- Record of environmental compliance with all environmental conditions of any approval under any environmental law and with the environmental requirements of the Project Deed
- Environmental incidents and complaints including summary of main areas and issues of complaint or the cause of the incident, action taken, response given and intended strategies to reduce complaints or incidents of a similar nature
- Applications for consents, licences and approvals, and responses from all relevant authorities
- Implementation and effectiveness of environmental controls and conditions relating to Project Activities
- Environmental performance against performance standards and legal and other obligations
- Discussion of environmental monitoring results as relevant.

In addition to monthly reports, an annual report to the State is required, in accordance with clause 16.2 of the PS&PR, including:

- any benthic surveys undertaken
- concentrate water quality, in a format compatible with submission to the EPA in fulfilling the EPA reporting requirements as required under the EPA Works Approval and any site licence granted by the EPA and consistent with the requirements of Appendix S3 (Environmental Requirements), including a list of all chemicals added to the seawater.

AquaSure must also provide a copy of any report submitted in connection with an Approval relating to the environment (including EPA Works Approval, EPBC Approval and the EES Assessment) to the State.

10.1.2. AquaSure

The AquaSure EMR will provide input to the monthly and annual reports. AquaSure will submit the report to the State.

10.1.3. O&M Contractor

The O&M Contractor will provide monthly and annual reports to AquaSure including the details set out in Section 10.1.1.

The Reporting Schedule in the O&M EMP will describe reporting requirements and accountabilities, including statutory reporting obligations. The O&M EMP defines reporting requirements for each stage of the Project.

The O&M Contractor must provide a copy of any report submitted in connection with an Approval relating to the environment (including EPA Works Approval,) to AquaSure.

10.2. Management review

The EMS Manual, an EMP or associated controlled documents must be reviewed and updated if at any time it:

- does not adequately address the matters it is intended to address

- is causing non-conformity or is otherwise necessary to comply with the Project Deed
- has to be changed because of an audit
- no longer represents current or appropriate practice
- is otherwise required by the Project Deed to be updated.

10.2.1. AquaSure

Management reviews are critical to the continual improvement process. They ensure the continuing suitability, adequacy and effectiveness of the EMS Manual and its implementation. AquaSure and the AquaSure EMR will be responsible for ensuring that management reviews are held to review environmental performance.

A management review will be conducted by a nominated management team including:

- ~ AquaSure EMR
- ~ AquaSure Chief Executive Officer
- ~ O&M Contractor representative.

A management review is to be held at six monthly intervals. This may result in improvements to the EMS Manual, the O&M EMP or procedures. The AquaSure EMR will be responsible for ensuring that changes are incorporated into the EMS Manual and ensuring that the Contractor Environment Manager updates the O&M EMP in accordance with these changes.

The management review will include a review of the following:

- ~ Status of actions from previous management reviews
- ~ Changes in:
 - External and internal issues that are relevant to the EMS, including technological options and financial, operational and business requirements
 - The needs and expectations of interested parties, including compliance obligations
 - Significant environmental aspects
 - Risks and opportunities
- ~ The extent to which environmental objectives have been achieved
- ~ Status/effectiveness of EMS Manual implementation, including trends in:
 - Nonconformities and corrective actions
 - Monitoring and measurement results
 - Fulfillment of compliance obligations
 - Audit results
- ~ Adequacy of resources
- ~ Effectiveness of environmental training programme
- ~ Relevant communications from interested parties, including complaints
- ~ Opportunities for continual improvement.
- ~ Achievement of the Environmental Policy commitments

These items are the minimum inputs to the management review. The review will include agreed EMS Manual and other environmental management system element changes with assigned responsibilities.

The outputs of the management review will be documented and will include:

- ~ Conclusions on the continuing suitability, adequacy and effectiveness of the EMS
- ~ Decisions related to continual improvement opportunities

- ~ Decisions related to any need for changes to the EMS, including resources
- ~ Actions, if needed, when environmental objectives have not been achieved
- ~ Opportunities to improve integration of the EMS with other business processes, if needed
- ~ Any implications for the strategic direction of the organization.

