

Reliance Notice

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1 Introduction

1.1 Background

This Construction Environmental Management Plan (CEMP) is written specifically for the execution of the civils, tank, structural, mechanical, piping, and electrical and instrumentation works of Vopak Port Botany B4A Expansion Project. It is a primary document and has been written in conjunction with and in compliance with other existing plans and Company documents.

This CEMP details the environmental protection, management measures and controls necessary to avoid, reduce and mitigate environmental impacts and risks during the construction and pre-commissioning scope of work. It describes the systems and tools that will be implemented by contractors and subcontractors to manage environmental responsibilities.

The CEMP has been written in compliance with Vopak's Environmental Policy and Vopak Australia's Environmental Management System (EMS) which is certified to International Standard ISO 14001:2015 'Environmental Management Systems'.

1.2 Other Related Plans

As part of the continual development of this Plan, a number of separate and more detailed sub plans will be produced and maintained by the Project team. These will be an integral part of the overall SHE Management for the project. These will include:

- 233771-HS-PL-00001 Construction Health and Safety Management Plan
- 233771-HS-PL-00003 Construction Emergency Preparedness Plan (EPP)
- 233771-HS-PL-00004 Construction Traffic Management Plan
- 233771-HS-PL-00005 Construction Noise Management Plan
- 233771-HS-PL-00006 Construction Water Management Plan
- 233771-HS-PL-00007 Construction HSE Training Plan

1.3 SHE Management Plan Review/Development

The Principal Contractor will have the required systems, policy, and procedures to execute the B4A Expansion Project scope of work, and procedures to ensure subcontractors are suitably qualified (i.e. pre-qualification evaluations).

This Plan will be supported by the Principal Contractors parent company Safety, Health and Environment Management System and procedures.

All Management Plans developed and implemented on the B4A Project are considered "live" documents and as such, will be updated as necessary to reflect the on-going development of the Project.

1.4 Environmental Management Overview

Vopak's Environmental Management System is designed and implemented around the fundamental principle of how Vopak conducts business and operates. Vopak's Environmental Management System has an emphasis on the necessary requirements to enable us to develop and implement our environmental policies and objectives, which take into account legal requirements and other requirements to which we subscribe. The Principal Contractor shall implement an Environmental Management System to cover the aspects and impacts of the B4A Project scope of works. The Vopak Environmental System will be used as a baseline to audit the effectiveness of the Principal Contractors system.

This Plan applies to the environmental activity aspects and impacts of the B4A Project and provides information relating to environmental legislation, environmental policy, organisational chart, roles and responsibilities, project contacts, environmental planning, environmental procedures, site inspections, auditing, monitoring, reporting requirements, corrective actions, complaints management, communication, environmental training and awareness, document control requirements and management review.

2 References

2.1 Company Documents

Plan, Policy, Procedure Name	Company Document Number
Vopak SHE Plan	Annexure Part J
Vopak Stage B4 – State Significant Development - Environmental Impact Statement	60344169
Vopak Stage B4 – Construction Traffic Impact Assessment	N/A
Vopak Stage B4 – Noise and Vibration Impact Assessment	N/A

3 Definitions

Term	Definition
Company	Vopak Terminals Australia
Continual improvement	Recurring process of enhancing the environmental management system in order to achieve improvements in overall environmental performance consistent with Vopak and the Principal Contractor's environmental policy.
Environmental Policy	Overall intentions and direction of an organisation related to its environmental performance as formally expressed by top management.
Environmental Management System	Part of an organisation's management system used to develop and implement its environmental policy and manage its environmental aspects
Environment	The surroundings and conditions in which the Project operates, including air, water, land, natural resources, flora, fauna, humans and their interrelations. As the environmental aspects of the Project may reach all parts of the world, the environment in this context extends from within the workplace to the global system.
Environmental Aspect	Any direct or indirect interaction of the activities, products and services of the project upon the environment, whether adverse or beneficial.
Environmental Aspects Evaluation	A documented assessment of the environmental significance of the aspects associated with the project activities, products and services (existing and planned). Significance is based on the application of an Environmental Risk assessment.
Environmental Impact	Any change to the environment, whether adverse or beneficial, (resulting from and Environmental Aspect) wholly or partially and directly or indirectly resulting from the project's activities, products or services.
Environmental Regulatory Requirement	Any document, whether legislation or code of practice, representing a legal obligation, an official guideline or an industry standard, which seeks to control environmental issues.
Environmental Risk	The likelihood that a specified environmental impact will occur.
Environmental Risk Assessment	A method of evaluating the environmental significance of an identified aspect.
Environmental Targets	Detailed performance requirements, which arise from the environmental objectives and which need to be met in order to achieve those objectives.

	Environmental targets will be measurable where practicable, and will be linked to specified time scales, and nominated responsible persons.
Principal Contractor	Dialog, or their entities, i.e. Dialog Fitzroy
Pollution /Contamination	The release into an ecosystem or environmental medium of any pollutant/contaminant which is not naturally found there, or which generally increases the naturally occurring concentrations.
Subcontractor	Any approved Subcontractor engaged by Vopak, or Vopak's Principal Contractor, to complete works under the contract.

4 Abbreviations

ALARP	As Low as is Reasonably Practicable
CEMP	Construction Environmental Management Plan
EIS	Environmental Impact Statement
DA	Development Approval
DC	Development Consent
DWA	Designated Work Area
DPIE	Department of Planning, Industry and Environment
EIA	Environmental Impact Assessment
EPA	Environmental Protection Authority
EPP	Emergency Preparedness Plan
HAZID	Hazard Identification
HSE	Health, Safety and Environment
MOC	Management of Change
SDS	Safety Data Sheet
SSD	Significant State Development
PPE	Personal Protective Equipment
PTW	Permit to Work
SHE	Safety, Health and Environment
SSE	Short Service Employee
SSoW	Safe System of Work
SWMS	Safe Work Method Statement

5 Project Details

5.1 Project Overview

Vopak's Principal Contractor is responsible for the design, the supply of materials, labour, plant, fabrication, construction equipment, consumables, scaffolding, welding equipment, supervision, quality assurance documentation, and inspection and testing necessary to complete all of the work in accordance with the requirements of this specification.

The Civil Scope of work includes:

- Site preparation (clearing, grubbing, ground improvements);
- Tank foundations;
- Concrete bund walls, sumps and lining;
- Roads and pavements, including kerbs and car parks;
- Stormwater and drainage ;
- Potable water; and
- Structural and equipment slabs, plinths, foundations and grouting.

The Mechanical Tanks scope of work includes:

- Design of three (3) x 35,000m³ (working volume) steel storage tanks;
- Fabrication and Construction of three (3) tanks, including all fittings and peripherals; and
- Inspection, testing, pre-commissioning and commissioning of tanks (including hydro test).

The structural, mechanical and piping scope of work includes:

- Detailed design for the procurement, fabrication and construction of all structural, mechanical and piping components inclusive of;
 - o Transfer lines;
 - o Valve manifold;
 - o Tank Inlet / Outlet Piping;
 - o Tank recirculation piping and pump station piping;
 - o Stormwater, oily water system for wastewater sumps to the separator and interceptor pit;
 - o Compressed air reticulation and utility connections;
 - o Potable water supply and distribution including safety showers;
 - o Firewater piping;
- Painting and insulation; and
- Inspection, testing and commissioning of all piping.

The electrical and instrumentation scope includes:

- All B4A electrical and instrumentation including Switchroom (or packaged distribution centre);
- Management of and procurement of new Ausgrid packaged substation including design and provision of associated civil works and all cabling;
- B4A Automation systems will each involve Vopak-specified suppliers and include: PLC, SAAB Tankmaster, CCTV, Access Controls, Fire Indicator Control Panel systems; and
- Sufficient automation engineering to complete the powering up of automation devices, point-to-point testing and pre-commissioning to achieve Practical Completion.

