



GEE LONG CHANNEL DEEPENING STUDIES - GEOTECHNICAL

ENVIRONMENTAL MANAGEMENT PLAN




April 2019

Document Control

Rev. No.	Date Released	Author	Purpose for issue
A (Draft)	1 February 2019	J Milne	Internal review
B (Draft)	5 March 2019	C Bell	Incorporation of VRCA comments
C (Draft)	21 March 2019	I. Clydesdale	Minor amendments
D (Final)	10 th April, 2019	I. Clydesdale	Final - following DELWP feedback

Endorsed By

Name	Signature	Date
Michael Harvey, CEO Project Sponsor		10th April, 2019

1 INTRODUCTION

1.1 SCOPE OF DOCUMENT

This Environmental Management Plan (EMP) details the environmental management requirements for the Geelong Channel Deepening Studies – Geotechnical. This project consists of the drilling of 13 geotechnical boreholes in the port waters of the Port of Geelong, for the recovery and laboratory testing of soil and rock samples.

This EMP includes:

- The requirements for environmental management during the planning, implementation and review of project activities
- The responsibilities for implementing this EMP
- The Project Delivery Standards (PDS) including environmental controls and limits to ensure that project objectives and targets are achieved
- An overview of the environmental management procedures, contingency plans and associated management action
- Post drilling requirements.

This EMP applies to the drilling and sampling works described below, and associated environmental management programs. Victorian Regional Channels Authority (VRCA) has overall responsibility for the implementation of the works in accordance with the requirements of this EMP.

1.2 PROJECT DESCRIPTIONS

The Port of Geelong is the second largest port in Victoria, and handles approx. 14 million tonnes of bulk cargo per annum. The activities of the port and port related companies are a major contributor to the economy of the region and the state, supporting thousands of jobs in Geelong and the surrounding region. The port attracts over 600 ship visits per annum, requiring more than 1200 ship transits of the shipping channels.

Victorian Regional Channels Authority (VRCA) is responsible for the provision of safe access for commercial vessels visiting Victoria's regional ports. It is the only government agency with responsibility for the safety of vessel access to the ports of Geelong, Hastings and Portland.

There has been a steady and continuing growth in the size of ships in the global commercial shipping fleet. To inform the future planning of channel improvements in response to this trend in global shipping, VRCA has undertaken site investigations in recent years to

determine the geotechnical conditions in areas which could be affected by future channel improvements.

A basalt rock outcrop in the vicinity of Wilson Spit is a major potential risk to future channel improvement projects, and has been the subject of recent geophysical surveys to map the surface profile and the variability of the subsea bed materials. A program of geotechnical investigations including the drilling of marine boreholes is now required to corroborate and calibrate the results of the geophysical surveys, in order to fully understand the nature of the material and the technologies required for its removal. The investigations will be used to reduce the construction, contractual and environmental risks associated with future channel improvements.

The proposed actions are entirely within Geelong Port Waters and are consistent with current Victorian government policy frameworks.

The investigations will consist of the drilling of marine geotechnical boreholes located as shown in Figure 1 (Total No. 13) and conducting of field and laboratory testing to determine physical properties. Drilling will be undertaken by a drilling rig mounted either on a barge stabilised by spud legs or a jack up barge to provide a stable working platform.

VRCA has conducted an environmental risk assessment to identify the controls required to reduce ecological risks to low. This Environmental Management Plan (EMP) has been prepared for the project, in response to the environmental risk assessment.

1.2.1 Drilling of Marine Geotechnical Boreholes

The proposed sites are located within the designated port waters of the Port of Geelong, within or adjacent to the existing commercial shipping channel and in the existing Dredge Material (Spoil) Ground (DMG) in the vicinity of Wilson Spit, between Portarlington and Point Wilson (Ref. Drawing VRCA0068 – Borehole Locations).

1.2.2 Management of Drilling Material

Borehole drilling in and around the shipping channels will be carried out using 122mm diameter drilling equipment to provide high quality rock samples. At the DMG, 76mm diameter drilling equipment will be used. The volumes of drilling material generated, and any associated turbidity will be very small. Water will generally be used as a drilling fluid, and retained on the barge along with drilling material and cuttings, which will be pumped down the borehole as the casing is withdrawn. If drilling muds are required, they will be stored and managed in accordance with the approved EMP.

1.2.3 Environmental Management Plans

Contractors engaged to undertake the work will be required to submit an Environmental Management Plan to VRCA based upon the requirements of this EMP, and avoid potential environmental impacts arising from the use of their floating plant.