10.2.2. O&M Contractor

The O&M Contractor is responsible for conducting management reviews consistent with clause 9.3 (Management review) of ISO 14001. This will be documented in the EMPs.

A management review will be conducted by a nominated management team including:

- ~ AquaSure EMR
- ~ O&M Contractor Project Director
- ~ O&M Contractor Environment Managers

A management review is to be held at six monthly intervals. The review will be documented and will include agreed EMP and other environmental management system element changes with assigned responsibilities.

Changes to the EMPs and associated documents shall be reviewed and approved in accordance with Section 6.3.

ATTACHMENT A –COMPLIANCE READY REFERENCE

AS/NZS ISO14001:2015 Clause	AquaSure EMS Manual Reference
5 Leadership	
5.1 Leadership and commitment	Environmental Policy and Section 5.2
5.2 Environmental policy	Section 7.1
5.3 Organizational roles, responsibilities and authorities	Section 5
6 Planning	
6.1 Actions to address risks and opportunities	
6.1.1 General	Section 7.4
6.1.2 Environmental aspects	Section 7.4
6.1.3 Compliance obligations	Section 7.5
6.1.4 Planning action	EMS Manual Section 10.2
6.2 Environmental objectives and planning to achieve them	Section 7.2
6.2.1 Environmental objectives	
6.2.2 Planning actions to achieve environmental objectives	
7 Support	
7.1 Resources	Section 8.1
7.2 Competence	Section 8.2
7.3 Awareness	Section 8.2
7.4 Communications	Section 8.3
7.4.1 General	Section 10.1
7.4.2 Internal communication	
7.4.3 External communication	
7.5 Documented information	Section 6
7.5.2 Creating and updating documents	Section 6, 8.4 Section 9.4
7.5.3 Control of documented information	Section 6.6 Section 8.4 Section 9.4
8 Operation	
8.1 Operational planning and control	Section 8.5
8.2 Emergency preparedness and response	Section 8.6
9 Performance evaluation	
9.1 Monitoring, measurement, analysis and evaluation	Section 9.1
9.1.2 Evaluation of compliance	Section 9.2
9.2 Internal audit	Section 9.5

9.2.1 General	
9.2.2 Internal audit programme	
9.3 Management review	Section 10.2
10 Improvement	
10.2 Nonconformity and corrective action	Section 9.3
10.3 Continual improvement	Sections 9.3 and 10.2

Project Scope and Project Requirements Appendix S3 Environmental Requirements Clause	AquaSure EMS Manual Reference
1 General Requirements	Whole manual
2 Environmental Management System and Environmental Management Representative	Section 1, 5.3
3 Environmental Management Plans (EMPs)	Section 6
4 Emergency/Environmental Incident Procedures	Section 8.6
5 Training	Section 8.2
6 Control of Associates	Whole manual and Section 8.2
7 Reporting and Auditing Requirements	Section 9.5, 10.1

ATTACHMENT B – AQUASURE ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY

AquaSure is committed to achieving the sustainable development and operation of the Victorian Desalination Project (Project) to protect environmental values, maximise environmental benefits, and minimise environmental risk and harm throughout the life of the Project.

In implementing this policy, AquaSure will:

- Comply with all applicable statutory environmental laws and regulations, and environmental Performance Requirements (PRs) specified in the Project Deed
- Encourage compliance by all relevant internal stakeholders including employees, contractors and others working on our behalf by ensuring they are aware of and support AquaSure's Environmental Policy and procedures and have the necessary skills to satisfy their environmental obligations
- Work with our Government stakeholders to ensure that their environmental requirements, as expressed in the Project Deed, are met through all stages of the Project
- Strive to optimise energy efficiency of the Project, and ensure that all remaining operational energy use is offset through the purchase of renewable energy credits
- Minimise resource usage, avoid and minimise pollution and generation of wastes, and act to prevent adverse environmental effects.
- Implement environment protection measures that protect the beneficial uses and environmental values of the coastal and marine environment
- Maintain an environmental management system (EMS) that fulfills the requirements of ISO14001, and is integrated into our business activities
- Maintain informed dialogue with affected communities and key stakeholders regarding the environmental impact of our operations
- Periodically review and revise our Environmental Policy and procedures to ensure their relevance and support continuous improvement by AquaSure, its employees and contractors

AquaSure will always address the environmental challenges arising from our activities.

