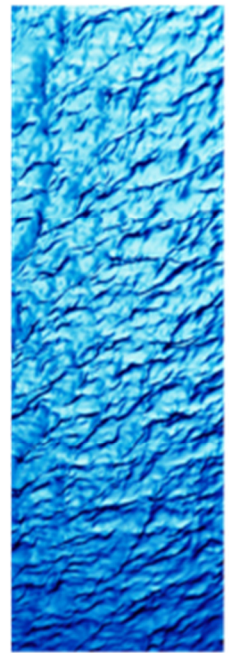




Victorian Desalination Project



D&C Marine Area Environmental Management Plan Attachment L - Monitoring, Inspection, Reporting and Audit Schedule

DOCUMENT NUMBER						
TDV	0	EV	SH	0013	L	04

ATTACHMENT L – MONITORING, INSPECTION, REPORTING AND AUDIT SCHEDULE

TABLE 1 - MONITORING

Type	Scope *	Frequency	Responsibility	Form used	Reporting procedure
Monitoring					
Att I1 – Coastal Processes					
Coastal features surveys	Aerial photographic survey of coastal habitats and features	Pre-construction Post construction	Consultant	Consultant form	Consultant report
Att I2 – Hazardous Materials					
Hazardous material use	Visual observations of hazardous material use, storage/segregation, bunding, labelling, spill containment, MSDS	Daily / weekly	Foreman or Supervisors	Site Diary	Checklists as per HSE Activity Scheduler. Weekly checklist NCRs via HSE Action database.
Att I3 – Resource Efficiency and Waste Management					
Energy monitoring (including tracking all energy consumed by sub contractors, consultants etc)	NGERS data from sub contractors	Monthly	Environmental Officer	Log book NGERS datasheet	Monthly report to Thiess corporate
Water consumption	Log potable water use on	Monthly	Environmental Officer	Onboard supply records	Monthly report

D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Type	Scope *	Frequency	Responsibility	Form used	Reporting procedure
Monitoring					
monitoring (water use onboard all major vessels (JUB and OSV))	JUB and OSV				
Waste Monitoring	Throughout works – review of garbage book and oil book.	Monthly	Environmental Officer	Log book	Monthly report
Drill plume monitoring	Visual observations of the plume including general appearance, colour and estimated size	Regular during drilling – dependent on drill activity.	Supervising Engineer	Checklist	Contractor report
Drill plume water quality monitoring	Sampling will be undertaken at designated points with distance from the drilling activity. At each point, sub-surface samples will be collected for total suspended solids (TSS), turbidity and secchi disk depth.	During riser drilling and cuttings disposal construction works	Consultant	Consultant form	Consultant Report
Cuttings disposal sites	Monitor disposal sites by ROV during activity to ensure placement is correct Post construction surveys to assess location of drill cuttings and determine stability.	During riser drilling and cuttings disposal construction works	ROV operator	Checklist	Contractor report

D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Type	Scope *	Frequency	Responsibility	Form used	Reporting procedure
Monitoring					
Att I4 – Marine Flora and Fauna (Refer to Marine Flora and Fauna sub plan Attachment I4.2 for additional details)					
Flora and fauna surveys	Habitat and community assessments for siting design	Pre-construction	Consultant	Consultant form	Consultant Report
Benthic surveys	Pre-construction detailed survey of intake and outlet locations	Pre-construction Post construction	Consultant	Consultant form	Consultant Report
Protected, endangered and threatened species (PETS)	Observations of species (e.g. whale observations etc)	Pre-construction During construction	Consultant MMOs Environmental Officer	Consultant form	Consultant Report PETS logs
Water quality monitoring	As per drill plume water quality monitoring	During construction	Consultant	Consultant form	Consultant Report
Att I5 – Helicopter Management					
Helicopter flight plans	Monitoring of helicopter flights to and from Jack up Barge and for other project related activities	Throughout construction	Environmental Officer	Helicopter flight logs	Helicopter flight - reported on request
Att I6 – Marine Pest and Pathogen Management (Refer to Marine Pest and Pathogen sub plan Attachment I6.5 for additional details)					
Flora and fauna surveys	Habitat and community assessments for siting design – records of any marine pests recorded	Pre-construction	Consultant	Consultant form	Consultant Report

