

Victorian Desalination Project | Independent Reviewer & Environmental Auditor

## IR&EA REPORT

COMPLIANCE WITH ENVIRONMENTAL PERFORMANCE  
REQUIREMENTS QUARTER 4 2011

QUARTERLY REPORT TO THE MINISTER FOR ENVIRONMENT AND  
CLIMATE CHANGE

**February 2012**



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## SUMMARY

The Victorian Desalination Project (VDP – the Project) is being constructed on the coast in South Gippsland near Wonthaggi by the AquaSure consortium in a public-private partnership with the Victorian Government. The Project includes a desalination plant, a pipeline to transfer water to the Melbourne water distribution network near Cardinia, and an underground power supply, which will be largely in the same alignment as the pipeline. AquaSure has contracted Thiess Degrémont Joint Venture (TDJV) to design and construct, and Degrémont Thiess Services (DTSJV) to operate and maintain the VDP.

The overall environmental management framework for the VDP was initially defined in the Environmental Effects Statement (EES) for the reference project. This framework was further refined and included in the Project Deed as a contractual requirement for both the Design and Construction (D&C) and Operations and Maintenance (O&M) Stages of the Project. The main components of the Environmental Management Framework are:

- The VDP must be designed and constructed in accordance with a set of documented Environmental Performance Requirements, included in Appendix S3 of the Project Deed. In addition, Commonwealth and Victorian environmental legal requirements must be met.
- An Environmental Management System and Environmental Management Plans to support delivery of compliance with the Environmental Performance Requirements; and
- Additional requirements in the Project Deed to support environmental management.

The Independent Reviewer and Environmental Auditor (IR&EA) provides independent oversight of design engineering, construction, and environmental performance of the VDP. The IR&EA is jointly appointed by the State Government and AquaSure; the consortium building the VDP, and which will subsequently operate it. In particular, the IR&EA audits the Project Activities to assess whether the environmental requirements of the Project are being met. The Department of Sustainability and Environment (DSE) Capital Projects Division administers the Contract with AquaSure on behalf of the State.

This report provides a summary of the IR&EA's monthly environmental audit outcomes from October – December 2011.

Works commenced at the desalination plant site on the coast near Wonthaggi on 30 September 2009. The Project Activities occurring during the reporting period were:

- **Plant site:** minor bulk earthworks, civil works, building works, electrical works and mechanical installation. Site revegetation continued outside the construction footprint. Construction verification and cleaning activities commenced including hydro-testing.
- **Utilities alignment:** pipe stringing and trenching, pipe and conduit laying, power cable installation and trench back-filling were completed during the reporting period. Reinstatement of the alignment continued. Pipe hydrostatic testing commenced in September and was finished in December. The power cable was successfully energised from the Cranbourne Terminal Station to the Northern Reactor Compensation Station.

During the reporting period a total of 12 formal audit findings were raised, including two Non-compliances and ten Areas for Improvement. A list of all the audit findings, as well as corrective and preventive actions to the end of December 2011 taken by AquaSure and TDJV to close the findings is given in Appendix 1.

The number of overall audit findings, and the number of Non-compliances declined over the reporting period, and in comparison to the previous three months. This is partly due to the reduced environmental risk profile of the project. As construction was largely completed along the utilities alignment the associated environmental risks were no longer relevant. Similarly at the plant site, construction is progressively undercover and/or on paved surfaces, reducing the associated environmental risks.

While the number of new findings has decreased, the number of audit findings remaining open has increased. Audit findings related to on-ground environmental management were all minor, and generally closed in the next audit period, with mitigation actions undertaken quickly by TDJV. Twenty-one findings remained open at the end of December 2011, with most relating to environmental management documentation not being consistent with on-ground practices. These findings will be closed when the revised AquaSure EMS and TDJV D&C EMP are formally approved. Some of the open findings relate to implementation of elements of the D&C EMP which direct the overall management of the environmental management system.

Two Non-compliance were raised during the reporting period. One relates to the Utilities Area EMP not covering construction verification and cleaning activities, and is consistent with a similar finding raised on the Plant and General Area EMP in Q3 2011. The other Non-compliance was in relation to an unplanned discharge along the utilities alignment during hydrostatic testing of the pipeline. The discharge was not

managed in accordance with TDJV's documented requirements. This Non-compliance was closed in January 2012.

The risk profile at the plant site has changed with construction activities progressively being a lower risk. The associated environmental issues are well managed, with no major audit findings related to on-ground management. A major investigation of groundwater at the plant site in relation to future Acid Sulphate Soils (ASS) management continued, and is on schedule to be complete in the first quarter of 2012. A revised D&C EMP was provided to the IR&EA for comment during the reporting period. TDJV advise this will be submitted to the Minister for Environment and Climate Change for approval under the Project Deed early in 2012. Work also progressed on developing environmental management documentation for the commissioning phase of construction.

The conclusions in relation to the objectives for the Environmental Audits in the Project Deed are given below.

#### **Operation of the Environmental Management System**

The AquaSure Environmental Management System (EMS) provides the overall framework for environmental management for the project. The EMS continues to operate effectively. IR&EA and external audit findings relate to minor administrative issues, largely concerned with documentation.

#### **Implementation of each component of the EMP**

The D&C EMP and the Area EMPs remained effective in guiding on-ground environmental management for most issues. Construction verification and cleaning activities are being conducted, and are not documented in the EMP. Two Non-compliances have now been raised in relation to this issue, for both the Plant and General Area, and the Utilities Area EMPs, and both remain open. Most audit findings relate to environmental management documentation and records, with a minority related directly to management of environmental risks. The Non-compliance on inadequate waste management data first raised in May 2011 has yet to be closed, although some progress on generating appropriate data has been made.

#### **Other Environmental requirements**

Construction related Environmental Performance Requirements are integrated into the relevant sub plans of the Area EMPs. Accordingly, the audits of the EMPs provide assurance that the Performance Requirements are being met. In addition, construction requirements and methodologies are defined in Site Establishment Packages and Temporary Works Packages, which refer to the D&C EMP and the Performance Requirements. These packages are certified by the IR&EA.

The design related Performance Requirements are integrated into the relevant Design Package. The IR&EA certification of the Design Packages includes assurance that the related performance requirements have been adequately addressed.

During the reporting period there were no material audit findings which would suggest that the Performance Requirements had not been met. The open Non-compliance on waste management may impact on the associated Performance Requirements.

## 1 INTRODUCTION

The Victorian Desalination Project (VDP) is being constructed on the coast in South Gippsland near Wonthaggi by the AquaSure consortium in a public-private partnership with the Victorian Government. The project includes the desalination plant, a pipeline to transfer water to the Melbourne water distribution network near Cardinia, and an underground power supply, which will be largely in the same alignment as the pipeline.

Environmental management for both the design and construction, and operational stages of the VDP was a major part of planning for the Project. The Project was the subject of a comprehensive Environment Effects Statement, including a Panel hearing, and requires compliance with a range of environmental requirements and approvals as outlined in the Project Deed between the State and AquaSure. Design and construction of the VDP is being carried out under a formal environmental management framework which includes an overarching Project Environmental Management System (EMS), and specific Environmental Management Plans (EMPs) for the overall Design and Construction phase and each area of construction (the plant site, the pipeline and power supply corridor, and the marine works). The operational and maintenance stage similarly will operate under specific Environmental Management Plans. In addition a range of environmental requirements has been defined relating to the design and operation of the desalination plant, and to the construction activities.