It is the responsibility of every employee and contractor to implement this policy.



Matt Brassington
Chief Executive Officer

ATTACHMENT C – ENVIRONMENTAL DOCUMENTS AND RECORD RETENTION PERIODS

A variety of environmental documents and records produced by AquaSure must be controlled to meet requirements described in ISO14001:2015, the EMS Manual and AquaSure's document control protocols in the O&M Management Plans. Minimum retention periods required for environmental documents and records comprise:

Type of document or record	Minimum retention period
Approvals, licences and permits	7 yrs
Audit Reports and Action Plans	7 yrs
Baseline Marine Monitoring Plan data	Life of project
Business Review Reports and Action Plans	7 yrs
List of Environmental Monitoring Equipment and Calibration Records	7 yrs
Correspondence In/Out (Regulators)	7yrs
Environmental Policies	Y
Environmental Management Plans	7 yrs
Environmental monitoring records	7 yrs
Environmental Review records (e.g. meeting minutes)	7 yrs
EMS Performance Reports	7 yrs
HSE Committee Meeting Minutes	-
Incident and Non-conformance records	(7 yrs)
Inspection, calibration and maintenance records	7 yrs
ISO14001 Certificates	Y
Legislative updates	7 yrs
Procedures	7 yrs
Photos	7 yrs
Environmental Risk Registers and Assessments (JSEAs, work procedures, WABs)	7 yrs
Environmental Obligations Registers	7 yrs
Training Records (Env)	7 yrs
Waste management records	7 yrs

Items marked 'Y' are to be archived, when superseded, within the project filing system.

ATTACHMENT D – ENVIRONMENTAL AUDIT PROCEDURE

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1. Introduction

Environmental audits are an independent examination of how processes are being or have been performed to ensure compliance with environmental requirements. Audits also provide data which can be used to develop preventative or corrective actions for existing or emerging environmental risks. Specifically, the purpose of the auditing process is to ensure:

- Compliance with Project Environmental Performance requirements (PRs);
- Compliance with environmental regulatory requirements not specified in the PRs;
- The Aquasure EMS Manual is fully implemented;
- Compliance with the AS/NZS ISO 14001:2015 standard; and
- A process of continual improvement is maintained.

Environmental audits are required for the following:

- AquaSure Environmental Management System (EMS).
- O&M Contractor Environmental Management Plan (EMP).

2. Types of Audits

The EMS recognises a number of types of environmental audits. Further information is provided in Attachment D1.

Aquasure

The Aquasure EMR is responsible for ensuring development and implementation of an Aquasure audit program as specified in Section 9.5 of the EMS Manual.

- AquaSure audits of the EMS Manual will be managed in accordance with the AquaSure procedure “Internal and External Audits” (Aquasure Document Reference AQS-SYS-PR002).
- Aquasure audits of compliance of the Contractor with the requirements of the EMS Manual and EMP documentation shall be conducted in accordance with this procedure.

Contractor

The Contractor Environmental Manager is responsible for ensuring development and implementation of a Contractor internal audit program as specified in Section 9.5.2.2 of the EMS Manual.

External audits

The EMS recognises auditing by independent external parties:

- External audits undertaken by the Environmental Auditor (EA) and/or the State on Aquasure and/ or the Contractor, for compliance with the Project Deed;
- External audits of the Aquasure EMS will be carried out by appropriately qualified external auditors to ensure certification and ongoing compliance with ISO 14001:2015 standard.