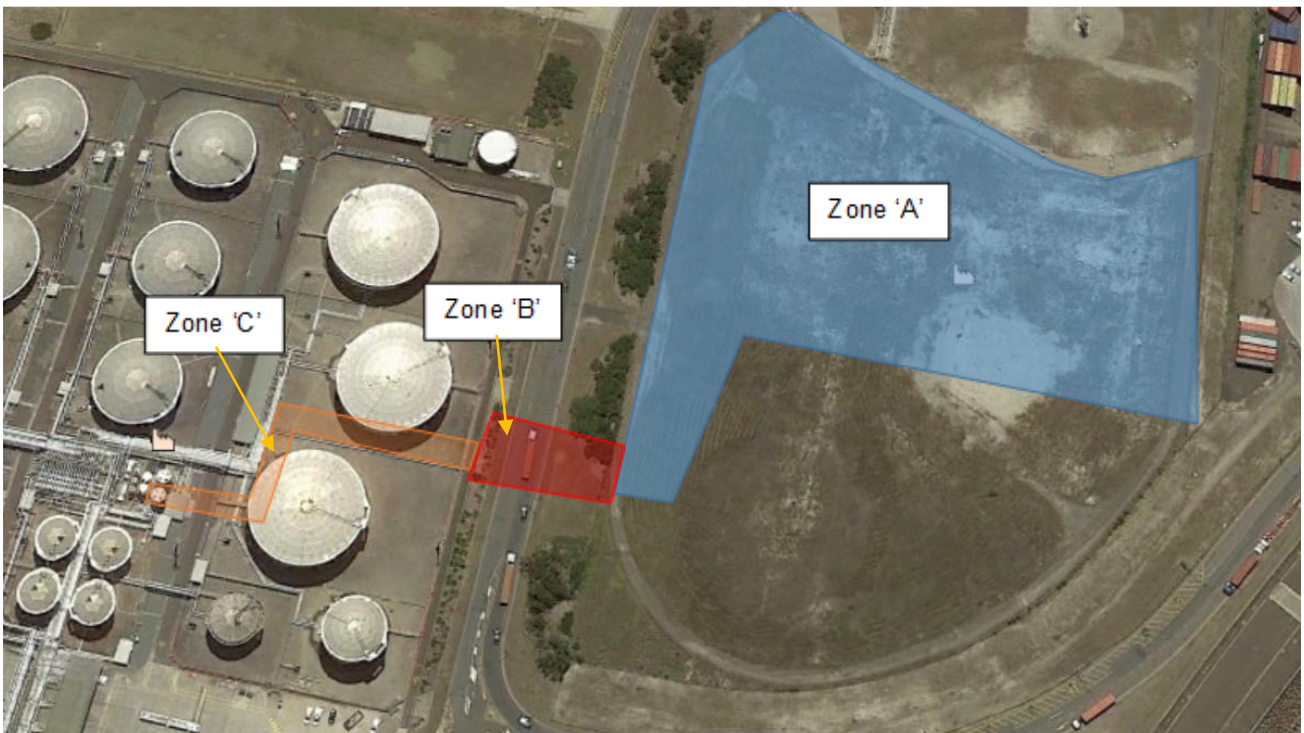


Figure 2: Zone 'A' / Zone 'B' / Zone 'C' Project Areas

Zone 'A' and 'B' is a segregated work area from Zone 'C' within the existing Site 'B' operations. Zone 'A' and 'B' will be controlled by Vopak's Principal Contractor under the NSW Work Health and Safety (WHS) Regulation 2017, and shall meet all the requirements under the WHS Regulations. This shall include the full implementation of Safety, Health and Environment (SHE) Management System and Permit to Work Program for the duration of construction work.

All works within Zone 'B', the road crossing, shall be executed in consultation with NSW Ports who will be responsible for issuance of Permits. Boundary limits between Zone 'B' and Zone 'C' is the Site 'B' bund wall. No daily permit is required from NSW Ports for daily work activities. The Principal Contractor will maintain the control and safe systems of work for all activities in this area.

Work within Zone 'C' shall require the Principal Contractor and their Subcontractors to work under the Vopak Contractor Regulations and Site 'B' Permit to Work System.

5.2 Contact Details

This section details the Vopak and Principal Contractor nominated personnel who are available to assist with public inquiries and to liaise with government agencies and authorities if required.

5.2.1 Project Contacts

The Project SHE Manager shall maintain an updated list of all Project contact personnel and have available in the main site office. The below names and positions may not be current at the time of viewing this document.

Company:	Address:	Description:	Contact Name:	Contact Details:
Dialog (Principal Contractor)	B4A Project Site	Project Manager	Alan Paulsen	M: 04 0901 3387
Vopak	B4A Project Site	Construction Manager	Mark Millevoy	M: 0404 483 989
	Site 'B', Gate 47, 20 Friendship Road, Port Botany	SHE Manager	Jamil Kharoudeh	M: 0455 212 438
		Head of Project and Engineering	Alan Chambers	M: 0417 896 479

5.2.2 External Contacts

Company:	Address:	Description:	Contact Details:
Emergency Fire/ Ambulance/Police	N/A	Emergency Services.	Tel: 000 Mob Tel: 112
NSW Ports	Brotherson House Level 2 Gate B103, Penrhyn Rd, Port Botany NSW 2036	NSW Ports Operator Tel: 1300 922 524	Wayne Ashton, Port Operations Manager M: 0417 217 274 Carsten Varming, Port Development Manager M: 0411 067 560
BSMS Security	7/31 Chaplin Dr, Lane Cove West NSW 2066	NSW Ports Security	Tel: 1300 889 059 M: 0434 424 642
General Hospital: Prince Of Wales Hospital	320-346 Barker St, Randwick NSW 2031	Local Public Hospital for Emergency Treatment (24hr)	Tel: (02) 9382 2222
Fire and Rescue Botany Fire Station	3 Banksia Street, Botany, 2019	Local Fire Authority	Tel: (02) 9666 5440
Police	136 Maroubra Rd, Maroubra NSW 2035	Local Police Station	Tel: 131 444 (General enquires) Tel: (02) 9349 9299 (Maroubra Stn.)
SafeWork NSW	92-100 Donnison St Gosford, 2250	Health and Safety Regulator	Toll-free: 13 10 50
Environmental Protection Authority	L14, 59-61 Goulburn St, Sydney	Environmental Regulator.	Tel: 13 15 55
Sydney Water	1 Smith Street, Parramatta NSW 2150	Emergency services and repairs	Tel: 13 20 90
Ausgrid	130 Joynton Ave, Zetland NSW 2017	Electrical Utility Operator	Tel: 13 13 65 (02) 4951 0899

6 Environmental Planning

Vopak's Principal Contractor shall be responsible for Work Approvals, Licenses and Permits, contractual requirements and all applicable Governmental environmental legislation, standards and codes of practice required by a company executing these works. Regulatory compliance, approvals and communications with Government entities will be managed by Vopak. The Principal Contractor will be responsible for assisting where required (i.e. providing information or implementation of recommendations).

6.1 Legal and Other Requirements

This document aims to ensure that all project activities are performed in a manner consistent with applicable Legislation and Regulations, which are listed below, and in addition to the Department of Planning, Industry and Environment's Development Consent.

Vopak's selection of Principal Contractor and sub-contractors will be based on their awareness of legislative environmental obligations applicable to the Project and specific to this Scope of Work, and the importance of complying and exceeding minimum requirements where practicable. These include applicable Environmental Acts and their subsidiary legislation, standards and codes of practice.

Management and supervision associated with the B4A Project will have a working knowledge of legal and other requirements applicable to their work scope and work location.

Numerous Acts, regulations, guidelines and policies will apply throughout the Project. The Project will comply with the applicable regulatory requirements, relevant Australian laws, conventions and regulations include, but are not limited to, the following:

Commonwealth Environmental Legislative Requirements:

- Environmental Protection and Biodiversity Conservation Act 1999 (CWLTH)
- Quarantine Act 1908 (CWLTH)
- National Greenhouse and Energy Reporting Act 2007

NSW State Environmental Legislative Requirements:

- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- Contaminated Land Management Act 1997
- Protection of Environmental Operations Act 1997
- Threatened Species Conservation Act 1995
- Water Management Act 2000
- State Environmental Planning Policy (Three Ports) 2013
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
- State Environmental Planning Policy No. 33 - Hazardous and Offensive Development

Relevant Approvals / Licences Required prior to Construction:

- Construction Licence – Agreement between Sydney Ports Corporation and Vopak
- Approvals under part 5 of the Environmental Planning and Assessment Act 1979
- EPA, Environmental Protection Licence 6007 (Variation)

Statutory Planning, the Project must be developed consistent with the provisions of the following state advisory guidelines:

- State Environmental Planning Policy 33 – Hazardous and Offensive Development;
- State Environmental Planning Policy 55 – Remediation of Land; and
- State Environmental Planning Policy (Three Ports) 2013.