1.3 KEY ASSETS, ENVIRONMENTAL EFFECTS AND RISKS

The key ecological assets and potential impacts include:

- Impacts due to drilling operations, such as spills or pollutants
- The Western Shoreline (Cheetham salt pans) Ramsar site occupying the northern side of the Geelong Arm

Potential impacts upon key social values and economic uses include:

- Public amenity – noise and visual effects of the drilling and disposal activities.
- Recreational activities (e.g. fishing, boating and beach activities) – impacts of drilling
- Commercial uses (including commercial fishing, charter fishing and aquaculture leases) – potential impacts of release of contaminants.

1.4 VRCA ENVIRONMENTAL POLICY

VRCA Environmental Policy provides the umbrella policy direction for the project (Refer to Appendix 1).

VRCA is committed to delivering the Geelong Channel Deepening Studies - Geotechnical in an environmentally responsible manner and in accordance with its statutory approvals and this EMP.

1.5 ENVIRONMENTAL MANAGEMENT SYSTEM OVERVIEW

An Environmental Management System (EMS), consistent with the requirements of *ISO14001:2004 Environmental management systems – Requirements with guidance for use* has been developed for this project. The EMS consists of the policies, plans, procedures and activities that form a systematic method of managing the environmental aspects of the project. This EMP is a key component of the EMS, describing the main elements of the EMS and providing direction to detailed procedures and processes.

The EMS is designed to be consistent with the Port of Geelong Safety and Environmental Management Plan (SEMP), which is jointly prepared by GeelongPort, Graincorp and VRCA, the principal owners and operators of the port's combined assets.

Contractors will be required to incorporate requirements of this EMP into Contract Environmental Management Plans (CEMPs). All CEMPs will be reviewed by VRCA before works begin, to ensure consistency with this EMP.

The structure of the EMS is shown below, and key documents are described in Table 1:



Structure of the EMS

Environmental Management Documents



Table 1 – Key Environmental Management Documents

Document	Description	Content
Port of Geelong Safety and Environmental Management Plan (SEMP)	<p>The SEMP is a document jointly prepared by GeelongPort, Graincorp and VRCA to provide a whole of port response to safety and environmental responsibilities imposed by the <i>Port Management Act 1995</i>.</p> <p>Please note: as at 1 April 2019, VRCA will have a separate standalone SEMP.</p>	Comprehensive risk based approach to safety and environmental management of port operations, including roles and responsibilities, risk assessment, process and consultation requirements
VRCA – Geelong Channel Deepening Studies - Geotechnical Environmental Management Plan (EMP)	<p>This EMP, prepared by VRCA defines the processes and methods by which the environmental aspects of the project will be managed to ensure that environmental effects of the project are within the predictions set out in the risk assessment and statutory authority referrals.</p>	<p>Description of the main elements of the project EMS, their interaction and direction to key procedures (including legal requirements, risk management, induction and training, emergency response, incident reporting, measurement and evaluation, and management review).</p> <p>External notification and reporting requirements.</p>

		Project Delivery Standards (PDS) (incorporating environmental limits and controls)
Contract Environmental Management Plans (CEMPs)	CEMPs are prepared and implemented by contractors to document environmental requirements specific to their activities.	Requirements relevant to the scope of the contract work, including any relevant requirements of this EMP.

1.6 ENVIRONMENTAL MANAGEMENT PLAN CONTEXT

This EMP has been prepared in support of the following objectives:

- To describe the main elements of the Geelong Channel Deepening Studies - Geotechnical EMS, their interaction and direction to key procedures as required by *ISO14001:2004 Environmental management systems – Requirements with guidance for use*.
- To establish the processes and controls that will be implemented to ensure that the program is delivered with environmental impacts that do not exceed those predicted in the risk assessment and statutory approvals.
- To communicate environmental management requirements to contractors. Requirements will be included in CEMP's for each contract.
- To ensure that the project does not result in unacceptable impacts on matters of National Environmental Significance.

1.7 EMP APPROVAL

This EMP is a controlled document and will be approved and revised in accordance with the requirements defined in Table 2.

VRCA will consult relevant authorities on all proposed revisions to the EMP and seek advice on whether these revisions require approval. Where approval is required, this will be sought prior to implementing the change.