The Independent Reviewer and Environmental Auditor (IR&EA) provides independent oversight of design engineering, construction, and environmental performance of the VDP. The IR&EA is jointly appointed by the State Government and AquaSure; the consortium building the VDP, and which will subsequently operate it. In particular, the IR&EA audits the Project Activities to assess whether the environmental requirements of the Project are being met. The Department of Sustainability and Environment (DSE) Capital Projects Division administers the contract with AquaSure on behalf of the State.

This report provides a summary of the IR&EA's monthly environmental audit outcomes from October – December 2011.

## 2 THE VDP ENVIRONMENTAL MANAGEMENT FRAMEWORK

The overall environmental management framework for the VDP was initially defined in the Environmental Effects Statement (EES) for the reference project. This framework was further refined and included in the Project Deed as contractual requirements for both the Design and Construction (D&C) and Operations and Maintenance (O&M) phases of the Project. The main components of the Environmental Management Framework are:

- The VDP must be designed and constructed in accordance with a set of documented Environmental Performance Requirements, included in Appendix S3 of the Project Deed. In addition, Commonwealth and Victorian environmental legal requirements must be met.
- An Environmental Management System and Environmental Management Plans to support delivery of compliance with the Environmental Performance Requirements; and
- Additional requirements in the Project Deed to support environmental management.

The main elements of the Environmental Management Framework for the D&C stage are summarised below.

### 2.1 Environmental performance requirements

The Project Deed, in Appendix S3, sets out over 200 individual Environmental Performance Requirements in 39 environmental areas. They apply variously to the D&C and/or the O&M stages of the Project, and are required to be met as a condition of the Project Deed. Many of the Environmental Performance Requirements must be considered in the design of the desalination plant, to ensure that operational environmental performance requirements can be met.

Some of the Environmental Performance Requirements are relevant to construction activities. The D&C EMPs should effectively incorporate these requirements, and include mechanisms to ensure that they are met.

Specific project approvals, and general environmental requirements are necessary under both Commonwealth and Victorian legislation. Some of the key environmental legal requirements derive from the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and Victorian legislation including the *Environment Effects Act 1978*, the *Environment Protection Act 1970*, the *Planning and Environment Act 1987*, the *Flora and Fauna Guarantee Act 1988* and the *Wildlife Act 1975*. A full list of applicable legislation is given in the Technical Appendix 2 of the EES.

AquaSure must have a process to manage the identification of the compliance requirements associated with all the Environmental Performance Requirements, including approvals. In addition, AquaSure must identify how they will comply with these requirements and track progress of compliance actions.

## 2.2 EMS and EMPs

The Project is being designed and constructed, and will be operated, under the guidance of a set of formal environmental management documents:

- AquaSure maintains an overarching project Environmental Management System (EMS), which is required to be independently certified to the Australian and International standard AS/NZS ISO 14001:2004<sup>1</sup>. The EMS guides all aspects of environmental management for the project, including on-the-ground management of environmental issues and risks, as well as supporting mechanisms such as compliance management, delivery of relevant training, communication, auditing, inspections and monitoring.
- Specific documented Environmental Management Plans (EMPs) for the Plant Site, the Utilities corridor (covering the construction of the transfer pipeline and the underground power supply), and the marine intake and outlet structures. These Area EMPs are consistent with AquaSure's EMS, and include explicit requirements defined in Appendix S3 of the Project Deed. They are managed by AquaSure as part of their obligations under the Project Deed, and maintained by the D&C contractor, Thiess Degrémont Joint Venture (TDJV).

## 2.3 Other project environmental requirements

The Project Deed defines a number of other environmental conditions. The key ones are included in Appendix S3 and include:

- The appointment by AquaSure of a suitably qualified Environmental Management Representative (EMR), with appropriate resources to manage the implementation of the EMPs and to monitor compliance with the Environmental Requirements.
- Requirements for management of environmental incidents, provision of environmental training, control by AquaSure of subcontractors, and reporting and auditing.

The Project Deed also includes requirements for revision and approval of the EMS and EMPs, and for communication on environmental matters between AquaSure, the State and the IR&EA.

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<sup>1</sup> AS/NZS ISO 14001:2004. Environmental management systems. Requirements with guidance for use.

<sup>2</sup> AS/NZS ISO 19011:2002. Guidelines for quality and/or environmental management systems auditing

## 2.4 IR&EA environmental audits

The IR&EA is required under the Project Deed to conduct monthly audits of the Project Activities to determine whether they have been undertaken in accordance with the EMS, the EMP and Environmental Requirements.

The independent environmental audits are carried out on a rolling monthly basis. Audit and surveillance activities include field surveillance of construction activities, formal audits of the EMS and subordinate D&C and Area EMPs, and review of design documentation for compliance with design-based environmental performance requirements.

A risk-based approach is used to select the monthly activities and areas for surveillance and audit. AquaSure is required by the Project Deed to provide a Certificate of Environmental Compliance to the IR&EA and the State confirming that the Project Activities have been carried out in accordance with the EMP and the Environmental Requirements. These certificates are to be provided monthly on the first business day of each month.

The IR&EA has developed a Verification and Monitoring Plan under which all audit and surveillance activities are carried out.

Monthly Environmental Audit Reports are provided to AquaSure and the State, providing a summary of the audit activities, findings and conclusions.

As a condition of the EMP approval, quarterly reports are prepared for the State to provide to the Minister for Environment and Climate Change on performance against the environmental requirements of the Project Deed, based on the findings of the monthly environmental audits. This report provides a summary of the environmental audit activities and outcomes conducted from October - December 2011. In addition the Design Review and Certification process provides evidence that the Project design is in accordance with the Environmental Performance Requirements defined in the Project Deed.

### 3 CONDUCT OF ENVIRONMENTAL AUDITS

The overall conduct of the environmental audits is consistent with the conduct of audit activities given in ISO 19011:2002<sup>2</sup>. The required timing of audit activities, including conducting audits and reporting, is defined in the Project Deed. An overview of the audit process is provided below and is shown in Figure 1 at the end of this section.

The environmental audits assess whether environmental management arrangements, as defined by AquaSure and approved by the State, in the EMS and D&C and Area EMPs, are being implemented. The environmental audits also address whether environmental risks are being adequately managed, and whether the Project Environmental Requirements are being met.

#### 3.1 Audit objective

The objective for the environmental audit is given in clause 13.9 of the Project Deed, which requires that *“the Independent Reviewer & Environmental Auditor ... form an opinion as to whether or not the Environmental Management Plan and Environmental Requirements are being complied with, ... [and] to assess performance in relation to:*

- *the operation of the Environmental Management System;*
- *the implementation of each component of the Environmental Management Plan; and*
- *each other Environmental Requirement.”*

Environmental requirements are set out in Appendix S3 (Environmental Requirements) of the Project Deed, Environmental Approvals, and Ministers' requirements.

The environmental audits focus on:

- Construction-related Environmental Performance Requirements (including conditions of environmental approvals), which are the subject of a monthly rolling audit program designed to determine conformance with the EMS and D&C EMPs;
- Specific requirements of the EMS, D&C EMP, D&C Area EMPs, and subordinate documents which relate to the implementation of the overall EMS and EMPs; and
- Design-related Environmental Performance Requirements, conformance with which is assessed through audits of AquaSure/TDJV's internal processes for

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<sup>2</sup> AS/NZS ISO 19011:2002. Guidelines for quality and/or environmental management systems auditing

integrating Performance Requirements into design requirements, and during the Design Review and Certification process.