6.2 Development Consent

As a condition of the Development Consent (SSD7000), the Construction Environmental Management Plan (this document) is required to be approved by the DPIE Secretary prior to the commencement of construction. On approval by the Secretary, this document will be published on the DPIE project website and Vopak project website.

6.3 Environmental Aspects and Impacts

The Project's SHE Legal and other requirements are identified in the *Project Compliance Procedure* a comprehensive register of legislative obligations as applicable to the project activities under the scope of work.

Systems for accessing Regulatory and supporting Environmental documentation such as Codes of Practice and/or ISO 14001 and AS/NZ Standards guidelines shall be maintained to ensure the timely availability to the site as required.

Electronic copies of the above legislation are available on the Internet at:

- www.epa.nsw.gov.au
- www.austlii.edu.au
- www.saiglobal.com

The SHE Manager and SHE Team will track proposed and emerging legislative and regulatory requirements and provide Project Management with a regular review where any changes are likely to affect the project.

Where required any relevant Codes of Practice and/or AS/NZ Standards will be made available for reference for specific tasks or events.

6.4 Environmental Assessment

As part of the State Significant Development application, Vopak engaged AECOM Australia Pty Ltd, in 2015, to prepare an Environmental Impact Statement (EIS). The EIS assessed the impact of construction and operations activities associated with the B4 development on the environment.

Reference: Vopak Site B4 Project – State Significant Development – Environmental Impact Statement (Rev F).

The assessments carried out for the Environmental Impact Statement (EIS), identified a number of mitigation measures for the Project. These mitigation measures, including the project’s procedural requirements, have been included within this Plan.

6.4.1 Aspect and Impact Prioritisation

Vopak, in consultation with various stakeholders and qualified consultancy organisations, identified the following environmental prioritisation as detailed within *Vopak Site B4 Project – State Significant Development – Environmental Impact Statement (Rev F)*.

Issue	Likelihood	Consequence	Priority
Hazard and Risk	2	3	High
Traffic	2	2	Medium
Air Quality	2	2	Medium
Noise and Vibration	2	2	Medium
Soils and Water	1	2	Low
Waste Management	1	2	Low
Greenhouse Gas	1	1	Low
Visual Amenity	1	1	Low
Social and Economic	1	2	Low
Ecology	1	1	Low
Heritage	1	1	Low

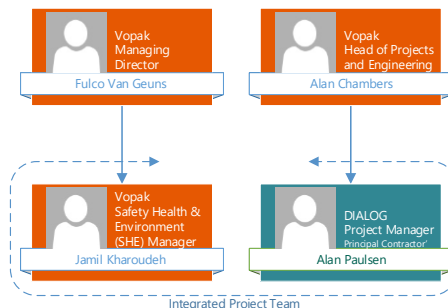
7 Organisational Structure

The Principal Contractor’s Project Manager is ultimately responsible for the implementation of this Construction Environmental Management Plan and other environmental requirements. In implementing this plan, the Project Manager will be supported by the Safety Health and Environmental (SHE) Team established for the project.

7.1 SHE Team Staffing

Safety, Health and Environmental (SHE) staffing on-site will include a minimum of one SHE Advisor to every thirty direct project employees. The SHE Advisors for the project will consist of an integrated team of Vopak and the Principal Contractor’s staff.

The SHE Manager for the Project will be a Vopak employee with a direct reporting line to Vopak Australia’s Managing Director and the Project Manager.



8 Roles and Responsibilities

Environmental aspects and impacts are communicated to members of the project team, and they are required to take due cognisance of these issues when carrying out their respective duties.

The following personnel have responsibilities under this Plan:

- Employees
- Subcontractors
- Site Supervisor/Leads/Superintendent
- Weld Supervisor
- Construction Manager
- SHE Advisor
- Project Manager
- SHE Manager

Responsibilities identified for key roles within the project team are detailed below.

8.1 Project Manager

The Project Manager is accountable to B4A Project Alliance Board (detailed in the organisational chart) and is responsible for:

- Overall responsibility for the development, implementation, maintenance, and compliance with this Construction Environmental Management Plan;
- Ensure contracts contain relevant environmental provisions;
- Providing vision and leadership for environmental matters;
- Promoting participation in environmental matters;
- Ensuring all aspects of the Project's environmental policies are implemented and meet legislative and Principal Contractor's requirements;
- Reporting environmental incidents in accordance with statutory and Vopak requirements (including verbally notifying Vopak immediately and providing Vopak with a written notification report thereafter);
- Ensure the SHE Manager/Advisor is regularly informed on the commencement of work fronts, chemical use and other aspects of the work;
- Ensure Supervisors/Leads and staff conduct weekly Environmental Inspection and submit completed forms to SHE advisor as part of their KPI's; and
- Participating in investigating all incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries to close out.

To meet the above responsibilities, the Project Manager will:

- Review and approve the CEMP;
- In consultation with the B4A Project Management team ensure appropriate resources are allocated to meet Vopak and the Principal Contractor's environmental responsibilities; and
- Ensure all levels of the Project Management Team are aware of and comply with the requirements of the CEMP.

8.2 Construction Manager

The Construction Manager is accountable to the Project Manager and is responsible for:

- Implementation of Vopak's and the Principal Contractor's environmental, procedures and systems;
- Allocation of resources to meet environmental requirements, including determination and allocation of supervision, equipment and manpower;
- Promoting participation in site environmental activities across all levels of the workforce;
- Review of Vopak's and the Principal Contractor's environmental assessments;
- Ensuring Vopak's and Principal's compliance with the Project environmental requirements;
- Monitoring overall site environmental performance;
- Providing instruction and direction to Supervisors in the discharge of their Environmental responsibilities;

- Implementing, personally and via Supervisors, Vopak's and the Principal Contractor's Environmental procedures;
- Ensuring that requirements contained in Job Risk Assessments (i.e. SWMS/JHA/JSA) are implemented through scheduled audits;
- Ensuring that discipline in relation to environmental matters is applied fairly and firmly;
- Ensure Supervisors complete the required Environmental Inspections through scheduled audits; and
- Report all incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries in accordance with statutory and Company requirements.
- Participating (and/or lead) in investigating all incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries to close out.

To meet the above responsibilities, the Construction Manager will:

- Review implementation plans;
- Assist with the development of Job Risk Assessments (i.e. SWMS/JHA/JSA), methods statements, and procedures;
- Review and approves corrective actions arising from incident investigations;
- Monitoring overall site environmental performance;
- Review procedures, method statements, Job Risk Assessments and inspection reports; and
- Liaise with SHE Manager / SHE Advisor regarding environmental input into Daily Prestart and Weekly Toolbox Meetings.

8.3 Discipline Supervisor/Lead

Supervisors/Leads are accountable to the Construction Manager and are responsible for:

- Providing environmental leadership to their work teams;
- Instructing each member of their team in the environmental standards applicable to their work, and ensuring that such requirements are enforced;
- Continually monitoring the condition of their work area and surrounding areas and proactively addressing environmental hazards as they are identified;
- Monitor the implementation of the Project's environmental management strategies;
- Review procedures, method statements, Job Risk Assessments (i.e. SWMS/JHA/JSA) and inspection reports;
- Identification of Health, Safety and Environmental critical items on the Project Works Schedule; and
- Report all incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries in accordance with statutory and Company requirements.

To meet the above requirements, Supervisors/Leads will:

- Conduct daily inspections of their workplace, and of equipment within their workplace at start and end of each shift;
- Developing Job Risk Assessments (i.e. SWMS/JHA/JSA) with, and for their team that consider environmental impacts and issues;
- Respond promptly and positively to any environmental concerns or suggestions made by their team;
- Complete all necessary environmental documentation in a timely and professional manner, including Incident Reports, Workplace Inspection Reports and Toolbox Records;
- Complete a weekly Environmental Inspection and forward to the SHE Advisor each week; and
- Assist with the development of methods statements and reviews procedures.