Table 2 – EMP Approval requirements		
	Approval	
	VRCA	Victorian Gov't (DELWP)
Initial release	Approval by CEO, VRCA	Approval required, DELWP Regional Director Barwon South West
Procedural or Minor revision (changes within project conditions or consents).	Approval by CEO, VRCA	Notification of change to DELWP, Regional Director Barwon South West.
Major revision (changes requiring amendment to project conditions).	Approval by CEO, VRCA	Approval required, DELWP Regional Director Barwon South West

2 PLANNING

2.1 LEGAL REQUIREMENTS

Where legislation requires a specific management action or response, these requirements are identified in the Project Delivery Standards (PDS) as environmental controls, limits or monitoring programs, or within contingency plans. The PDS associated with key legislation are shown in Table 3 below. The content of a PDS is further described in Section 2.2.1.

Compliance with legal and other relevant requirements will be evaluated by project audits (Section 3.7).

Table 3 – Legislation and associated Project Delivery Standards	
Legislation	Applicable Project Delivery Standards
<i>Marine and Coastal Act 2018</i> (Vic.)	All PDS.
<i>Environment Protection Act 1970</i> (Vic.)	

<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth.)</i>	Not applicable – No matters of national environmental significance will be impacted by this project.
<i>Historic Shipwrecks Act 1976 (Cwlth.)</i> <i>Heritage Act 1995 (Vic.)</i>	Marine based works
<i>Wildlife Act 1975 (Vic.)</i>	Marine based works Drilling and plume
<i>Pollution of Waters by Oil and Noxious Substances Act 1986 (Vic)</i>	Marine based works

2.2 PROJECT DELIVERY STANDARDS

2.2.1 Environmental Risk and Project Delivery Standards

PDS have been developed for the geotechnical investigation program to address key environmental risks, effects and legal requirements. PDS are a collation of the management and mitigation measures, environmental performance monitoring and contingency plans for the project (if required).

The geotechnical investigation program PDS are:

- Marine based works
- Drilling and plume

Each PDS includes:

- An objective – the performance goal.
- A target – performance level at which the objective is demonstrated as being achieved.
- Application – the project activities and project areas to which the PDS applies
- Environmental controls – management and mitigation measures required to support achievement of the objective during the project implementation. These include process controls and associated monitoring.
- Environmental limits – numerical performance standards which the project must comply with.
- Reference to environmental monitoring programs – the environmental monitoring programs applicable to the PDS.

- Reference to contingencies – the relevant contingency plans containing management actions which may be implemented in the event of exceedance of the environmental limit or response level.

Environmental risks associated with the project have been identified and documented in risk assessments conducted in accordance with *ISO 31000:2018 - Risk Management – Principles and guidelines*.

A risk assessment workshop was conducted by VRCA on 22 January 2019. The panel consisted of:

- Ian Clydesdale – Commercial Manager, VRCA
- Stuart Christie – Development Manager, VRCA
- Dr Jan Watson – Director, Marine Science and Ecology
- John Milne – Principal Engineer, AW Maritime Pty Ltd

Seven potential environmental hazards arising from the proposed activities were considered. Of these, three were classified with a risk level of moderate prior to any specific controls, with the remaining four classified as low risk. With the implementation of controls specified within this EMP, the risk level for all of the identified environmental hazards was reduced to low.

In consideration of the remoteness of the site from populated areas, the small scale and short duration of the activity, and the low level of environmental risk as shown in the risk assessment the application of environmental limits, monitoring programs or contingency plans is not considered appropriate or necessary to achieve the objectives of the PDS.

Contractors must incorporate relevant PDS into their respective CEMPs. A guide to the applicability of PDS to each project area is contained in Appendix 2. The PDS applicable to this project are included in Appendix 3.

2.2.2 Environmental Limits and Response Levels

Environmental limits have not been established for this project as noted above.

2.3 EXTERNAL NOTIFICATION AND REPORTING REQUIREMENTS

Performance against this EMP will be reported to government agencies as indicated in Table 6.

Table 6 – Notification and reporting requirements		
Subject	Reporting or notification	
	Government agency	Timeframe
Environmental Incident	DELWP	Notification within one day Incident report required
Pollution event or imminent environmental hazard (as defined in Environmental Auditor Guidelines for Conducting Environmental Audits, Publication No 953.2, October 2007, EPA Victoria)	DELWP, EPA	Immediate notification. Incident report required.
Non-Aboriginal heritage	Heritage Victoria, DELWP	Notification within 7 working days of discovery of historic shipwreck. Notification prior to any additional surveys being conducted. Report to be forwarded following heritage inspections.
Aboriginal heritage	Office of Aboriginal Affairs, DELWP	Notification within 7 working days of discovery of Aboriginal heritage items.
Project close-out report.	DELWP	Close-out report to be forwarded within 90 days of completion of dredging activities.
Audit of the implementation of the EMP by an external auditor.	DELWP	Audit report forwarded within 7 working days of finalising the audit report.
EMP Method Statement for Drilling Works	DELWP	Approval by DELWP to be sought within 10 business days prior to the commencement of drilling.