D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Type	Scope *	Frequency	Responsibility	Form used	Reporting procedure
Monitoring					
Marine structures and disturbed area inspections	Monitoring (e.g. video inspection) of marine structures and disturbed areas for signs of marine pest colonisation.	During construction Post construction	Consultant	Consultant form	Consultant Report
Vessel inspections	Underwater video surveys of vessel hulls, legs etc to determine presence of marine pests	During construction, as required by pre-entry risk assessment and random inspections	Consultant	Consultant form	Consultant Report
Att I7 – Underwater Noise Management (Refer to Underwater Noise sub plan Attachment I7 for additional details)					
Underwater noise monitoring	Underwater noise monitoring during key activities. Determination of noise levels at exclusion zone boundary.	Construction	Consultant	Consultant form	Consultant report
Marine Mammals	Observations for marine mammals during key activities	Construction	MMOs Consultant	TDJV form	Monthly report

*

SEE TABLE 2 MONITORING STANDARDS & GUIDELINES BELOW.

TABLE 2 – MONITORING STANDARDS & GUIDELINES

Sub Plan	Applicable Monitoring Standards and Guidelines
Att I1 – Coastal Processes and Activities	N/A
Att I2 - Hazardous Materials	<ul style="list-style-type: none"> • Approved Criteria for Classifying Hazardous Substances, 2004, NOHSC:1008(2004), 3rd Edition • Code of Practice for the Storage and Handling of Dangerous Good, No. 27, 2000 • Australian Dangerous Goods (ADG) Code, 7th edition • National Code of Practice for Labelling of Workplace Hazardous Substances, 1994, NOHSC: 2012 • AS 1940 – 1993 The Storage and Handling of Combustible and Flammable Liquids • International Safety Management (ISM) Code 2002
Att I3 – Resource Efficiency and Waste Management	<p><u>General:</u></p> <ul style="list-style-type: none"> • National Greenhouse and Energy Reporting (Measurement) Systems and Technical Guidelines 2008 v1.0 (Department of Water Climate Change, 2008). • Industrial Waste Management Policy (Prescribed Industrial Waste) • EPA Publication 448.3 – Classification of Wastes and the Guidelines • Australian Code for the Transport of Dangerous Goods <p><u>Drilling spoil disposal monitoring:</u></p> <ul style="list-style-type: none"> • SEPP (WoV) • Various scientific standards and methods depending on component being monitored. Refer to Marine Flora and Fauna sub plan Attachment I4 for additional details.
Att I4 – Marine Flora and Fauna	<ul style="list-style-type: none"> • Various scientific standards and methods depending on component being monitored. Refer to Marine Flora and Fauna sub plan Attachment I4 for additional details.
Att I5 – Helicopter Management	<ul style="list-style-type: none"> • Air Navigation (Aircraft Noise) Regulations 1984 • Civil Aviation Regulations 1988 • Wildlife (Marine Mammals) Regulations 2009



D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Att 16 – Marine Pest and Pathogen Management

- AQIS Inspection Standards
- Various scientific standards and methods. Refer to Marine Pest and Pathogen Sub Plan Attachment 16.5

Att 17 – Underwater Noise

- EPBC Act Policy Statement 2.1

TABLE 3 - INSPECTION

Type	Scope	Frequency	Responsibility	Form used	Reporting procedure
Daily inspections of construction activities	<p>General activities and services, including:</p> <ul style="list-style-type: none"> hazardous material use, storage construction activities and progress energy and water using recycling facilities, waste handling practices noise generating activities visual inspections of water turbidity, exclusion zones, chemical discharges 	Daily	Environmental Officer or representative	Diary – Notes	<p>NCRs via HSE Action database.</p> <p>Observations and areas for improvement tracked in actions register.</p>
Site environmental inspections	All activities, services and facilities	Weekly	Site Environment Officer and/or 3rd party	AEMP Attach J.2 (and J.3) – Environmental Inspection Checklists (Area and Activity specific)	<p>Environmental Programs as per HSE Activity Scheduler.</p> <p>NCRs unresolved within 5 days: HSE Action database.</p> <p>Observations and areas for improvement tracked in actions register.</p> <p>Monthly Project Report.</p>