8.4 SHE Manager / SHE Advisor

The SHE manager or their delegate will Coordinate Safety, Health and Environment activities including:

- Provide advice to the Environmental performance for the Project;
- Monitor the implementation of this Construction Environmental Management Plan, and advise the Project Manager of status in compliance with this plan;
- Advise the Project in regards to matters specified in the Development Consent;
- Supports site management and supervisors in the implementation of SHE plans/procedures and monitor their effectiveness in achieving performance targets;
- Recruiting, training and evaluating environmental professionals for construction execution;
- Providing vision and leadership for environmental matters;
- Facilitates and maintains inductions and ongoing environmental awareness training to the construction workforce;
- Monitor the performance of the SHE programs;
- Manage SHE personnel and provide appropriate environmental direction, optimising their effectiveness on-site;
- Coordinate environmental concerns/requirements with the Project SHE team and Field Engineering personnel;
- Coordinate with the Project Alliance Board, Project team and Corporate SHE regarding compliance issues;
- Develop the Project's Environmental Training Program and associated materials;
- Allocation of resources to meet environmental requirements;
- Provide support in environmental incident investigations as required;
- Reviewing lower-tier Subcontractor deliverables and plans, for environmental compliance and provide recommendations for improvements;
- Monitor Lower Tier Subcontractors for compliance with applicable plans and coordinate with the Contract Administration Manager and lower-tier subcontractors to assist in attaining compliance with this CEMP, or approved management plans, as applicable; and
- Review Principal Contractor's incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries in accordance with statutory and Vopak requirements including notifications.

8.5 Project Employees and Subcontractors

All personnel on-site are accountable to their immediate supervisor, to themselves and their fellow workers, and are responsible for:

- Their own actions and the observance of all site environmental requirements;
- Participating in and contributing to site environmental activities; and
- Demonstrating concern for the environment.

To meet the above responsibilities, all personnel will:

- Immediately report to their supervisor all environmental incidents;
- Maintain their work area in a safe and tidy condition;
- Assist in environmental investigations if required to do so;
- Produce evidence to support Project/training assessments;
- Familiarise themselves with relevant site environmental requirements via toolbox talks, project inductions and project notice boards;
- Follow and adhere to the site environmental requirements and ensure that work complies with these requirements;
- Complete and adhere to maintenance and inspection schedules for vehicles, plant and equipment in accordance with site and legislative requirements; and
- Report all incidents, Unsafe Acts, Unsafe Conditions, Near misses and Injuries in accordance with statutory and Company requirements.

9 Key Performance Indicators

In pursuit of the objectives previously stated and to provide targets against which environmental performance can be measured and improved, detailed Key Performance Indicators (KPI's) have been developed for the Project and are included below:

Objective	Target	Indicator	Accountable
Prevention of Regulatory Reportable Environmental Incidents	Zero Regulatory Reportable Environmental Incidents.	Environmental Incident Records	Project Manager**
	Zero enforcement notices and prosecutions.	Environmental Incident Records	Project Manager**
Prevention of any Project Environmental Incidents	Zero Environmental Incidents	Environmental Incident Records	Project Manager**
Compliance with Project Regulatory Licences and Consents	Ensure work is performed in accordance with Vopak's Environmental Impact Statement and SSD requirements.	Project site inspections/audits	Project Manager**
Achievement of best practice environment management	Achieve >90% in Quarterly SHE Assessment	Quarterly SHE Assessment	Project Manager**
Communication of Environmental elements at Prestart and Toolbox Meetings	One SHE Topic per Quarter (Toolbox)	Environmental Bulletins, Toolbox Talks, Posters etc.	Project Manager**
	One SHE Topic per Fortnight (Prestart)	Environmental Bulletins, Prestart Talks, Posters etc.	Project Manager**
Monitoring of environmental Corrective Action Register, action closure	100% of Actions closed out by due date Incident/ Register	Corrective Action Register	Project Manager**
Effective implementation of planned Environmental Training activities	100% of Supervisors attended Mandatory Environmental Protection Supervisor Training within the first 3 months of mobilisation	Documented training records	Project Manager**

**Principal Contractor

10 Project Environmental Control Plans

The Principal Contractor (and their subcontractors) will adhere to the environmental standards as set out by Vopak, regulatory requirements and relevant procedures developed for the project.

The Environmental Control Plans listed below shall outline the Project’s environmental and regulatory guidance in terms of environmental protection and compliance.

10.1 Dust / Air Quality Control Plan

Air quality within the area surrounding Port Botany is influenced by both local and regional pollutant sources, including road traffic, domestic sources, aircraft and a variety of industrial emissions. The proximity to local pollutant sources and the influence of sea breezes play significant roles in the dispersion of pollutants around Botany Bay.

The construction cut fill balance indicates that some fill may need to be imported. Therefore, it is unlikely that there would be large amounts of soil that need to be stockpiled on-site during the construction stages, where possible stockpiling of soils will be kept to a minimum. Where stockpiles are required, they would be located in consultation with NSW Ports.

10.1.1 Potential Impacts

Construction activities have the potential to affect air quality if not properly managed. Due to the large surface area of the reclamation and stockpiles that will be potentially exposed to winds, there is potential for windblown sand and dust. Consequently, construction activities require careful construction planning and effective measures to ensure that there are no significant emissions of dust. Dust could be generated from the following sources:

- The dried reclaimed surface;
- Earthworks;
- Spoil handling & stockpiling on top of the reclamation;
- Movement of vehicles across unsealed areas on the site; and
- Abrasive blasting and painting.

Modelling completed by AECOM (*Vopak Site B4 Project – State Significant Development - Environmental Impact Statement*) indicated that predicted pollutants to air quality during construction is not expected to adversely affect the air environment or the amenity of sensitive receptors.

Pollutant	Maximum Predicted 99.9th Percentile Concentration ($\mu\text{g}/\text{m}^3$)	Criteria ($\mu\text{g}/\text{m}^3$)
Benzene	4.4	29
Cumene	6.1	21
Cyclohexane	1.5	19,000
Ethylbenzene	1.5	8,000
n-Hexane	2.8	3,200
Toluene	4.1	360
Xylenes	4.0	190

Table: Predicted Maximum Ground Level Concentrations 99.9th Percentile

10.1.2 Control Measures

The Principal Contractor shall comply with the air quality management requirements specified by the Environmental Impact Statement as relevant to the scope of work and as determined through the Project Environmental HAZID Risk Assessments. The Principal Contractor is responsible for ensuring compliance with applicable Australian legislative requirements, ambient air quality standards and Project specific requirements. These will include but not be limited to:

- Water carts to be used to wet down excavations to suppress dust during construction periods.
- Review forward forecasts and re-program works during periods of high winds to ensure that a dust nuisance is not caused externally to the site.
- The Principal Contractor may establish a real-time metrological weather station and shall be monitored frequently for rain events, lightning and significant winds.
- Where dust from earthworks or other dust-generating activities cannot be controlled adequately by existing dust suppression measures, the activities shall be stopped and the process reviewed and additional mitigation measures employed.
- Provision for dust suppression equipment during periods of site shutdown such as weekends, RDOs and extended site closures where it is anticipated that weather conditions will generate dust.
- Construction Supervisors (or delegate) shall visually inspect plant and equipment exhaust periodically during the works for excessive emissions. Excessive emissions shall be defined as visual emissions continuing for a period of greater than 30 seconds.
- Excessive mud to be removed from vehicles before entering public roads by a wheel wash at the site exit point to prevent tracking of mud and sediment on to public roads.
- Minimise vehicles speeds on unpaved areas and site roads - general site speed limit shall be 10km/hr, however, shall not exceed 20km/h.
- All plant and equipment are to be maintained in good working order, in accordance with the relevant manufacturer's requirements, to limit the emission of smoke and dust.
- Vehicles entering and leaving the premises that are carrying loads of dust-generating materials must always have their loads covered, except during loading and unloading.
- Use of suitable compacted rock, limestone or blue metal for car parks and office areas.
- Daily visual monitoring of dust generation will be undertaken for the duration of the project and shall include site exit points. The frequency of this activity can be increased if required.
- Sweeper/vacuum truck to be used if required to clean public roads in and around the site.
- The stockpiling of contaminated material shall be minimised, and height kept to less than 2m, wetted and covered.
- Active excavation works shall be wetted down.
- All abrasive blasting shall be 100% encapsulated or managed to ensure airborne dust is managed to suitable levels and monitored by the responsible Supervisor/Lead for the escape of contaminant.
- Paint is to be applied using brush or roller. Airless paint spraying shall be avoided, but if required must be risk assessed first.
- Provide awareness training within the site-specific induction and toolbox meetings and include the need to minimise dust and report emissions. In particular, the need to identify activities causing dust emissions.