### 3.2 Pre-audit activities

The audit activities for each month period are determined through the following activities:

1. **Review of the Construction Program** to identify the Project Activities occurring during the audit period.
2. **Review of the AquaSure/TDJV Environmental Risk Registers** to identify environmental risks relevant to the identified Project Activities, and the related identified controls (EMP Sub Plans or other requirements). The relevant elements of the controls form part of the audit criteria.
3. **Review of the IR&EA field surveillance checklist and results of previous audits** to identify any areas in which the planned environmental arrangements may not be met.
4. **Review of EMS and EMP requirements.** EMS and EMP requirements not directly related to control of identified environmental risks (e.g. training, communication, document and record management requirements) are reviewed to identify any key requirements which should form part of the audit.
5. **Review of the relevant environmental approvals.** The environmental approvals relevant to the identified Project Activities are reviewed to identify compliance requirements. The key compliance requirements are generally integrated into the Area EMPs, and are included as part of the audit criteria.
6. **Review of AquaSure and TDJV records** relating to: internal audits; environmental monitoring; non-conformance, corrective and preventive actions; and incidents.
7. **Confirmation of audit criteria and development of checklists.** Audit criteria are developed from the audit areas identified in the tasks above and included in checklists which are used to guide audit interviews, records reviews and inspections.

### 3.3 Audit scope

A scope for each audit is defined, and generally includes:

- AquaSure EMS implementation, including the responsibilities of the Environmental Management Representative (EMR) as required in Appendix S3 of the Project Deed;
- Implementation of the requirements of the D&C EMP;

- Implementation of the D&C Area EMPs as related to high risk areas identified by the AquaSure/TDJV environmental risk identification and management processes.

### 3.4 Audit reference documents

Audit reference documents are defined, relevant to the project activities and audit scope. These are generally the relevant EMP, and particularly the relevant sub plan. Specific audit issues are identified from the reference documents, and included in a checklist, which are completed with audit observations and evidence each month and maintained as audit records.

### 3.5 Audit activities

Audit and surveillance activities include:

- Field surveillance of construction activities;
- Formal audits of the EMS and subordinate D&C and Area EMPs, both in the field to check on-ground compliance with environmental management arrangements, and office-based audits to assess the implementation of necessary environmental management procedures and processes; and
- Review of design documentation for compliance with design-based environmental performance requirements.

Activities and areas for surveillance and audit activities are chosen monthly on a risk basis.

### 3.6 Audit findings classification

Audit findings are classified according to the following definitions:

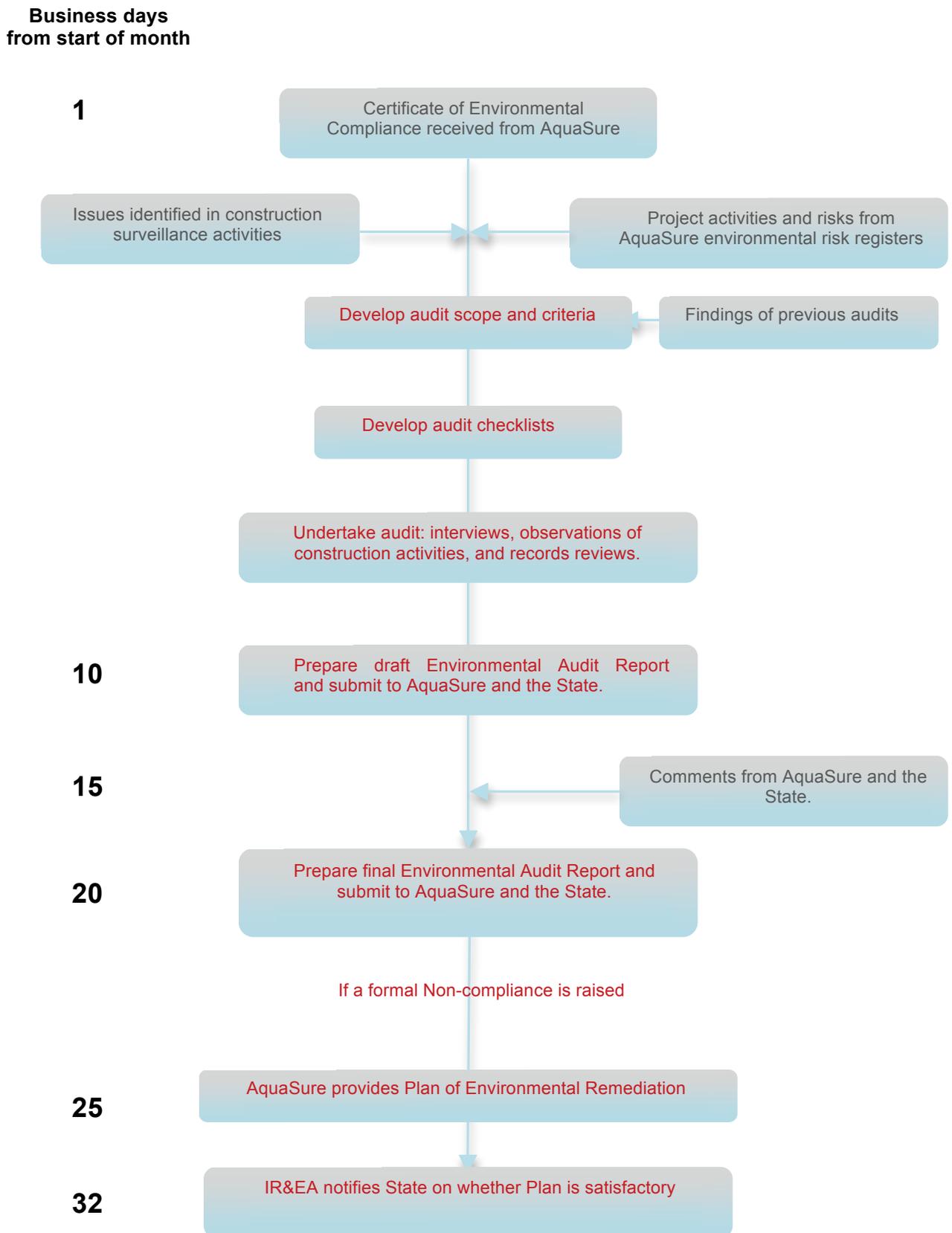
**Non-compliance:** The absence of, or the failure to implement and maintain, one or more requirements of the relevant EMP or subordinate documentation, or a situation, which would, on the basis of available objective evidence raise significant doubt as to the effectiveness of environmental management.

**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:** 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:** 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.

**Figure 1. Overview of the environmental audit process**



## 4 PROJECT ACTIVITIES AND ENVIRONMENTAL AUDITS

### 4.1 Project activities

The Project Activities occurring during the reporting period were:

- **Plant site:** minor bulk earthworks, civil works, building works, electrical works and mechanical installation. Site revegetation continued outside the construction footprint. Construction verification and cleaning activities commenced including hydro-testing.
- **Utilities alignment:** pipe stringing and trenching, pipe and conduit laying, power cable installation and trench back-filling were completed during the reporting period. Reinstatement of the alignment continued. Pipe hydrostatic testing commenced in September and was finished in December. The power cable was successfully energised from the Cranbourne Terminal Station to the Northern Reactor Compensation Station.

Views of these construction activities are shown in Figures 2 and 3 below.