Works Schedule	DELWP	Notification no less than 5 business days prior to commencement. Subsequent significant revisions of the works schedule will be submitted to DELWP within two working days of approval by VRCA management.
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2.4 RISK MANAGEMENT

The risk registers will be reviewed as required to incorporate any changes identified or the results of incident investigations. Changes to the risk registers will be approved by the project sponsor, VRCA CEO or his delegate.

Task based risk assessments (eg Job Safety and Environment Assessments) will be undertaken during the project to identify and control workplace hazards.

2.5 PROJECT GOVERNANCE STRUCTURE

VRCA has overall responsibility for the implementation of the project in accordance with the requirements of this EMP. VRCA is therefore responsible also for communicating responsibilities to contractors engaged to undertake the works.

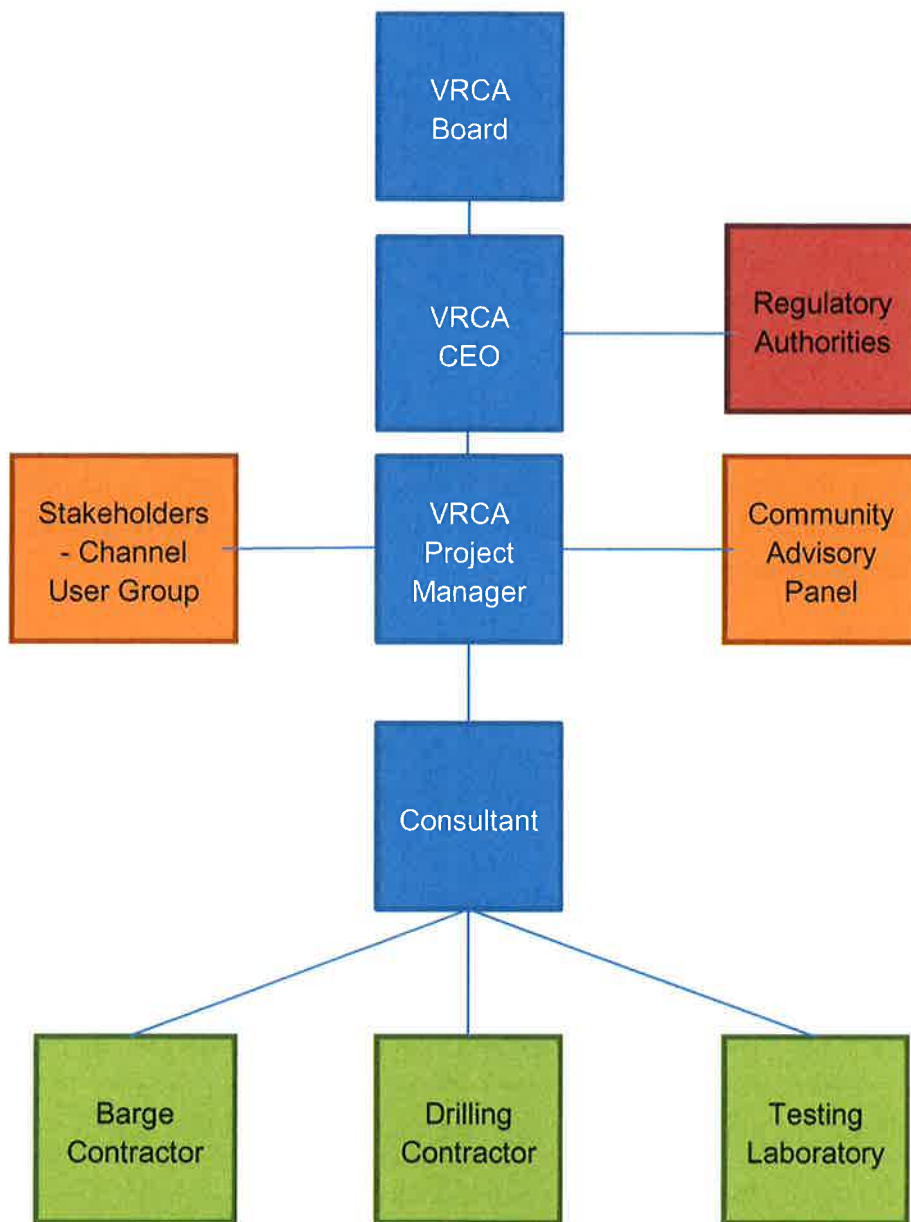
Project roles and responsibilities illustrated in the indicative organisation structure below. VRCA CEO has responsibility for:

- Implementing the EMP
- Coordinating all activities relating to the EMP
- Providing adequate resources to undertake the project in accordance with the EMP.