10.1.3 Air Quality and Dust Management – Monitoring Activities

Each Supervisor and the Construction Manager will undertake daily monitoring in the form of visual inspections of the site. Results of visual inspections will be recorded in the relevant site diary and on the daily/weekly checklist as appropriate.

Visual monitoring will be undertaken continually throughout construction for air quality and dust. If excessive dust or air quality impacts are observed, works are to cease and the source to be actively investigated and preventative measures implemented before proceeding.

The Construction Manager will be responsible for providing appropriate resources in terms of labour, plant and equipment to enable the items to be rectified in the nominated timeframes.

10.2 Surface and Stormwater Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Construction Water Management

Surface water at the site falls under the *Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011* (Office of Water, 2011c and d, AECOM 2015). Due to this, surface water on-site is managed under the provisions of the Water Management Act 2000 (AECOM, 2015). Surface and stormwater management is important to ensure that the surrounding waterways, including Botany Bay, is not impacted by construction activities that occur on-site.

10.2.1 Potential Impacts

As the Botany Bay water quality is heavily influenced by the flow of freshwater, any impacts to surface and stormwater during construction is likely to be localised and will not have a significant impact on the surrounding communities within Botany Bay (AECOM, 2015). During the construction phase, the immediate surface and stormwater may be impacted by any runoff from soil stockpiles, hydrocarbon contamination from spills and leaks, and fill material coming in contact with the surface and stormwater.

Significant impacts to surface water quality are not anticipated as a result of the Project. However, best practice measures for the management of runoff from the Site would be put in place as part of standard site management. Contingency measures would be identified in the event that contaminated soils, including materials potentially containing asbestos, are encountered.

10.2.2 Control Measures

The Principal Contractor shall comply with surface and stormwater management procedure specified for the B4A Project and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Installing erosion and sedimentation controls as required;
- Utilising silt fencing for material stockpiles;
- Closing waste containers when not in use to prevent stormwater contamination;
- Inspection of work areas before commencing work;
- Following spill response procedures;
- Reporting spills and leaks immediately;
- Conducting incident investigation, and leading to incident closeout report;
- Maintaining good housekeeping practices; and
- Regularly clean up work areas to remove debris.

After being built and commissioned the site's stormwater system will be used to:

- Inspect and test collected surface and stormwater prior to release off-site in alignment with *Soil and Construction Vol 1 Mar 2004* and Vopak requirements; and
- Discharge of water emanating from construction activities.

10.2.3 Monitoring Activities

The Principal Contractor shall continue to monitor the work area for pooling for surface or stormwater. Any dewatering activities will need to follow the plans and procedures for soil and water management.

Water quality will need to be monitored and tested before commencing dewatering. A dewatering log shall be maintained to monitor the amount of water displaced from the work area and discharged into the stormwater drain.

10.3 Soil and Sediment Management

Excavation works on the project include drainage works, tank and bund wall foundations and surface levelling. Such works shall be managed strictly in accordance with both this CEMP and a Project-specific Work Method Statement, detailing the strategies to prevent contaminated waste build-up in soils, correct disposal of unwanted soil materials and measure to prevent sedimentation entering groundwater aquifers and waterways.

In order to satisfy a condition of consent for a development application (DA 6329), for the demolition of the previous site infrastructure, former site tenants Qenos engaged Jacobs to undertake a contamination assessment for the subject site. This contamination assessment (Jacobs, 2015) concluded that no indications of contamination were observed. Similarly, laboratory analysis indicated that soil and groundwater met the relevant contamination criteria for commercial and industrial land uses. The results of Jacobs (2015) were reviewed in a Site Audit Report prepared by Environ (2015), which supported Jacobs's findings.

The risk of encountering acid sulphate soils is low given all excavation would be undertaken in soils laid down as part of the land reclamation works in the 1970s. In addition, there are no EPA records of declared contaminated soil sites near the B4 Site. However, contingency measures would be identified to manage works in case either acid sulphate soils or contaminated soils are encountered.

10.3.1 Potential Impacts

Any impacts on soil quality and water runoff during construction are likely to be localised, and it is not anticipated that impacts would have a significant impact on sensitive habitats/communities within the Botany Bay area. The Project would not directly impact surface waters, but there is potential for sediment or contaminated runoff to enter the nearby Yarra Bay water and potentially affect water quality.

Vopak acknowledges that asbestos fragments have previously been discovered on site, which, if uncovered, shall be managed by the Principal Contractor using a project-specific asbestos management plan or procedure.

10.3.2 Control Measures

The Principal Contractor shall establish a soil and sediment management procedure as part of construction works and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Inspecting work areas after a rain event to see if any pooling has occurred or if any repairs to physical controls need to be made;
- Installing erosion and sediment control measures in work areas if required as a direct result of their work scope;
- Inspecting and repairing erosion and sediment controls (if installed);
- In the event that dewatering of standing water is required a visual inspection shall be conducted to determine if any contamination (visual oil/grease sheen) is present prior to dewatering into the site drainage system;
- Where excavated material needs to be stockpiled for the efficient operation of the works, it will be placed in a dedicated spoil treatment and stockpile area; and
- Providing awareness training within the site-specific induction and toolbox meetings in relation to the management of soils and prevention of sediment build-up and discharge into stormwater drains.

10.3.3 Monitoring Activities

If required, the Principal Contractor shall follow all sampling, monitoring and approval requirements outlined by the Vopak and regulatory bodies. Where required, samples will be tested by a NATA accredited laboratory and assessed for compliance with the relevant waste regulations. Where samples indicate a non-conformance, the material will be stockpiled, covered and banded.

All records of soil testing will be kept on file in the project records. Accurate and up to date records are to be maintained for all monitoring activities. Records shall be retained for the life of the project and archived in accordance with Vopak's and the Principal Contractor's document control procedures. This shall include, but not be limited to:

- Records for the assessment, treatment, and placement of material to be retained on-site.
- A site plan showing the location and classification of contaminated materials identified and/or stored on-site shall be prepared and retained on-site.
- Results of all relevant sampling and analysis are to be retained in the project records.
- Records of all sampling, analysis and validation will be provided to Vopak as the works progress.

10.4 Groundwater Management

The Site is located above two aquifer systems (Qenos, 2013). The Botany Sands aquifer comprises a large volume of unconfined groundwater within the sandy grounds surrounding Port Botany (Office of Water, 2015). A further, underlying confined aquifer lies within the Hawkesbury Sandstone, which is itself divided into upper and lower systems divided by a shale band. There is some connectivity between the upper Hawkesbury aquifer and the overlying Botany Sands aquifer (Qenos, 2013).

10.4.1 Potential Impacts

The risk of impacting groundwater is restricted to excavation works of levelling the site, footings and foundations for structures to be constructed.

Impacts on groundwater are unlikely during construction due to the shallow (approx. 1 m) depth to which excavations are required compared to local groundwater levels which are typically around three to four metres (Jacobs, 2015) below ground level.

Due to the permeability of the Botany sands and the shallow table of this aquifer, the Botany Sands aquifer is vulnerable to contamination. Contamination from any escaped or spilled substance at the site is therefore likely to accumulate in soils and eventually leach into the Botany Sands aquifer.

10.4.2 Control Measures

The Principal Contractor shall establish a surface water management controls to minimise the risk of hydrocarbons contaminating the groundwater and soil. As part of construction works, the Principal Contractor shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Complying with established groundwater monitoring requirements;
- Complying with established reporting requirements;
- Implementing a Spill Response Plan;
- Utilising secondary containment for chemical storage;
- Utilising drip trays when refuelling vehicles and machinery;
- Cover waste containers; and
- Provide awareness training within the site-specific induction and toolbox meetings for spill prevention, spill response and reporting requirements.

10.4.3 Monitoring Activities

If in the event contaminants are identified, the Principal Contractor shall notify Vopak, and also report to the Environmental Protection Authority (EPA). The Vopak SHE Manager shall oversee any investigation to determine the source of pollution and establish appropriate corrective actions to minimise any environmental impacts and avoid further occurrences.

10.5 Waste Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Waste Accumulation and Storage Plan
- Waste Characterisation Plan
- Hazardous Waste Management
- Used Oil and Filter Management

In line with the *Vopak Site B4 Project – State Significant Development – Environmental Impact Statement (Rev F)*, Vopak does not anticipate to generate significant quantities of waste material throughout the construction phase of the project. Waste generated on the Project during construction are likely to include the following:

- Excess cut soil from excavation and foundations works;
- Surplus construction materials (steel, timber, general waste);
- Excess painting materials inclusive of used thinners;
- Spent blasting garnet; and
- Sewage and other waste, such as food scraps as a result of the presence of the construction workforce.