**Figure 2. The Green Roof, Plant Site November 2011**



Photo courtesy TDJV

**Figure 3. Reinstatement of the Utilities alignment, December 2011**



#### 4.2 Environmental audits

The IR&EA conducted the following audits during the reporting period:

Audit No	Date	Scope
108	10/10/2011	Office audit of implementation of the Environmental Management Representative's (EMR's) responsibilities and relevant requirements of the Project Deed
109	10/10/2011	Office audit of documentation and records related to requirements of the D&C EMP
110	5/10/2011	Field audit of implementation of key requirements and sub-plans of the D&C Plant and General Area EMP
111	4/10/2011	Field audit of implementation of key requirements and sub-plans of the D&C Utilities Area EMP
112	6/10/2011	Office audit of the implementation of the Baseline Marine Monitoring Program
113	7/11/2011	Office audit of implementation of the Environmental Management System (EMS), and the Environmental Management Representative's (EMR's) responsibilities and relevant requirements of the Project Deed
114	14/11/2011	Office audit of documentation and records related to requirements of the D&C EMP
115	10/11/2011	Field audit of implementation of key requirements and sub-plans of the D&C Plant and General Area EMP
116	9/11/2011	Field audit of implementation of key requirements and sub-plans of the D&C Utilities Area EMP

Audit No	Date	Scope
117	7/11/2011	Office audit of the implementation of the Baseline Marine Monitoring Program
118	9/12/2011	Office audit of implementation of the Environmental Management System (EMS), and the Environmental Management Representative's (EMR's) responsibilities and relevant requirements of the Project Deed
119	12/12/2011	Office audit of documentation and records related to requirements of the D&C EMP
120	8/12/2011	Field audit of implementation of key requirements and sub-plans of the D&C Plant and General Area EMP
121	6/12/2011	Field audit of implementation of key requirements and sub-plans of the D&C Utilities Area EMP
122	7/12/2011	Office audit of the implementation of the Baseline Marine Monitoring Program

## 5 AUDIT FINDINGS AND CONCLUSIONS

### 5.1 Audit findings

During the reporting period a total of 12 formal audit findings were raised, including two Non-compliances and ten Areas for Improvement. A list of all the audit findings, as well as corrective and preventive actions to the end of December 2011 taken by AquaSure and TDJV to close the findings is given in Appendix 1.

A summary of the numbers of audit findings is given in Table 1 below.

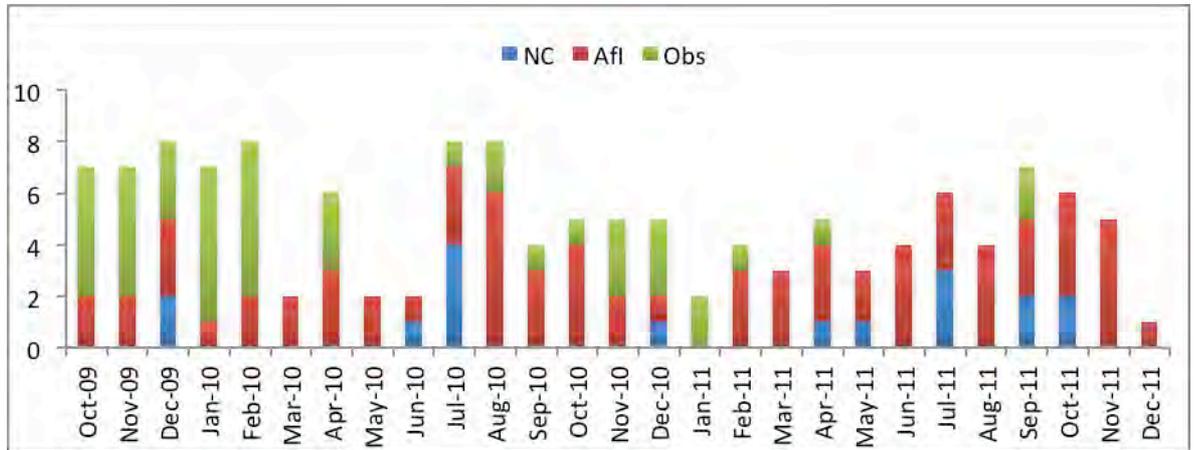
**Table 1. Summary of environmental audit findings Q4 2011**

<b>Audit finding type</b>	<b>No. Open at Oct '11</b>	<b>No. Raised Oct - Dec '11</b>	<b>No. Closed Oct - Dec '11</b>
Non Compliance	5	2	1
Area for Improvement	7	10	6
Observation	6	0	2
<b>Totals</b>	<b>18</b>	<b>12</b>	<b>9</b>

The number of overall audit findings, and the number of Non-compliances declined over the reporting period, and in comparison to the previous three months. This is partly due to the reduced environmental risk profile of the project. As construction was largely completed along the utilities alignment the associated environmental risks were no longer relevant. Similarly at the plant site, construction is progressively undercover and/or on paved surfaces, reducing the associated environmental risks.

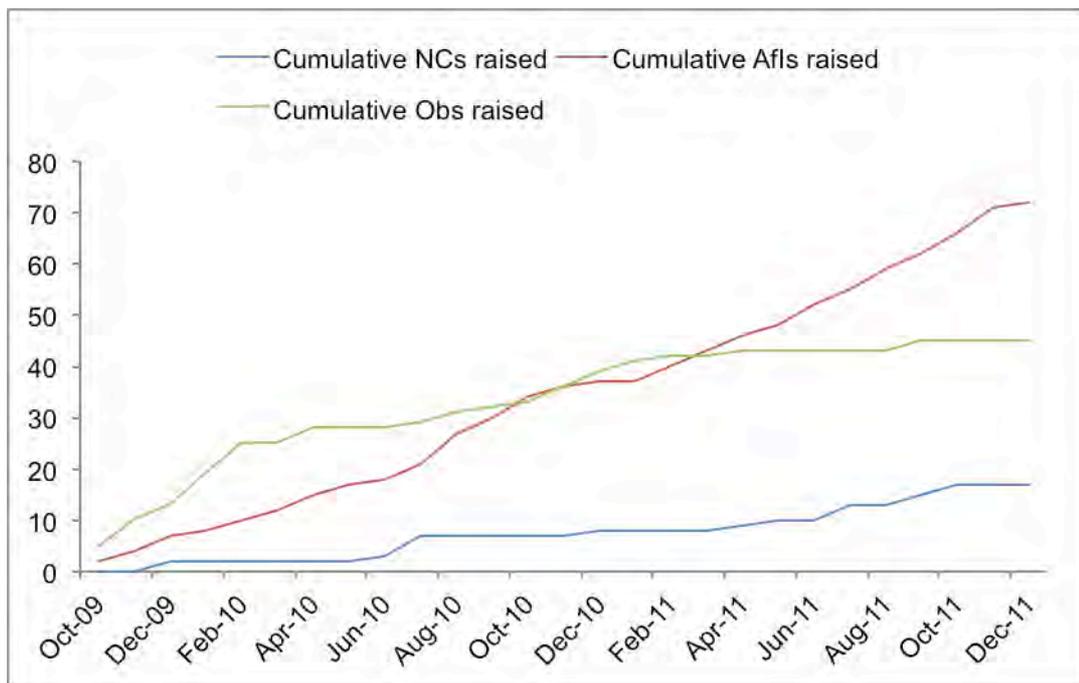
The number of each type of audit finding raised each month since project inception is given in Figure 4 below.

**Figure 4. Audit findings by category.**



The overall number of audit findings raised (and closed) since the project started is given in Figure 5 below.