Specific detailed responsibilities for implementing the EMP are identified in plans including:

- CEMPs – identifying responsibilities within each contract team undertaking works

VRCA will monitor the appropriate delegation of responsibility through the review of key documentation including CEMPs and during audits.



**GEELONG CHANNEL DEEPENING STUDIES -
GEOTECHNICAL
ORGANISATION CHART**

2.6 DOCUMENT AND RECORD CONTROL

Environment documents and records will be managed in accordance with the standard procedures of VRCA for document creation, review and approval, and record storage, retention and disposal.

At the completion of the works, documentation relevant to the investigations will be incorporated into VRCA ongoing operational systems. These may include as-executed records, calculations, drawings and reports.

2.7 CHANGE MANAGEMENT

Proposed changes to the project will be assessed and documented in order to identify and manage any consequences of the change. This will include an assessment of the risk and compliance with legal requirements.

Changes may include:

- Alterations to the project schedule
- Modifications to work methods within the approved scope
- Adjustment of environmental monitoring and response levels
- Changes to drilling technology

Changes will be approved in accordance with Table 2.

2.8 TRAINING AND AWARENESS

All project personnel will be suitably qualified and experienced to undertake their defined work in an environmentally responsible manner. Personnel who have defined responsibilities under this plan will be trained in the requirements of this EMP.

All personnel involved in the dredging program will be required to complete a project induction which will incorporate key environmental aspects of the project. All personnel will be required to complete an assessment to demonstrate an understanding of key issues, requirements and responsibilities.

Induction topics will include:

- VRCA environmental policy
- Key environmental issues and controls
- Emergency response
- Incident reporting
- Waste management
- Cetacean requirements
- Responsibilities

- Communication requirements
- Consequence of departure from the requirements of this EMP.

2.9 COMMUNICATION

VRCA CEO or his delegate will be responsible for and undertake all requirements with respect to community liaison.

2.9.1 Internal Communication

Regular meetings between VRCA personnel and contractors will be scheduled. Environmental matters will be included as standard agenda items at these meetings.

Where appropriate, additional communication regarding environmental matters will occur in the form of written correspondence such as memoranda, contract instructions and variation orders issued in accordance with the conditions of contract.

2.9.2 External Communication

A variety of methods will be used to distribute to, or receive information from interested members of the community and direct stakeholders. These include the following:

- **VRCA Website** – A section dedicated to the project will be created on the Authority's website. Within this section there will be a segment for community feedback.
- **Media Releases** – Once the project receives the necessary Government approvals, VRCA will issue a press release explaining the rationale behind the project and outline the key details of the program. Subsequent press releases will be issued on reaching critical project milestones.
- **Notices to Mariners** – Official alerts to the shipping and boating community will be issued during the course of the project.
- **Issues Log** – A community issues log will be used for this project with protocols in place to ensure that all issues raised by the community are addressed in an efficient and timely fashion.

Key communication activities and content include the following:

- All complainants will receive an initial response by the end of the next business day. Complaints will be managed following the process described in Appendix 5 and resolved as soon as practicable.
- All enquiries received through VRCA web site will receive a response within two working days and will be resolved as soon as practicable.
- Communication of safety exclusion zones or restricted access zones as per Marine Safety Act 2010 around all major marine equipment.
- Communications with operators, tenants and other port stakeholders, through the regular meetings of the Port City Co-ordination Group.

- Briefings / meetings with community, recreational, and other relevant community groups where requested and/or required.
- Notice to Mariners to be issued before the start of any work.
- A community consultation group established by VRCA.

2.10 CONTRACTOR MANAGEMENT

All contractors shall comply with the requirements of this EMP.

Contractor requirements and key performance expectations will include:

- Mandatory contractor systems and plans (including a CEMP) for the management of environment and emergency preparedness.
- Induction, site and hazard specific training.
- Inspection regimes and schedules.
- Environmental performance monitoring and reporting.

All contractors will be required to demonstrate that they have the necessary skills and experience to undertake the work in accordance with this EMP.

2.11 EMERGENCY PREPAREDNESS, RESPONSE AND RECOVERY

Potential emergency scenarios are identified in the project risk register.