10.5.1 Potential Impacts

The handling and final disposal of these wastes have been determined based on regulatory guidelines and industry standards. Negative impacts on the environment throughout construction could be attributable to the following:

- Insufficient waste receptacles for the relevant waste type resulting in waste build-up;
- Incorrect segregation and separation of waste streams;
- Incorrect and/or unauthorised disposal of waste at off-site facilities by licensed waste subcontractors; and
- Windblown debris impacting on neighbours and local watercourses.

10.5.2 Control Measures

The Principal Contractor shall comply with the waste management plan and procedures for the B4A Project and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

Construction waste management strategies can be summarised as the application of the waste hierarchy where the Principal Contractor and subcontractors shall employ the following:

- Avoidance – The generation of wastes from the Project would be avoided where possible;
- Reduce – Reduce resource consumption, procure materials with less packaging and implement practices to reduce waste;
- Reuse – Where feasible, materials would be reused on-site;
- Recycling – Paper, cardboard, glass and plastics would be available for recycling; and
- Disposal – Disposal of wastes would be minimised where possible.

The Principal Contractor will ensure compliance throughout the project by:

- Maintain good housekeeping;
- Characterise waste correctly;
- Use the correct containers for storing waste;
- Ensure waste containers have the correct labelling;
- Recycle steel, timber, paper and cardboard;
- Specific waste containers for spent abrasive blasting media;
- Cover waste containers;
- Provide an adequate amount of waste containers for the amount of waste being generated;
- Engage a licensed waste subcontractor who has been engaged following subcontractor pre-qualification process; and
- Monitor subcontractor compliance with this plan and Environmental Guideline: Assessment, Classification and Management of Liquid and Non-Liquid Waste (1998).

10.5.3 Monitoring Activities

The designated waste subcontractor responsible for collection, transport and disposal have obligations to ensure that the waste is properly tracked from its point of generation to its disposal location and to ensure that the required documentation is completed. This shall be rigorously monitored by the Principal Contractor and Vopak to ensure compliance.

The Principal Contractor shall monitor compliance with this CEMP and relevant waste legislation by means of the following:

- Daily and Weekly HSE Inspections checklists;
- Waste management Register;
- Ensuring subcontractor license and disposal forms on file and current;
- Audit through internal Project HSE Assessments; and
- Quarterly Corporate HSE Assessments.

10.6 Noise and Vibration Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Noise and Vibration Management

The purpose of Noise and Vibration Management Plan is to protect the well-being of the nearby community and the workforce as well as avoid/minimise impacts to terrestrial fauna from nuisance noise impacts resulting from activities associated with construction by ensuring the noise levels meet statutory requirements and acceptable standards.

Noise emissions will be generated during site mobilisation and mechanical installation of infrastructure and commissioning. Equipment for site mobilisation and construction will include cranes, telehandlers, generators, light vehicles and medium/heavy rigid vehicles. Noise generated from other construction activities includes but are not limited to welding, grinding, abrasive blasting and painting.

10.6.1 Potential Impacts

Extensive noise monitoring has been undertaken previously (Atkins Report 2011), which Vopak believe to be representative of the current noise environment. Additionally, an assessment of the likely set of construction plant and equipment utilised during the main stages of constructions provided the construction scenarios, which formed the basis of the construction noise assessment. As stated within the *Vopak Site B4A Project – Environmental Impact Statement (Rev F Oct.2015)*, noise modelling for day and night activities during both construction and operational phases, there would be no exceedance of the site-specific noise criterion.

While the majority of construction activities would be undertaken during standard hours, there may be a need to undertake out of hours works for the pipe and culvert works across Friendship Road to minimise impact to traffic during business hours.

Based on the recent construction noise assessment completed by an external consultant, on behalf of Vopak, predict that construction activity will comply within the recommended construction noise levels at all nearby sensitive receiver locations during both standard hours and out of hours works.

With regards to vibration impacts, Vopak does not anticipate construction activities to result in vibration impacts on surrounding areas and neighbours. Similarly, vibration due to construction traffic would be restricted given the Port Botany and arterial road networks being specifically designed for heavy vehicles.

10.6.2 Control Measures

The construction noise and vibration assessment indicate that due to the large buffer distance between the Project and nearby residential receivers, the risk of discomfort, regenerated noise and structural damage impacting on receivers is very low.

The Principal Contractor shall comply with the noise and vibration management procedure for the B4A Project and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Limiting construction activities to daylight working hours (where practicable);
- Hours of work to comply with the Development Consent requirements;
- Night-time construction activities shall be undertaken only after approval has been issued by Vopak;
- Where practical use low noise specification equipment;
- Scheduled maintenance of vehicles and equipment; and
- Daily inspection of equipment by operators.

10.6.3 Monitoring Activities

The Principal Contractor shall utilise noise and vibration receivers if they exist at locations around the proposed B4A development site. The SHE Manager shall liaise with the relevant stakeholders to review results from noise and vibration monitoring activities to ensure that all construction work is within the recommended tolerable limits.

Due to the low risk of Noise and Vibration inductions, toolbox talks, and Job Risk Assessments shall stipulate the expected control measures for the given activity. Any activity not covered by the above is to be risk assessed with controls and mitigation techniques approved by Vopak.

10.7 Spill Response Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Spill Prevention, Control and Countermeasure Plan
- Sorbents and Spill Clean-up Materials Plan
- Equipment Fuelling
- Chemical Storage and Compatibility Plan

10.7.1 Potential Impacts

Vopak's emphasises that spill prevention is primary to spill remediation and shall, therefore, require the Principal Contractor to use preventative measures as a primary focus in risk management activities. Therefore, the Principal Contractor develop spill response management plans and procedures and ensure that resources and capability effectively respond to minor or major spill events in a timely manner.

Potential impacts may be due to the following:

- On-site refuelling activities;
- General wear and tear of plant and equipment during operation;
- Mechanical servicing of plant and equipment on-site;
- Incorrect storage of hazardous substances and materials; and
- Construction activities, including blasting and painting.

10.7.2 Control Measures

The Principal Contractor shall comply with the spill response management plans and procedures for the B4A Project and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor and subcontractors shall implement the following preventative and mitigation control measures:

- Incorporating contaminant risk and mitigation measures within the work task Job Risk Assessment (i.e. JSA/JHA/SWMS's);
- All spills will be reported in accordance with the Project reporting requirements;
- Spill kits will be located at all hazardous waste storage areas, refuelling areas and strategic locations within the work area footprint (replenished after use);
- Inspect vehicles and equipment daily;

- All chemicals and hazardous material storage areas must be located at least 30 m from any waterways/storm-water drainage systems and as per the SDS requirements;
- Fuelling equipment shall be equipped with emergency shut-off and maintain adequate spill response supplies;
- Spill response training shall be delivered to key personnel and crew;
- Large stationary equipment shall either have internal bunding or be adequately bunded;
- Spill/drip trays shall be provided for small stationary equipment (i.e. light towers, welding sets, compressors etc.) if not internally bunded;
- Hazardous materials and products shall be labelled, segregated and stored in accordance with the manufacturer's guidelines;
- Hazardous labelled containers will be stored only in designated storage areas and within secondary containment or bunding controls (110% of the volume of the largest container stored);
- All containers of chemicals supplied to, used in or handled in the workplace shall be appropriately labelled to allow the chemical to be used safely. Labelling of chemicals shall be in accordance with the National Commission's National Code of Practice for the Labelling of Workplace Substances;
- Petroleum products and used filters will be drained into appropriate containers to remove any free product prior to disposal via approved waste facilities only; and
- Vehicles used for transporting fuel shall be licensed as such, and all drivers shall be licensed to operate vehicles involved in transporting fuel.