The conduct of these external audits is not described further in this procedure, since the scope and frequency is the subject of independent assessment and review and not limited to requirements of the Aquasure EMS Manual. However, requirements on Aquasure and its Contractors to participate and respond to these external audits are outlined in Section 9.5.3 of the EMS Manual.

3. Audit Methodology

The audit methodology discussed below is limited to Aquasure and Contractor audits.

The audit methodology involves the following key steps:

- Establish audit schedule
- Appoint Auditor
- Plan the audit
- Conduct the audit
- Report audit findings

These steps are discussed in more detail below.

4. Establish audit schedule

Scheduling requirements for each type of environmental audit conducted by Aquasure and the Contractor is identified in Attachment D2 of the EMS Manual. This is consistent with the requirements of Section 9.5 of the EMS Manual.

For the Aquasure audit program, the EMR will consult with relevant Government Agencies, the EA and the Contractor when planning the audit schedule. The minimum audit frequencies set out in Section 9.5.1 of the EMS Manual should be used as a guide.

The Contractor will consult with the EMR as a minimum when setting frequency and scope of the Contractor internal audit program.

5. Appoint Auditor

Aquasure internal EMS audits are to be undertaken by an auditor designated by the AquaSure CEO or the Environmental Management Representative. The auditor must have appropriate external qualifications to undertake this type of audit.

Aquasure audits of the Contractor are to be undertaken by the EMR, or nominated representative. The EMR or nominated representative must have appropriate qualifications and experience to satisfy the requirements of Clause 2(b) of Appendix S3 Environmental Requirements. Aquasure must provide a letter from the CEO in support of this requirement, and must be able to demonstrate that the appointments satisfy the key requirements listed in Section 8.2.1 of the EMS Manual.

The Contractor internal audits must be undertaken by a suitably qualified Auditor, assisted by audit members, as appropriate. A Contractor Environmental Manager cannot audit an area for which he/ she have any responsibility for implementation of EMP requirements. The EMR may be nominated as Auditor for the Contractor internal audit, in consultation with the EMR.

The competencies for appointment as an Auditor for the purposes of conducting internal audits are listed in Attachment D3.

Contractor Auditors must be approved and registered by the EMR prior to conducting Contractor internal audits. The Registration Form is provided as Attachment D4.

6. Plan the Audit

The responsible Auditor must:

- Establish and document the following:
 - Purpose and scope of audit
 - Audit assessment methodology
 - Notify the Project Area/Contractor to be audited
 - Other audit requirements

6.1 Purpose and scope of audit

EMR audits may be routine or random, with the audit purpose (objective) and scope dependent on the status and importance of the environmental risks involved with the process or activities of the Project cycle.

Contractor audits will be documented in the EMP, and generally linked to the EMP requirements.

6.2 Audit assessment methodology

The Auditor should confirm the methodology to be used to document and assess the audit findings. Generally, this will be quite specific to the scope of the proposed audit. For example, EMR audits of the Contractor will systematically review documentation and on site practices (where appropriate) for specific requirements of the EMS and/or O&M EMP.

The Auditor may decide to use an environmental audit checklist. This could include but not be limited to the following:

- Identifying an audit scoring method (to ensure consistency)
- Comparison with Certification Standards included in ISO 14001:2015

For Contractor internal audits, the Contractor Environmental Manager should discuss and agree on the proposed overall assessment methodology with the Aquasure EMR prior to commencing the audit program. Any proposed significant changes to the agreed methodology for subsequent audits should also be agreed with the EMR prior to implementation.

Note: The methodology should be discussed with the auditee before commencement of the audit

6.3 Notify Project Area to be audited

The Auditor (EMR or Contractor Environmental Manager) must:

- Notify the Auditee of the proposed audit (including objective and scope, and proposed date(s) of field work). It should be noted that finalisation of these aspects for an EMR audit including the site visit should be made in consultation with the Contractor Environmental Manager.
- In consultation with the auditee, identify all personnel that are to be involved in the audit process.
- Identify all documentation that is relevant to the audit, and provide a list of these documents to the auditee in a reasonable time frame so that they can be made available on the day of the site visit/ audit.