Emergency response procedures will be as documented within the Port of Geelong SEMP, the Port of Geelong Emergency Management Plan and the latest edition of the Port Waters of Geelong Operating Handbook including Harbour Master's Directions, and operating procedures as for normal port operations.

Inductions will provide an overview of emergency response requirements. Site specific induction and training will be undertaken by contractors.

3 MEASUREMENT AND EVALUATION

3.1 INCIDENT REPORTING AND INVESTIGATION

Environmental incidents and hazards, including pollution incidents will be reported and recorded. This requirement will be included in inductions and reinforced during the project. Reporting procedures shall be in accordance with the latest edition of the Port Waters of Geelong Operating Handbook.

External reporting requirements in relation to hazards and incidents are identified in Table 6.

3.2 MONITORING OF ENVIRONMENTAL PERFORMANCE

Environmental performance will be monitored via the following mechanisms:

1. Environmental monitoring – due to the small scale and short duration of the drilling activity, environmental monitoring programs are not appropriate or necessary.
2. Process monitoring, inspections and surveys – monitoring of operational activities, physical conditions and post construction environmental conditions (eg equipment tracking, bathymetric surveys). Process monitoring, inspections and surveys are identified in PDS alongside process controls. Monitoring data informs any additional management action that may be required.

3.3 PROCESS MONITORING

Process monitoring is identified in the PDS. Process monitoring includes:

- Equipment tracking – Dredging and Plume PDS.

3.4 INSPECTIONS AND SURVEYS

Inspections and surveys (if required) are identified in the PDS.

4 MANAGEMENT REVIEW

4.1 PROJECT MANAGEMENT REVIEW MEETINGS

Regular reviews of the EMS and environmental performance will be undertaken by the Project Steering Committee at its scheduled fortnightly meetings, and in accordance with the PMP.

Due to the short duration of the proposed drilling activities, it is expected that these meetings will be held prior to, during (one only) and following completion of the drilling works.

Reviews may include as appropriate:

- Compliance with PDS
- Compliance with legal requirements including statutory approvals and other commitments
- Results of inspections and surveys
- Results of audits
- Project risk profile

Management reviews will ensure the continued effectiveness, suitability and adequacy of environmental arrangements and identify opportunities for continuous improvement. Any action arising from the management review will be assigned responsibility and tracked until completion.

4.2 PROJECT CLOSE OUT

A project close out report will be prepared following completion of drilling activities. The close out report will contain a summary of project outcomes including:

- A summary of project activities
- Conformance with PDS
- Summary of consultation activities

The project close out report will be submitted to relevant government agencies (Refer to Table 6)

Drawing VRCA0068 - Fig 1

APPENDIX 1

VRCA ENVIRONMENTAL POLICY



ENVIRONMENTAL POLICY

SECTION - ENVIRONMENTAL / OCCUPATIONAL HEALTH & SAFETY

Policy No. 10.10
Date 10.11.17
Revision No 2
Page 1 of 1

Principle

Victorian Regional Channel Authority (VRCA) was established by the Victorian Government to manage the commercial navigation of the channels in the port waters of Geelong and Hastings and to oversee channel management for the Port of Portland.

VRCA provides safe, secure and environmentally responsible navigation services to the users and operators of Victoria's regional commercial ports.

Policy

VRCA is committed to enhancing, as far as practicable, the environmental outcomes and sustainability of Victoria's regional commercial ports. This reflects VRCA's contribution to the environmental sustainability objective of the Transport System Objectives in the *Transport Integration Act, 2010*.

To achieve the above, VRCA will:

- ❑ Establish and implement a Safety and Environmental Management Plan in accordance with the *Port Management Act 1995*, Section 91D;
- ❑ Ensure VRCA policies, objectives and targets address key port environmental issues and conduct periodic reviews of these policies, objectives and targets;
- ❑ Comply with all environmental legal requirements and other applicable environmental obligations;
- ❑ Commit to conduct its port and marine operations so as to minimise waste, prevent pollution, promote efficient use of resources and manage environmental impacts;
- ❑ Review environmental management techniques and adopt identified improvements;
- ❑ Encourage a port-wide culture of responsible environmental management;
- ❑ Where able require and influence tenants, contractors and port service providers to develop environmental management plans and/or systems to manage their environmental impacts;
- ❑ Work toward reducing the energy usage and waste generated by VRCA activities and assets; Integrate environmental management consideration into decision making and work practices related to marine operations, property development, planning, design, construction, maintenance and operation of facilities;
- ❑ Provide sufficient resources (human, physical and financial) to achieve the aims, objectives and targets of the Safety and Environmental Management Plan; and
- ❑ Communicate this Environment Policy to VRCA employees, VRCA contractors, VRCA stakeholders and where appropriate, to the community.