The provision of spill response material shall be provided by the Principal Contractor (and their subcontractors) which shall include the following as a minimum:

- Vehicle and Mobile Equipment Spill Kits - Grab spill kits will be available in all light vehicles and mobile construction equipment. Packaged spill kit to be capable of absorbing up to 20 litres of oil (kit to include absorbent pads, socks, a disposal bag and protective gloves).
- Large Spill Stations – These shall be provided in all areas where controlled products, oils, fuels etc. are used or stored. The SHE Manager (or their delegate) will determine the locations necessary (i.e. warehouse, maintenance shop, tool cribs, etc.) based on environmental risk assessment (i.e. HAZID). The spill station will be contained in a weatherproof box, drum, wheeled/lidded container, or trunk that can be mobilised to the spill site. Each spill station will have a total absorbency of up to 150 litres of liquids (oils), or greater if determined by risk assessment.

10.7.3 Monitoring Activities

The following will undertake or ensure the following activities:

- Inspection of all oil/fuel storage areas and containers using Daily and Weekly Inspection checklists.
- Inspection of spill kits monitoring through inspections and checking inventory in accordance with the manifest.
- Environmental site inspection and/or activity audits performed by the project management or SHE team to ensure safeguards implemented are adequate and effective.

During activities, it is the responsibility of the area supervision to ensure they have adequate spill kits for their work scope.

All equipment operators are responsible for undertaking a comprehensive prestart inspection prior to operating light vehicles, mobile equipment, and other miscellaneous petrol/diesel-powered equipment. These inspections shall include provision for inspecting for leaks and general wear and tear of hoses and fittings.

If in the event spill event occurs, the Principal Contractor shall notify Vopak, and if required, also report to the Environmental Protection Authority (EPA). The Vopak SHE Manager shall oversee any investigation to determine the cause of the spill and establish appropriate corrective actions to minimise any environmental impacts and avoid further occurrences.

10.8 Hydrostatic Test Water Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Construction Water Management (same as Surface and Stormwater Management section)
- Tank and Pipework Hydrostatic Test Procedure/Plan
- Water Quality test procedure

The Principal Contractor shall be required to hydrostatically test tanks and pipes to ensure the integrity and quality of the tanks before commissioning and hand over to Vopak. The water quality, water source and water discharge point shall be determined by the Principal Contractor and confirmed by Vopak. The water quality must meet the Test Water Requirements for Stainless Steel, Aluminium, Carbon and Low Alloy Steel Tanks and Pressure Vessels.

As mentioned above, a specific Hydrostatic Test Management procedure/plan will be written and approved before commencing any hydrostatic activities on site. Subject to Vopak approval. This procedure/plan will outline the requirements, scope, training, test sequence (including hold and witness points), risk assessment, and equipment required to perform the hydrostatic test.

10.8.1 Potential Impacts

Unauthorised discharge of Hydrostatic testing water may have an adverse impact on surface water and groundwater around the site. The discharge of Hydrostatic water will increase the risk of erosion and sedimentation, if not captured and controlled correctly.

10.8.2 Control Measures

The Principal Contractor shall comply with all hydrostatic test water management procedure specified for the B4A Project and shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Developing and implementing an approved Hydrostatic Test Management Plan;
- Plan to include the method of disposing of hydro test water;
- Sampling and analysing water quality prior to discharge;
- Discharging of water through an approved discharge point only;
- Utilise erosion and sediment controls where required; and
- Cascade Hydrostatic test water by transferring water from tank to tank if possible to reduce the amount of water discharged.

10.8.3 Monitoring Activities

The Principal Contractor shall follow the construction water management procedures as required. The integrity of the tank will be monitored consistently to ensure that there are no leaks and defects within the tank. Work areas will continue to be inspected before commencing work to ensure that hydrostatic test water has not leaked and impacted the work area.

10.9 Flora and Fauna Management

As stated in the Vopak Environmental Impact Assessment, the site is previously cleared and an industrial area, there are minimal species of flora and fauna in the work area.

10.9.1 Potential Impacts

Due to the lack of flora and fauna in the work area, the potential to impact is low. However, fauna may be trapped in excavations or trenches. Litter and crib hut waste must be managed correctly, or it may result in attracting rodents and birds. Construction waste may impact fauna habitats around the surrounding project area if not managed properly.

10.9.2 Control Measures

The Principal Contractor shall establish controls to minimise the risk to flora and fauna. As part of construction works, the Principal Contractor shall incorporate requirements into the relevant scopes of work and Job Risk Assessments.

The Principal Contractor will ensure compliance throughout the project by:

- Reporting animal sightings to Vopak;
- Capping ends of pipes;
- Enforcing site speed limits;
- Maintaining a high level of housekeeping;
- Inspecting work area and trenches before commencing work;
- Erecting fencing and barricading around work areas; and
- Inspecting waste containers.

10.9.3 Monitoring Activities

The Principal Contractor shall visually inspect and monitor the work areas for fauna before commencing any work. If any fauna is found, the SHE team and Vopak will be notified.

10.10 Traffic and Transport Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following management plan or procedure:

- Pipe Culvert Road Crossing Installation, Construction Traffic Management Plan
- 233771-HS-PL-00004 Construction Traffic Management Plan

The Vopak site is serviced by the Port Botany road network, which provides access to Sydney's arterial road network. Vehicular access between the site and the surrounding major road network is via the one-way loop of Simblist Road / Friendship Road. This connects to Bumborah Point Road at priority-controlled T-junctions.

Vopak has developed *233771-HS-PL-00004 Construction Traffic Management Plan* specific for the Project. It contains requirements agreed to with DPIE Development Consent (SSD7000), NSW Ports, Randwick City Council, and other Vopak stakeholders:

- Designated travel paths for vehicles including entry and exit points, haul routes for debris or plant and materials, or traffic crossing other streams of traffic;
- Pedestrian and traffic routes;
- Designated delivery and loading and unloading areas;
- Travel paths on routes remote from the workplace including places to turn around, dump material, access ramps and side roads;
- How often and where vehicles and pedestrians interact;
- Traffic control measures for each expected interaction including drawings of the layout of barriers, walkways, signs and general arrangements to warn and guide traffic around, past or through the workplace or temporary hazard;
- Requirements for special vehicles including surface mobile equipment, mobile cranes and delivery trucks;
- The responsibilities of people managing traffic at the workplace;
- The responsibilities of people expected to interact with traffic at the workplace;
- Instructions or procedures for controlling traffic including in an emergency, and
- How the Principal Contractor will implement and monitor the effectiveness of the Construction Traffic Management Plan.

10.10.1 Potential Impacts

Consistent with the *Vopak Site B4 Project – State Significant Development - Environmental Impact Statement (Rev F)*, (Section 12.0 Traffic and Transport), Vopak anticipates, traffic volumes of both light and heavy vehicles at an estimated volume and frequency (time of day) such as that prescribed.

The studies demonstrate that an increase in traffic is likely to impact congestion during peak travel time being both start and end of shift on the operation of the Botany Road / Bumborah Point Road intersection and the main access intersection from the strategic road network.

Construction traffic consisting of heavy transport vehicles shall avoid access and egress of the Project site during these times where possible.

Construction activities associated with the installation of a pipe culvert across Friendship Road shall be governed by a Company approved job-specific Traffic Management Plan for these works.

10.10.2 Control Measures

The Principal Contractor shall comply with local traffic and transport management requirements as detailed in Codes of Practice, Australian Standards, plans, procedures and requirements specified by Vopak for the B4A Project. The Principal Contractor shall incorporate these requirements into the relevant scopes of work and Job Risk Assessments.

To ensure the risk of harm to personnel and impact on public traffic is minimised, the Principal Contractor shall consider the following measures:

- Checking for licensing, qualification and fitness for work when engaging drivers or operators or when hiring project employees and subcontractors.
- Providing separate, clearly marked pedestrian walkways that take a direct route.
- Creating vehicle exclusion zones for pedestrian-only areas, for example around crib huts, amenities and pedestrian entrances.
- Securing areas where vehicles and powered mobile plant operate by installing pedestrian barriers, traffic control barricades, chains, tape or bollards.
- Worker and visitor parking is to be established, away from construction activities.
- Providing adequate signage and lit crossing points where walkways cut across roadways, so drivers and pedestrians can clearly see each other.
- Using traffic controllers, mirrors, stop signs or warning devices at site exits to make sure drivers can see or are aware of pedestrians before driving out onto public roads.
- Provide vehicle parking for workers and visitors away from the work area.
- Controlling entry to the work area, e.g. by using security gates, and scheduling work to minimise the number of vehicles operating in the same area at the same time.
- Ensure works are undertaken in consultation with NSW ports authority.