**Figure 5. Cumulative number of audit findings, Project inception to date.**



While the number of new findings has decreased, the number of audit findings remaining open has increased. Audit findings related to on-ground environmental management were all minor, and are generally closed in the next audit, with mitigation actions undertaken quickly by TDJV. Twenty-three findings remained open at the end of December, with most of these relating to environmental management documentation not

being consistent with on-ground practices. These findings will be closed when the revised AquaSure EMS and TDJV D&C EMP are formally approved. Some of the open findings relate to implementation of elements of the D&C EMP which direct the overall management of the environmental management system.

Two Non-compliance were raised during the reporting period. One relates to the Utilities Area EMP not covering construction verification and cleaning activities, and is consistent with a similar finding raised on the Plant and General Area EMP in Q3 2011. The other Non-compliance was in relation to an unplanned discharge along the utilities alignment during hydrostatic testing of the pipeline. The discharge was not managed in accordance with TDJV's documented requirements. This Non-compliance was closed in January 2012.

The risk profile at the plant site has changed with construction activities progressively being a lower risk. The associated environmental risks are well-managed, with no major audit findings related to on-ground management. A major investigation of groundwater at the plant site in relation to future Acid Sulphate Soils (ASS) management continued, and is on schedule to be complete in the first quarter of 2012. A revised D&C EMP was provided to the IR&EA for comment during the reporting period. TDJV advise this will be submitted to the Minister for Environment and Climate Change for approval under the Project Deed early in 2012. Work also progressed on developing environmental management documentation for the commissioning phase of construction.

**Figure 6. Segregation of contaminated soil from spills, Plant site, November 2011**



**Figure 7. Preparation for groundwater investigations, Plant site, December 2011**



Activities along the Utilities alignment progressed from the end of construction activities (including reinstatement activities) to hydrostatic testing of the pipeline, and energisation of the power cable from the Cranbourne Terminal Station to the Northern Reactor Compensation Station. Biosecurity measures were reactivated in area where top soil was being handled to minimise the risk of spreading agricultural pathogens.

**Figure 8. Chlorine storage during pipe hydrostatic testing, Utilities alignment, November 2011.**



**Figure 9. Biosecurity management, Utilities alignment, December 2011**



## **5.2 Audit conclusions**

The conclusions in relation to the objectives for the Environmental Audits in the Project Deed are given below.

### **5.2.1 Operation of the Environmental Management System**

The AquaSure Environmental Management System (EMS) provides the overall framework for environmental management for the project. The EMS continues to operate effectively. IR&EA and external audit findings relate to minor issues, largely concerned with documentation.

### **5.2.2 Implementation of each component of the EMP**

The D&C EMP and the Area EMPs remained effective in guiding on-ground environmental management for most issues. Construction verification and cleaning activities are being conducted, and are not documented in the EMPs. Two Non-compliances have now been raised in relation to this issue, for both the Plant and General Area, and the Utilities Area EMPs, and both remain open. Most audit findings relate to environmental management documentation and records, with a minority related directly to management of environmental risks. The Non-compliance on inadequate waste management data first raised in May 2011 has yet to be closed, although some progress on generating appropriate data has been made.

### 5.2.3 Other Environmental requirements

Construction related Environmental Performance Requirements are integrated into the relevant sub plans of the Area EMPs. Accordingly, the audits of the EMPs provide assurance that the Performance Requirements are being met. In addition, construction requirements and methodologies are defined in Site Establishment Packages and Temporary Works Packages, which refer to the D&C EMP and the Performance Requirements. These packages are certified by the IR&EA.

The design related Performance Requirements are integrated into the relevant Design Package. The IR&EA certification of the Design Packages includes assurance that the related performance requirements have been adequately addressed.

During the reporting period there were no material audit findings which would suggest that the Performance Requirements had not been met. The open Non-compliance on waste management may impact on the associated Performance Requirements.

## Appendix 1. Environmental audit findings Q4 2011

The following table summarises the audit findings which were open at the beginning of the reporting period, and those raised during the reporting period.