Signed

Date 10/11/17

Michael Harvey
Chief Executive Officer

APPENDIX 2

PROJECT DELIVERY STANDARDS – APPLICABLE WORKS AND PROJECT AREAS

APPENDIX 2

Project Delivery Standards – Applicable Works and Project Areas

Project Delivery Standard	Drilling
Drilling management	X
Marine based works (all areas)	X
Drilling and plume	X

APPENDIX 3

PROJECT DELIVERY STANDARDS

APPENDIX 3

Project Delivery Standards (PDS)

PDS - Drilling Management (all activities)	
Objective	<p>To plan and implement drilling aspects of the Geelong Channel Deepening Investigations - Geotechnical.</p> <p>To ensure that materials are appropriately stored, handled and disposed of.</p>
Target	Compliance with all environmental limits and controls specified in this PDS.
Application	All project activities and areas for the duration of the dredging program.
Environmental Controls	Project Phase
1. Hours of Operation <ul style="list-style-type: none"> All activities may be conducted on a 24 hour, 7 days a week basis, except where restricted within a PDS or relevant legislation. 	All phases
2. Airborne Noise <ul style="list-style-type: none"> All activities are remote from residential areas and consistent with normal shipping operations – no controls required. 	All phases
3. Waste Management <ul style="list-style-type: none"> All project vessels to have sewage containment or treatment facilities. Sewage treatment shall comply with Section 23G of the <i>Pollution of Waters by Oil and Noxious Substances Act 1986</i> (Vic). No disposal of untreated sewage or other wastes to the bay. Contractor waste management arrangements to include waste minimisation, containment, segregation and appropriate reuse, recycling, treatment and disposal. The handling and disposal of unexpected materials identified during drilling (eg inert debris such as metallic wastes and timber) to be included in waste management arrangements. All waste to be managed in accordance with: 	All phases

<ul style="list-style-type: none"> ○ <i>Environment Protection Act 1970 Vic</i> ○ <i>Quarantine Act 1908 (Commonwealth)</i> – applicable vessels ○ <i>Pollution of Waters by Oil and Noxious Substances Act 1986 (Vic)</i> 	
<p>4. Fuels, Oils, Chemicals and Hazardous Goods</p> <ul style="list-style-type: none"> • Storage and handling of chemicals to be in accordance with: <ul style="list-style-type: none"> ○ <i>Dangerous Goods Act 1985 (Vic)</i> ○ <i>International Ship Management (ISM) Code</i> – applicable vessels ○ <i>Pollution of Waters by Oil and Noxious Substances Act 1986 (Vic)</i> 	All phases
<p>5. Emergency Response Preparedness</p> <ul style="list-style-type: none"> • Emergency response procedures to be in accordance with the Port of Geelong SEMP, the Port of Geelong Emergency Management Plan, and the latest edition of Port Waters of Geelong Operating Handbook including Harbour Master's Directions, including provision for fuel, oil and chemical spills. • All project vessels to have oil spill response kits on board, and relevant personnel trained in their use. 	All phases

PDS – Marine Based Works (all areas)	
Objective	<p>To manage marine based work components of the Geelong Channel deepening Investigations - Geotechnical.</p> <p>To minimise disturbance to and appropriately manage any relevant heritage matters that may be encountered during the project.</p> <p>To minimise impacts on cetaceans due to vessel manoeuvring.</p>
Target	Conformance with all environmental controls specified in this PDS.
Application	All marine based activities for the duration of the project.
Environmental Controls	Project Phase
6. Safety <ul style="list-style-type: none"> An exclusion zone of 100m radius is to be established around drilling equipment during operations. 	Drilling
7. Marine Pests <ul style="list-style-type: none"> Marine pest inspection and certification of all support vessels and barges is required before mobilisation for the project where these are sourced externally to Port Phillip. Certification must be received from the final port of call before entry to Port Phillip. All vessels are to comply with “Australian Ballast Water Management Requirements”, Department of Agriculture (Current Revision) 	Drilling mobilisation Drilling
8. Vessel Anchoring <ul style="list-style-type: none"> All vessels are to anchor in accordance with the latest edition of “Port Waters of Geelong Operating Handbook including Harbour Master’s Directions”, VRCA. 	All phases
9. Vessel Bunkering <ul style="list-style-type: none"> All bunkering is to be in accordance with the latest edition of “Port Waters of Geelong Operating Handbook including Harbour Master’s Directions”, VRCA. 	All phases
10. Cetaceans – vessel manoeuvring <p>If within 300 m of a whale or dolphin the vessel must not:</p> <ul style="list-style-type: none"> approach a whale or dolphin head on restrict the path of a whale or dolphin pursue a whale or dolphin 	All phases