6.4 Other audit requirements

Preparations must cover logistics such as transport, accommodation, tools and PPE required. For example, consider the following details for auditors:

- Appropriate equipment to comply with site requirements, such as safety boots and long-sleeved shirts
- Site-familiarisation tours, if necessary
- Permits or escorts to visit restricted areas on site, such as confined spaces

7. Conduct the audit

The responsible Lead Auditor (EMR or Contractor Environmental Manager) must:

- Consider undertaking a pre-audit desk top review
- Conduct Audit Entry meeting
- Conduct audit program
- Conduct Audit Exit meeting

These steps are discussed in more detail below.

7.1 Pre-Audit desktop review

Auditors should consider conducting a desktop audit as a preliminary step in advance of the audit:

With the audit team, make the necessary preparations to ensure the desired outcomes of the audit can be achieved.

7.2 Audit Entry Meeting

The Audit Team must take part in an audit entry meeting with relevant personnel (Auditee and nominated staff) to discuss the following:

- Objective and scope of audit
- Proposed audit methodology and program of audit activities, including planning for exit meeting and report delivery
- Identify/ confirm Project personnel to be contacted or interviewed

7.3 Conduct audit program

Audit activities must focus on verifying the implementation of documentation involved with the audit scope (eg EMP), as well as compliance to standards. These are performed by:

- Interviewing appropriate personnel
- Examining systems documents and records for evidence of compliance (including forms, photographs, etc)
- Site induction (if required)
- Observing activities
- Carry out a site familiarisation tour before commencing the audit if deemed necessary/ appropriate
- Carry out the audit, formally recording:
 - Specific details of any NCRs, Afls and/or Os (refer definitions below), based on requirements of audit documentation.
 - Objective evidence the above findings.
 - Comments and feedback from Auditee/ personnel being interviewed.

Note

- During an EMR audit, any urgent issues must be immediately reported to the Contractor, in accordance with the AquaSure procedure “Non Compliance, Corrective and Preventive Action” AQS-SYS-PR003. Where the EMR identifies a non-conformance or hazardous situation on site, this shall be promptly notified to the Contractor in accordance with this procedure.

Urgent issues can include, but are not limited to:

- A potential/actual major environmental catastrophe
- Major actual/potential legal issue
- Assess the most appropriate method to address any audit findings and non-compliance

7.4 Audit Exit meeting

An audit exit meeting will be held with relevant personnel, where all issues raised during the audit will be specifically addressed and acknowledged by the responsible personnel.

At the exit meeting:

- All findings are summarised and addressed
- EMR and Contractor audit findings are classified in accordance with the following definitions, agreed with the EA. The EA also uses these definitions.

- **Non-compliance (NC):** The absence of, or the failure to implement and maintain, one or more requirements of the relevant EMP or subordinate documentation, or a solution, which would, on the basis of available objective evidence raise significant doubt as to the effectiveness of environmental management. Note: A non-compliance may be an individual non-compliance or a number of minor but related audit non-conformances, which when considered in total are judged to constitute a non-compliance.
- **Area for Improvement (Afl):** A deficiency in the implementation of the relevant EMP or subordinate documentation judged to be a risk to the environment, or to environmental management, without constituting an overall failure in the area concerned.
- **Observation (O):** An audit finding which may relate to an incidental or isolated system discrepancy, which does not compromise the effectiveness of environmental management, or constitute an actual or potential environmental risk.

8. Develop audit report and action plan

8.1 Prepare and distribute draft audit report

The Audit Team must prepare a report based on the objective evidence collected during the audit.

Note:

Corrective actions must focus on long-term solutions that will prevent recurrence.

Capture best practice by including positive reinforcement of good practices in the report.

Within 5 days of completing the audit, forward the draft audit report to the auditee.