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
2	Oct-09	OBS	2/04	<p>The roles and responsibilities of the Environmental Management Representative as defined in Appendix S3, Clause 2 of the PS&amp;PR have been only partially implemented in the following areas:</p> <p>the role of the EMR in environmental communication channels is not clearly defined (subclause (vii)).</p> <p>While the EMR provided evidence of involvement in internal and external environmental communications, these responsibilities are not formally defined in the EMS. The EMS Manual (at section 4.4.2) references the Community Involvement Plan, which does not include defined communications responsibilities for the EMR.</p>	<p>December 2009: Update EMS s4.4.2 &amp; s4.4.3, and the AquaSure CIP, to reflect what external communication input the EMR is involved with.</p> <p>January 2010: the identified action is still being implemented</p> <p>February 2010: the identified action is still being implemented</p> <p>March 2010: the identified action is still being implemented</p> <p>April 2010: the following draft documents are under preparation:</p> <ul style="list-style-type: none"> <li>• Draft protocol for communication with external agencies</li> <li>• Draft protocol for communication with stakeholders on environment issues and complaints</li> <li>• Draft revised CIP; including definition of EMR roles and responsibilities</li> </ul> <p>May 2010: The role of the EMR in environmental communication channels is to be defined in the revised EMS Manual and in the Community Involvement Plan. The mechanism has been prepared and approved internally and will be presented to the Environmental Agency Group.</p> <p>June 2010: The mechanism was presented to the EAG, which provided no comments. Finding to remain open until the EMS and revised CIP are formally approved by DSE</p> <p>July 2010: EMR is involved in communication channels through the Community Involvement Manager. The CIP has not yet been formally amended to include a formal process. Finding to remain open until the EMS and revised CIP are formally approved by DSE.</p> <p>August 2010: CIP revision not yet completed.</p> <p>September 2010: A revised CIP had been submitted to DSE for formal approval as a revised Project Plan. This finding to remain open until the revised CIP is formally approved.</p> <p>November 2010: the CIP has been revised in response to comments from DSE, and is awaiting a revised TDJV CIP before</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
					<p>being finalised and resubmitted to DSE for approval.</p> <p>December 2010: Action is on-going</p> <p>January 2011: CIP not yet approved.</p> <p>February 2011: DSE has some minor comments still outstanding.</p> <p>March 2011: The revised draft of the CIP adequately addresses the role of the EMR. The CIP is to be revised for other purposes, and to be submitted for state consent. This finding to remain open until the revised CIP has received consent.</p> <p>April 2011: The CIP is still to be submitted for State consent.</p> <p>May 2011: The CIP is still to be submitted for State consent.</p> <p>June 2011: The CIP is still to be submitted for State consent.</p> <p>July 2011: The CIP has still to receive State and IR&amp;EA consent</p> <p>August 2011: The CIP has still to receive State and IR&amp; EA consent</p> <p>September 2011: The CIP has still to receive State and IR&amp;EA consent</p> <p>October 2011: The CIP has still to receive State and IR&amp;EA consent</p> <p>November 2011: The CIP has still to receive State and IR&amp;EA consent</p> <p>December 2011: The CIP has received State and requires formal IR&amp;EA consent.</p>	
49	6-Oct-2010	Obs	49/01	<b>AquaSure EMS Manual, 9.5.1 AquaSure Audits.</b> The AquaSure EMR is the internal auditor, but he is not registered in accordance with Att E.4	<p>November 2010: No action</p> <p>December 2010: No further action. Revision to EMS being considered.</p> <p>January 2011: Action is on going. A management review to be arranged to consider EMS revisions.</p> <p>February 2011: Management Review meeting scheduled for 16 February.</p> <p>March 2011: Management review meeting held on 21 February. Minutes provided noting approval of revision. A revised EMS is to be submitted for State consent</p> <p>April 2011: The revised EMS is still to be submitted for State consent.</p> <p>May 2011: The revised EMS is still to be submitted for State consent.</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
					<p>June 2011: The revised EMS is still to be submitted for State consent</p> <p>July 2011: The revised EMS is still to be submitted for State consent</p> <p>August 2011: The revised EMS is still to be submitted for State consent</p> <p>September 2011: The revised EMS is still to be submitted for State consent</p> <p>October 2011: The revised EMS is still to be submitted for State consent</p> <p>November 2011: The revised EMS is still to be submitted for State consent</p> <p>December 2011: The revised EMS is still to be submitted for State consent</p>	
54	4-Nov-2010	Obs	54/01	<p><b>AquaSure EMS Manual. 7.5 Legal and other requirements.</b> Standards Australia publications are not regularly checked or reviewed unless included on the notification by LawLex. It is noted this may not be relevant for environmental standards.</p>	<p>December 2010: Requirement to review Standards Australia publications to be removed from EMS. Still to be completed</p> <p>January 2011: Action is on-going. A management review is to approve revision.</p> <p>February 2011: Management Review meeting scheduled for 16 February.</p> <p>March 2011: Management review meeting held on 21 February. Minutes provided noting approval of revision. A revised EMS is to be submitted for State consent.</p> <p>April 2011: The revised EMS is still to be submitted for State consent.</p> <p>May 2011: The revised EMS is still to be submitted for State consent.</p> <p>June 2011: The revised EMS is still to be submitted for State consent</p> <p>July 2011: The revised EMS is still to be submitted for State consent</p> <p>August 2011: The revised EMS is still to be submitted for State consent</p> <p>October 2011: The revised EMS is still to be submitted for State consent</p> <p>November 2011: The revised EMS is still to be submitted for State</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
					consent December 2011: The revised EMS is still to be submitted for State consent	
54	4-Nov-2010	Obs	54/02	<b>AquaSure EMS Manual. 9.2 Non-conformity, corrective and preventative actions.</b> Non-conformities are not managed in accordance with the AquaSure procedure "Non Compliance, Corrective and Preventive Action" AQS-SYS-PR003. The EMR has developed a separate audit findings register.	December 2010: AQS NC procedure may be revised to accommodate EMRs process. In progress January 2011: Action is on-going. Management review meeting to endorse change. February 2011: Management Review meeting scheduled for 16 February. March 2011: Management review meeting held on 21 February. Minutes provided noting approval of revision. A revised EMS is to be submitted for State consent. April 2011: The revised EMS is still to be submitted for State consent. May 2011: The revised EMS is still to be submitted for State consent. June 2011: The revised EMS is still to be submitted for State consent July 2011: The revised EMS is still to be submitted for State consent August 2011: The revised EMS is still to be submitted for State consent September 2011: The revised EMS is still to be submitted for State consent October 2011: The revised EMS has been submitted to DSE and the IR&EA for comment November 2011: The revised EMS is still to be submitted for State consent December 2011: The revised EMS is still to be submitted for State consent	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
84	11/05/11	N	84/01	<b>D&amp;C EMP Resource Efficiency Sub Plans. Waste Management Report 2010.</b> Data are not available to support the statements of recycling in the Waste Management Report. The amount of recyclable waste in general waste has not been reliably quantified. Data are not well presented and do not clearly identify how recycling rates were generated.	<p>TDJV response:</p> <p>A Waste Assessment consultant has been engaged to conduct on site waste assessments for both the Plant Site and Utilities Corridor. The first round of assessments will be conducted on 15 and 16 June 2011 and will continue on a monthly basis. The assessments will be used to develop and assess quantifiable monthly achievements of waste targets. Quarterly reviews of the waste data will commence in the second quarter 2011 against the waste assessment data obtained.</p> <p>June 2011: Actions are on-going</p> <p>July 2011: Waste assessments have been done, waiting for report.</p> <p>August 2011: Draft waste assessment report received by TDJV for comment. TDJV will review second monthly assessment before setting targets.</p> <p>September 2011: Monthly data gathering to continue. Development of targets to be done recognising the stage of construction.</p> <p>October 2011: TDJV is developing a monthly reporting approach, with reporting against targets and recommendations developed in the previous month. This will take into account the stage of construction and anticipated wastes.</p> <p>November 2011: Project wide waste report has been received from consultant. This includes an action list. The waste assessments are to be continued each month. Waste targets are to be tracked.</p> <p>December 2011: Draft October Waste Assessment sighted, which provides whole of project waste data and actions.</p>	Remains open
90	8/06/11	Afl	90/02	<b>D&amp;C EMP Plant and General Area Noise and Vibration sub plan.</b> The sub plan does not systematically reflect the noise management undertaken at the plant site, including the planning and scheduling of potentially noisy activities.	<p>July 2011: The revisions are in draft form</p> <p>August 2011: The revisions are in draft.</p> <p>September 2011: The revisions are in draft.</p> <p>October 2011: A revised sub plan has been submitted to the State and the IR&amp;EA for comment as part of a broader revision of the D&amp;C EMP.</p> <p>November 2011: The revised D&amp;C EMP is to be formally submitted for approval.</p> <p>December 2011: The revised D&amp;C EMP is to be formally</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
					submitted for approval	
95	11/07/11	N	95/01	<p><b>D&amp;C EMP Plant and General Area. Risk Register.</b>            Construction verification and cleaning activities have been conducted on site since April, but are not yet included in the environmental risk register. Accordingly, any required controls have not been formally identified and included in the EMP. It is noted that work required to identify the required revisions to the D&amp;C EMP has been underway for several months, and is not yet finalised.</p>	<p>TDJV response:            The TDJV D&amp;C EMP Risk Assessment has been updated to include construction verification and cleaning activities and was submitted to IR&amp;EA for comments. Based on the return comments all sub-plan are currently being amended to include small introduction sections on project phases and linked to CESP. Once complete this will be submitted to state for approval. All onsite activities have been included in the revised RA which is being implemented on site but has not yet been signed off by the State.            August 2011: The risk register is being revised as part of an overall revision of the D&amp;C EMP            September 2011: The risk register is being revised as part of an overall revision of the D&amp;C EMP            October 2011: the final revisions have been provided to the IR&amp;EA for review.            November 2011: The revised D&amp;C EMP is to be formally submitted for approval            December 2011: The revised D&amp;C EMP is to be formally submitted for approval.</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
96	7/07/11	N	96/02	<b>D&amp;C EMP Utilities Area Flora and Fauna sub plan.</b> Surplus spoil has been placed near the Bass River and has encroached on an area of sensitive vegetation.	<p>TDJV response:</p> <p>An inspection of the stockpile was completed with the General Site Superintendent to devise a temporary remediation plan. Due to site constraints full removal of the stockpile was not possible immediately. As such the stockpile was levelled off to allow a long arm excavator was groom the batter faces and retrieve the spoil that had slumped off the stockpile pad. Sediment fences have been reinstated around the entire stockpile. Full removal of the stockpile will be a reinstatement priority as soon as construction activities in between the Bass River and Stewarts Rd have been completed.</p> <p>August 2011: The stockpile has been stabilised and groomed, The AEM advises that the spoil will be removed once the pipe works have been completed. This finding to remain open until the area is rehabilitated.</p> <p>September 2011: The stockpile is being removed. The finding will be closed when removal is confirmed.</p> <p>October 2011: All spoil has been removed. Removal of all construction waste to be confirmed. Site still to be reinstated. Finding to be closed when Part D notice received.</p> <p>November 2011: Part D Notice received by IR&amp;EA 28 October. Finding Closed</p>	Finding Closed Audit No 116, November 2011
98	5/08/11	Afl	98/01	<b>AquaSure EMS, document review and approval.</b> The role of the EMR in reviewing key environmental procedures is not formally documented in the EMS.	<p>September 2011: Revisions to the EMS are being prepared for discussion with DSE, as the EMS needs to meet both Project Deed requirements and certification requirements.</p> <p>October 2011: The process for EMR review of key environmental procedures has been included in the revised EMS.</p> <p>November 2011: The EMS revisions are not yet finalised.</p> <p>December 2011: the revision to the EMS is not yet finalised.</p>	Remains open
99	5/08/11	Afl	99/01	<b>D&amp;C EMP, 8.5 Operational Management control.</b> The process of review approval and implementation of environmentally relevant operational controls is not formally audited by the TDJV Environment Manager, and accordingly the effectiveness of this review and approval process cannot be assessed by TDJV.	<p>TDJV response:</p> <p>The process of review approval and implementation of environmentally relevant operational controls will be formally audited by the TDJV Environment Manager.</p> <p>September 2011: audit not currently in TDJV internal audit schedule which goes out to Feb 2012.</p> <p>October 2011: TDJV will revise the audit schedule to include environmentally relevant operational controls.</p>	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
					November 2011: Audit schedule not yet revised. December 2011: Audit schedule to be discussed with AquaSure .	
99	5/08/11	Afl	99/02	<b>D&amp;C EMP 8.5 Operational Management control.</b> The process used in practice by the Area Environment Managers for involvement in the development, and where applicable sign off, of documents below the level of D&C EMP Sub Plans (such as Work Packs, Work Area Packs, Temporary Work Packs, environmental procedure and the like) is not consistent with the process outlined in the D&C EMP. The current process of approval and authorisation used by the AquaSure EMR, the TDJV Environment Manager and the TDJV Stakeholder Director, is not reflected in the D&C EMP.	TDJV response: The current process of approval and authorisation used by the AquaSure EMR, the TDJV Environment Manager and the TDJV Stakeholder Director will be reflected in the D&C EMP to be reissued for consent. September 2011: to be included in next revision of D&C EMP. October 2011: to be included in next revision of D&C EMP. November 2011: to be included in the next revision of the D&C EMP December 2011: the revised D&C EMP includes this approval process.	Remains open
SA01	20/07/11	N	SA01/01	<b>D&amp;C EMP, Utilities Area Archaeological and Cultural Heritage Sub Plan.</b> Summaries from unapproved versions of CHMPs for both the Utilities Corridor and the Cranbourne Power Extension have been appended to the Sub Plan. This has resulted in inaccurate site identification and management information in the Sub Plan for the Utilities Corridor.	TDJV response: The D&C EMP, Utilities Area Archaeological and Cultural Heritage Sub Plan will undergo a major revision to incorporate the recommendation of Executive Summaries of the approved versions of the CHMPs. September 2011: Actions are on-going. October 2011: Revised sub plan has been issued to DSE and IREA as part of overall revision, but did not include the CMHP extracts November 2011: AEM to follow up December 2011: CHMP Executive summary provided with the last version of the revised D&C EMP was still incorrect	Remains open
SA01	20/07/11	N	SA01/02	<b>D&amp;C EMP Utilities Area Archaeological and Cultural Heritage Sub Plan, and Performance Requirement #08070.</b> Not all Aboriginal heritage sites identified in CHMPs for management were marked on Site Environmental Plans.	TDJV response: The Site Environmental Plans will be revised to include all sites that are not entirely within the construction easement as Heritage NO GO Zones. September 2011: Actions are on-going. October 2011: Actions are ongoing November 2011: Revised SEPs to be published in December December 2011: Not yet published, some minor revisions still to be incorporated.	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
SA01	20/07/11	Afl	SA01/03	<b>Utilities Corridor CHMP; D&amp;C EMP Utilities Area; Archaeological and Cultural Heritage Sub Plan; Performance Requirements #08072.</b> The Cultural Heritage Induction Booklet is not widely available to personnel across the utilities work area.	<p>TDJV response:</p> <p>The Cultural Heritage Induction Booklet will be distributed to general HSE information packs available to staff in crib huts. Pre-start talk topics will be distributed to inform crews of the availability of these booklets.</p> <p>September 2011: Actions are on-going.</p> <p>October 2011: Actions are ongoing and will focus on reinstatement crews.</p> <p>November 2011: Cultural Heritage inductions to be rolled out for reinstatement crews</p> <p>December 2011: Booklets being distributed to crib huts. Toolbox talks underway.</p>	Remains open
103	12/09/11	Afl	103/01	<b>AquaSure EMS. 7.5 Legal and other requirements.</b> Compliance with the requirements of the Coastal Management Act consent for the project is not tracked.	<p>October 2011: The EMR is auditing TDJV compliance with the CMA consent in October</p> <p>November 2011: Compliance audit was done in October. Several minor findings made, awaiting TDJV response and some comments from DSE. Finding Closed.</p>	Finding Closed Audit No 113, November 2011
104	12/09/11	Afl	104/01	<b>D&amp;C EMP, 7.5.3 Licence, permit and approval requirements.</b> There is no systematic process for the tracking of the status of licences, permits and approvals, including compliance status and whether the approval is current. Compliance with approvals is not included in the TDJV internal audit schedule.	<p>TDJV response:</p> <p>TDJV will undertake a review of all Project licence, permit and approvals including compliance and currency status. Compliance with approvals has been added to the TDJV Internal Audit Schedule.</p> <p>October 2011: The compliance review has been commenced.</p> <p>November 2011: the Approvals Tracker has been reactivated as a mechanism for monitoring approvals. The tracker to be reviewed on a quarterly basis. Sighted tracker with notes indicating which approvals required renewing. Obligations from approvals are tracked in the compliance tracker. Finding Closed.</p>	Finding Closed Audit No 114, November 2011