D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Type	Scope	Frequency	Responsibility	Form used	Reporting procedure
Environmental Program (EP) compliance checklists	All activities, services and facilities	Monthly	Area Environment Manager	AEMP Attach J.1 – Environmental Inspection Checklists (Area and Activity specific)	Environmental Programs as per HSE Activity Scheduler. Monthly Project Report
Subcontractor inspections	Inspections of sub contractors and compliance with AEMP (including monitoring methods)	Frequency will vary based on the specific works being undertaken. Subcontractor activities will be accounted for through the weekly site inspection checklist where possible.	Environmental Officer	Sub contractor inspection checklist	Inspection report
Vessel inspections	Inspections of vessels to ensure compliance with regulations and marine pest management	As required	Environmental Officer Consultant	N/A	Inspection report



TABLE 4 - REVIEW, REPORTING & AUDIT

Review, Reporting & Audit					
Reviews					
Compliance Tracker	Review of relevant environmental obligations under PS&PR	Monthly	Area Environment Manager, Environmental Coordinator	Compliance Tracker	The D&C EMP tab of the <i>Environmental Compliance Tracker</i> (TDV-0-EV-RP-0001-01) is provided in the <i>VDP D&C Contractor Monthly Report</i> . The most current version can be found in INCITE.
Reporting					
EMS Checklist/ Project report	Project performance against EMS	Monthly (for end of month)	Area Environment Manager	AEMP Attach J.1	HSE Performance Report in HSE Reporting System.
Complaints from community	Reporting of community complaints	Monthly	Community and Stakeholder Manager	Consultation Manager Database	Input into Monthly Project Report
Environmental Performance Report	Workplace HS&E performance reporting and compliance status of licences	Monthly (for end of month)	Area Environment Manager and Project Manager	Online HSE Reporting System	TAU-H&S-PR-016 Measuring and Reporting HSE Performance
Environmental and Resource	Report the type and quantity of energy, water used, waste	Annual (Reporting period 1 July to 30 June)	Specialist consultant TBA	TBA	Report submitted to EPA within 3 months of the end of reporting period



D&C Marine Area EMP Attachment L – Monitoring, Inspection, Reporting and Audit Schedule

Efficiency Performance Report	generated, actions that have been fully or partially implemented and costs, gains/financial savings				
Incident reporting	Reporting of environmental and cultural heritage incidents	As required	Area Environment Manager	HSE Reporting Tool	All environmental incidents to be recorded under the environmental incidents or near hits sections of the HSE Reporting Tool for the project and reviewed monthly. Class 1 and 2 incidents reported to AquaSure, DSE and relevant regulatory authority as soon as practical.
Audits					
TDJV D&C EMP and Area EMPs Audits	D&C EMP(includes EMP implementation, impacts, interviews)	Quarterly	TDJV Stakeholder Director/Environmental Coordinator	Thiess Env Audit tool v2007	TAU-SYS-PR-001 Audits. Schedule included in HSE Activity Scheduler.
AquaSure	Project performance against AquaSure EMS	As determined by AquaSure EMR	Facilitated by Stakeholder Director and Area Environmental Managers	As determined by AquaSure EMR	Reports to be uploaded to Thiess Env Audit Database on HSE Reporting System. Monthly Project Report.
Third party certifiers and other audits (e.g. EPA)	Workplace EMS (includes EMP implementation, impacts, interviews) plus all construction activities, facilities	Monthly	IR&EA	As provided by third party	Reports to be uploaded to Thiess Env Audit Database on HSE Reporting System. Monthly Project Report.