8.2 Distribute final audit report

The auditee will be allowed a period of 5 days from receipt of the draft audit report, to respond with additional information or clarification of the draft audit findings.

Distribute the final audit report as specified in Section 9.5 of the EMS Manual to:

- Auditee/ Contractor
- Other relevant personnel
- EA
- The State.

Ensure a copy of the audit report is filed in the AquaSure and Contractor records.

9. Audit follow-up

For EMR audits, the auditee/ Contractor will respond to audit reports within the time frame specified by the EMR, generally 5 working days as required in Section 9.5.2.1 of the EMS Manual. The EMR will follow up close out of any NC, Afl or O on the Auditee/ Contractor. This may be done separately or at the next relevant audit, depending on the significance of the finding.

A similar process will be followed for Contractor internal audits, as specified in the O&M EMP.

ATTACHMENT D.2 – ENVIRONMENTAL AUDIT SCHEDULING

The environmental audit schedule conducted under the EMS will be consistent with the requirements set out in Section 9.5 of the EMS. Specifically, the program will include the elements summarised in Table 1.

Table 1 – EMS audit schedule guideline

Audit type	Scope of audit	Frequency	Responsibility
Internal audit of AQS EMS compliance	Compliance of the AQS EMS with AS/NZS 14001	Annual	As nominated by AQS CEO or AQS EMR
AQS audit of contractor compliance with EMP	Contractor compliance with implementation of EMP	All elements to be audited over an annual cycle.	AQS EMR
AQS audit of contractor compliance with EMP	Audit of high risk activities to ensure environmental controls and procedures outlined in the EMP are being implemented	Within 1 month of commencement of high-risk activity. Annually, dependent on outcome of audit	AQS EMR
Contractor internal audit of compliance with EMP	Contractor compliance with EMP requirements, including MIRA schedule.	All elements to be audited over an annual cycle.	Contractor Environmental Manager or nominated delegates as defined in the EMP
External audit of AQS EMS	AQS compliance with EMS and Project Deed requirements	O&M Phase – 3 months	EA
External audit of Contractor EMP	Audit of high risk activities to ensure environmental controls and procedures outlined in the EMP are being implemented	O&M Phase – 3 months	EA
External certification audit of AQS EMS	AQS EMS performance and ISO 140001 certification (including system and EMP compliance)	As required to achieve and maintain certification	External Certification Agent

ATTACHMENT D.3 – INTERNAL ENVIRONMENTAL AUDITOR COMPETENCIES

The key competencies for auditors are as follows:

- ~ Understanding and interpreting the requirements of the AquaSure EMS and the O&M EMPs, relevant ISO standards (eg 14001, 9001) and where applicable, legislation and regulations relating to auditing and corporate governance
- ~ Understanding, interpreting and assessing general compliance with relevant environmental:
 - Legislation, regulations, government policies, permits and licences
 - Codes of practice
 - Performance standards, eg contract specification requirements
- ~ Knowledge and experience in auditing methods and techniques
- ~ The ability to identify and assess actual and potential environmental risks/hazards/incidents/impacts and their significance
- ~ Knowledge of the relevant industry processes and technologies
- ~ Understanding of relevant environmental context (social, physical and cultural)
- ~ The ability to effectively manage the entire audit process.

Relevant managers need to justify the competencies of an auditor using one or more of the following criteria:

Elements	Auditor
Competent to	Carry out internal project/workplace audits Assist Lead Auditor
Minimum Requirement	
Education	Environmental Environmental Management Skills course or equivalent deemed appropriate by the Aquasure EMR
Auditor Training	Environmental Completed a relevant two day Exemplar Global approved internal auditor course or other appropriate training as approved by the Aquasure EMR
Work Experience	Minimum two years Environmental Minimum two years or one year with relevant qualification in environmental or relevant field
Specific Experience	Environmental One year, including implementation of a workplace/ project Environmental Management Plan
Audit Experience	Not applicable