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
105	8/09/11	O	105/01	<b>D&amp;C EMP Plant and General Area Noise and Vibration Sub Plan.</b> TDJV has responded to a series of complaints on night-time noise from a neighbour on West Area Road over several months. The responses have included conducting noise monitoring and implementing noise mitigation measures. TDJV's responses have followed the requirements of the Community Involvement Plan, however the complainant still maintains that a disturbing noise can be heard inside his house at night. The complainant has declined noise monitoring inside the house. While the response of TDJV is considered appropriate, the potential that night noise levels may not meet the requirements of EPA Publication 1254 cannot be excluded.	TDJV response: TDJV have made changes to site operations and confirmed via monitoring (external at property boundary) that this has resulted in a measureable reduction in noise. TDJV continues to liaise with the nearby resident via the community team. The complainant is still refusing attended listening. TDJV actions have been in accordance with the EMP (including Publication 1254) and the CIP. As the resident is refusing attended noise monitoring which has been offered by TDJV no further action is proposed. TDJV will continue to liaise with the local resident via the CIP as required. October 2011: Actions noted. Finding closed.	Finding Closed Audit No 110, October 2011
106	6/09/11	O	106/01	<b>D&amp;C EMP Utilities Area. Licences approvals and permits.</b> Several permits issued by Melbourne Water for Works on Waterways are not current. It is noted that PLJV have commenced discussions with MWC to obtain or renew the relevant permits.	TDJV response: All expired Melbourne Water Corporation Permits that have expired were surrendered on the 29.9.2011. New permits were issued for Rectification Works on Type A & B waterways (A111593) and Scour Valves (A111592). In conjunction with the Permit to Work on Type C Waterways (A87950), all remaining works on waterways are covered by an active permit. October 2011: Meeting held with MWC. All expired permits surrendered. Signed acknowledgment from MWC sighted. Two new permits issued. One covering reinstatement works on types A and B waterways valid to end June 2012. One for scour valves. Finding closed.	Finding Closed Audit No 111, October 2011
110	5/10/11	Afl	110/01	<b>D&amp;C EMP Plant and General Area MIRA Schedule; Air quality monitoring.</b> Real time dust monitors are in place, however the data are not available in real time as the monitors have not been connected to the Area Environment Manager's office following a recent move.	TDJV response: Air monitoring is still logging the data, visual inspections have been conducted to determine raised dust and hand held (dust tracks) are available as required. The air monitoring station has now been re-connected following the move of office and data is now available in real-time again. November 2011: The real time data are now available. Sighted in AEM's office. Finding Closed	Finding Closed Audit No 115, November 2011