<ul style="list-style-type: none"> • separate any whale or dolphin from a group • come between a mother and a calf • drop or lower an anchor overboard from the vessel. <p>If within 300 m of a whale or dolphin, the vessel must:</p> <ul style="list-style-type: none"> • maintain a constant speed that does not exceed 5 knots and avoid sudden changes in speed or direction • post a lookout for cetaceans • manoeuvre the vessel to a distance of at least 300m if the whale or dolphin shows any signs of being disturbed 	All phases
<p>11. Cetacean sightings and log</p> <ul style="list-style-type: none"> • Personnel on board vessels are to report all sightings of cetaceans. • A log of cetacean sightings and action taken to be kept for all work areas. 	Drilling
<p>12. Heritage (marine based) – Identification</p> <ul style="list-style-type: none"> • If potential relics are identified during the works, works likely to impact the potential relics will be temporarily suspended and Heritage Victoria and DELWP will be notified. 	Mobilisation and Drilling

PDS – Drilling and Plume	
Objective	<p>To manage drilling activities as far as practicable.</p> <p>To minimise the area of seabed disturbed and manage the material removed.</p> <p>To protect assets, beneficial uses and values from long term adverse effects due to drilling.</p>
Target	Conformance with all environmental controls and limits specified in this PDS.
Application	<ul style="list-style-type: none"> • All drilling activities. • Use of a drilling rig and associated equipment including tugs and barges.
Environmental Controls	Project Phase
13. Drilling <ul style="list-style-type: none"> • Drilling shall be limited to 13 No. boreholes at the locations shown in Figure 1, ie <ul style="list-style-type: none"> ○ 9 No. boreholes in and around the shipping channels ○ 4 No. boreholes in the Dredge Material Ground • To minimise environmental disturbance, the diameter of boreholes shall be limited to 125mm, and drilling depths shall be limited to: <ul style="list-style-type: none"> ○ RL -25m Chart Datum for boreholes in the DMG (4 No.). ○ RL -22m Chart Datum for boreholes in and around the shipping channels (9 No.) • Drilling equipment and associated support vessels will be required to manoeuvre outside the designated drilling areas, including transit between drilling areas. 	Drilling
14. Drilling Schedule <ul style="list-style-type: none"> • The initial drilling schedule is to be submitted to DELWP no less than 5 business days before commencement. • Subsequent significant revisions of the drilling schedule will be submitted to DELWP within two working days of approval by VRCA management. • Drilling is to take place in accordance with a drilling plan prepared by the contractor and included in the contractor's environmental management plan (CEMP), and which will be submitted to VRCA for approval. • The drilling plan is to include: 	Pre-mobilisation

<ul style="list-style-type: none"> ○ Drilling technology ○ Drilling configuration (ie. Numbers and locations of boreholes, sequence and methodology). 	
<p>15. Drilling Management</p> <ul style="list-style-type: none"> • Details of proposed drilling methods and equipment shall be detailed in the Contractor's drilling plan and CEMP. • As far as practicable, drilling fluids and cuttings shall be retained on the drilling barge, and pumped back down the borehole as the drill casing is withdrawn. • As far as practicable, drilling shall be undertaken using plain water as the drilling fluid. • Where necessary, biodegradable drilling fluids will be used, subject to detailed material safety data sheets (MSDS) being included in the CEMP 	Drilling

APPENDIX 4

COMPLAINTS RESPONSE PROCESS

APPENDIX 4

Complaints Response Process

Management actions if a complaint is received will be as follows:

If a complaint is received, a general response will be given to the complainant by the end of the next business day. The timeframe for further detailed response is dependent on the nature of the complaint and the scale of investigation required. It is expected that there will be management action within 24 hours of the initial assessment of the complaint. The following options for action may be taken:

- If the complaint is regarding a single event then no monitoring may be required if a cause cannot be determined.
- If there are a number of complaints relating to the same issue then monitoring will be considered as part of the investigation.

Where the assessment of vessels, equipment or activity indicates that they may not conform to relevant legislation, appropriate action will be taken. Management options include:

- Selection of alternative vessel / equipment.
- Modification to vessel / equipment.
- Restrictions on the use of vessel / equipment.
- Other actions as deemed appropriate.