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
110	5/10/11	Afl	110/02	<b>D&amp;C EMP, Plant and General Area, MIRA Schedule.</b> Water was discharged from the sediment pond when one of three pH readings was slightly outside the range defined in the TDJV Discharging Water Procedure.	TDJV response: All discharges occurred in accordance with TDJV's discharge framework, as established by Tiller & Newall (2011) and reviewed by the EPA Appointed Auditor. However, TDJV's Water Discharge Procedure had not been updated to reflect the current water quality parameters as outlined in the framework. This procedure has now been amended. November 2011: The Discharge Procedure has been revised to include discharge criteria as advised by Tiller et al. Sighted procedure. Finding Closed.	Finding Closed Audit No 115, November 2011.
111	4/10/11	N	111/01	<b>D&amp;C EMP, Utilities Area EMP.</b> Construction verification and cleaning activities are being conducted, but these activities are not yet included in an approved revision to the Area EMP.	TDJV response: The D&C Utilities EMP Risk Assessment and supporting documentation has been updated to include construction verification and cleaning activities and will be submitted to DSE CP for State consent. November 2011: Draft revised risk register sighted. December 2011: The revised D&C EMP has not yet been finalised for submission to the State and the IR&EA.	Remains open
111	4/10/11	N	111/02	<b>D&amp;C EMP Utilities Area, Transfer Pipeline Hydrostatic Test and Commissioning Phase, Environmental Discharge Procedure.</b> An uncontrolled discharge from a leaking scour valve assembly connection to the Lang Lang River during pipe hydrotest had measured total residual chlorine at detectable levels. The procedure requires no detectable total residual chlorine in water discharged to the environment.	TDJV response: The Hydrostatic Test and Commissioning Phase Environmental Discharge Procedure (PLV-3-EN-PR-0003-03) will be revised to remove reference to discharge having no detectable total residual chlorine. Based on expert advice, the acceptable residual chlorine level will be defined in accordance with State Environmental Protection Policy (Waters of Victoria) (SEPP (WoV)) and Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000). November 2011: PLJV have commissioned a technical note from a subject matter expert. The procedure is to be revised before the next hydrotest occurs. December 2011: Revised and approved procedure implemented for test section 4. Finding to be closed when the Part D Notice is received.	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
111	4/10/11	Afl	111/03	<b>D&amp;C EMP Utilities Area, Att K Environmental Incident response Plan.</b> The uncontrolled discharge to Lang Lang River during the hydrotest of pipeline section 2 was not recorded as an incident.	TDJV response: Relevant notifications of the incident were made to EPA, MWC, DSE, AquaSure and IR&EA on the 23/09/2011 (the day of the incident). The incident will be retrospectively recorded in the Thiess HSE Reporting System. November 2011: This has been acknowledged as an incident, but not yet included in the Thiess HSE database December 2011: The incident is recorded in the Thiess HSE database. Sighted. Finding closed.	Finding Closed Audit No 121, December 2011
111	4/10/11	Afl	111/04	<b>D&amp;C EMP, Utilities Area, Water Quality and Erosion Management Sub Plan.</b> A sediment fence was not functioning and was allowing highly turbid water to flow directly to an adjacent dam	TDJV response: The sediment fence will be repaired to intercept turbid water flowing off site into an adjacent dam. November 2011: The sediment fence has been fixed. Finding Closed.	Finding Closed Audit No 116, November 2011
113	7/11/11	Afl	113/01	<b>AquaSure EMS, 9.5.1 Internal audits.</b> The six monthly internal EMS audit is two months overdue, and has not been conducted or scheduled.	December 2011: the next internal audit is not yet scheduled	Remains open
113	7/11/11	Afl	113/02	<b>AquaSure EMS, 10.3.1 AquaSure continual improvement.</b> There is no regular or systematic approach to capturing and disseminating best practice and lessons learnt from the Project.	December 2011: An appropriate response to this is being considered by AQS.	Remains open
114	14/11/11	Afl	114/01	<b>D&amp;C EMP, 9.3 Non-conformity, corrective and preventive action.</b> The Quality Plan procedure referenced in the D&C EMP is not used to manage non-conformities. Corrective and preventive actions are not rated for priority, and no time lines are defined for actions to be implemented	TDJV response: The TDJV Audit action registers will be updated to include allocations of priority and action timeframes for all non-conformities. Corrective and preventative actions are managed via the HSE Database – the EMP has been amended to reflect this. Actions are assigned via the HSE Database, which includes priority, time frames to complete and close outs. The HSE database issues actions to the assigned individual and tracks actions (including issuing reminders and warnings to all associated with the action). December 2011: No action	Remains open
114	14/11/11	Afl	114/02	<b>D&amp;C EMP, 9.5.2 TDJV internal audits.</b> The internal audit schedule is not based on environmental risks and the outcomes of previous audits, and does not adequately address the relevant stages of construction and associated	TDJV response: The TDJV Internal Audit Schedule will be updated to include a program and environmental risk based approach along with	Remains open

AUDIT NO.	DATE	TYPE.	FINDING NO.	FINDING	ACTION	STATUS
				activities.	actions and outcomes from previous audits. December 2011: No action	
114	14/11/11	Afl	114/03	<b>D&amp;C EMP, 10.3.1 Continual improvement.</b> There is no regular or systematic approach to capturing and disseminating best practice and lessons learnt from the Project.	TDJV response: Environmental lessons learnt are circulated via the Thiess Business Unit (via the HSE Management System) and displayed around site when received by the Area Environmental Managers. Any lessons learnt relevant to the VDP project are communicated with the work group via the Environmental Toolbox Sessions. December 2011: No action January 2012: No action	Remains open
120	8/12/11	Afl	120/01	<b>D&amp;C EMP, Plant and General Area Hazardous Materials sub plan.</b> Jerry cans of diesel were observed during the site inspection at a number of locations around the site to unbanded and stored on unpaved areas	TDJV response: Hazardous material storage procedures were tool boxed to site personnel via the Desal Daily communication process. Individual area supervisors were reminded of their environmental obligations by the PGA Area Environmental Manager. Ongoing monitoring via Environmental Inspection Checklist. December 2011: No action	Remains open