The Principal Contractor shall install signage to alert project personnel and pedestrians to potential hazards from vehicles entering and exiting the construction work area, and other requirements like pedestrian exclusion zones.

Traffic routes shall be clearly signposted to indicate restricted parking, visitor parking, headroom, speed limits, vehicle movement, key site areas and other route hazards. Standard road signs should be used where possible, and speed limits should be implemented, enforced, and periodically monitored.

As confirmed with NSW Ports, Vopak and the Principal Contractor, Project personnel shall park their personal vehicles along the Prince of Wales Drive, located south of the site behind Simblist Road. All personnel shall be transported by minibus to the Project Site.

10.10.3 Monitoring Activities

The Principal Contractor shall undertake a range of monitoring activities to confirm the effectiveness of prescribed control measures as detailed within the Construction Traffic Management Plan and Environmental HAZID. These monitoring activities will include but not be limited to:

- Daily and Weekly SHE Inspections by Supervision and SHE personnel; and
- Traffic management audits against the content prescribed within the Project and job-specific Traffic Management Plans, including:
 - Construction traffic within defined project boundaries;
 - Traffic movement in laydown areas and car parks; and
 - Local traffic impact assessments on public access roads to the construction site.

11 Environmental Emergency Management

As part of the Principal Contractor's scope of work will be to develop, implement and monitor the following B4A project-specific management plan or procedure:

- Incident Notification Procedure
- Incident Investigation

This section outlines the incident reporting procedure to be followed in the event of an environmental incident.

An environmental incident can include:

- A breach of government regulations;
- An environmental spill and/or impact including discharges to air, land and water;
- Environmental impacts to flora, fauna, water, heritage and air quality; and
- Noise, air quality and other public complaints.

11.1.1 Initial Incident and Management Response

The Principal Contractor and lower-tier sub-contractor personnel will be responsible for immediately reporting all environmental incidents to their Supervisor/Lead. All emergencies will be dealt with in accordance with the Project Emergency Response and Preparedness Plan.

In the event of a spill, the following protocol must be followed:

- If spilled material is flammable, extinguish potential sources of ignition from within and near spilled area is safe to do so;
- Assess the situation, then stop and contain spill;
- Immediately contact supervisor, who will contact the SHE team;
- When reporting a spill, identify the severity of the release or if to water (storm drain or water body), as immediate assistance from Emergency Services may be required to contain and control the area; and
- SHE Manager or designate will be present to assess the extent of the release and coordinate the remediation efforts.

The Principal Contractor and their lower-tier sub-contractors are responsible for spill response and remediation of spills in their respective work area.

11.2 Incident Notification and Reporting Protocol

The Principal Contractor shall report all environmental incidents through to Vopak. Initial notification must be as soon as reasonably practicable, and the final closeout report in a timely manner. The Principal Contractor shall have the ways and means to track incidents, near misses, document, communicate and corrective actions.

All corrective actions will be appropriate to the nature and scale of the incident, address the root cause of the event, reduce the probability of recurrence, and be closed out within an agreed time frame.

Any reporting to external regulators or government shall be through Vopak unless required to be done by the Principal Contractor.

12 Baseline Assessments

The Project will utilise existing data and information developed by the previous B4 tenant, environmental engineering assessments/studies developed for the Environmental Impact Statement, and a site assessment completed prior to project mobilisation by an environmental consultant.

12.1 Baseline Environmental Contamination, soil and groundwater

An external environmental consultant will be engaged for the project to assist with establishing the baseline contamination assessment of the B4A land and groundwater. This assessment will be completed prior to mobilisation of the Principal Contractor and lower-tier subcontractors to ensure a true representation of the baseline is captured.

As the majority of the B4A site has been vacant since the previous tenant, and due to a large amount of the existing site data and information, the latest B4A site assessment will be to validate the existing site data and information. As the B4B neighbouring site and the southern side of the B4A site is currently being used by NSW Ports' civil contractor construction facilities, B4A samples in this area will take into account its current use.

12.1.1 Investigation Strategy

Soil samples from the ground level to two (2) meter deep will be extracted and analysed. The soil samples will be visually inspected at intervals and documented. A groundwater sample will be taken from the existing monument sample point located closest to the eastern fence line of the B4A site. The selected Environmental consultant will develop the ground well to ensure its suitability a week prior to extracting the sample.

12.2 Baseline Acid Sulphate Soil (ASS)

Through subcontracting, Vopak engaged Douglas Partners Pty Ltd (DP) to carry out Geotechnical Investigations of the Port Botany B4A Project site, in August 2019. DP carried out the below tests as part of their investigations for Potential Acid Sulphate Soils (PASS):

- 90 Acid Sulphate Soil (ASS) screening test soil samples were collected at 0.5 m depth intervals to a maximum depth of 3.0 m. The Potential Acid Sulphate (PASS) samples were taken from all shallow boreholes to assess the presence of acid sulphate within the proposed maximum depth of cut.
- Six Chromium suite tests were conducted to assess actual acid sulphate soils (AASS) – these came back negative

Results for PASS are summarized in the below table.

Sample Test Source & Depth Below existing GL		PASS Screening	
	pH (F)	pH (Fox)	Reaction Rate
BH-415 - 3m	7.6	6.7	Vigorous
BH-422 – 1.5m	3.5	3.1	High
BH-429 – 0.5m	6.9	4.2	Vigorous
BH-404 – 2.5m	3.5	2.8	Slight

A seventh sample was taken and tested for a Chromium Reducible Sulphur suite (BH 404 at 2.5m depth). This location exceeded the Acid Sulphate Soils Management Advisory Committee (ASSMAC) action criteria and is therefore considered to be PASS (BH 404).

12.3 Baseline Data for Noise

Based on the recent construction noise assessment completed by an external consultant predict that construction activity will comply within the recommended construction noise levels at all nearby sensitive receiver locations during both standard hours and out of hours works.

12.3.1 Baseline Results, Noise

Long term noise monitoring of the vicinity by a residential receiver (located at 2 Baragoola Avenue, Philip Bay) was undertaken from 29 July to 5 August 2011 by Atkins Acoustics. The results of the noise monitoring are presented in the Atkins Report. Details of the noise monitoring and a summary of the results are presented in Table 2.

Location	Noise Level Descriptor	Measured Noise Levels		
		Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am
Philip Bay	LA90	41	44	43
	LAeq	52	49	48

13 Verification and Assurance

As part of the Principal Contractor’s scope of work will be to develop, implement and monitor the following management plan, procedure, or documentation:

- Project SHE Inspections
- SHE Compliance Audits
- SHE Corrective Action Tracking Register
- SHE Site Assessments
- SHE Training and toolbox discussions

13.1 Monitoring and Measurement

The Principal Contractor shall periodically assess the implementation of and compliance with its expectations to assure stakeholders and Vopak that management processes are in place and working effectively. This process shall involve a series of monitoring activities in the field to confirm that exposure and baseline levels as defined within risk assessments and/or sub-plans are within tolerable limits.

The Principal Contractor shall ensure that these monitoring activities are conducted in accordance with legislative requirements and documented.

13.2 Inspection

Environmental compliance shall be monitored through the following inspection program as a minimum and not limited to:

- Weekly Project Inspection
- Loss Prevention Inspections
- Spill Kit Inspections

Corrective actions from these inspections shall be entered into a Corrective Action Register for monitoring and timely closeout. Copies of all inspections shall be documented and held on-site with the project SHE Team.

Any Project-specific inspection templates are live documents and shall be revised as required during Project execution to capture changes in compliance conditions.

13.3 Audits

The project SHE management system will be verified by a planned program of internal audits. Audits will be performed to provide timely documentary objective evidence that:

- All Project personnel are complying with the requirements of this CEMP.
- Demonstrate the project’s regulatory compliance and compliance with other plans and procedures relevant to their activities.
- The Principal Contractor’s project SHE management system is adequate, practical, and effective.
- Subcontractors are complying with this document and their approved HSE Plans.

The Principal Contractor and their lower-tier subcontractors shall participate in the following anticipated audits for the Project:

- Vopak Environmental Compliance Audits;
- ISO14001 Compliance Audit – the scope of work is selected to be inspected by an external auditor;
- Project SHE Assessments will be conducted on a quarterly basis by the project time;

Deficient areas will be subject to corrective action control, and auditors will follow-up to ensure actions proposed by the auditees have been taken and appropriate preventive actions implemented.

13.4 External Regulatory Compliance Inspections

The Principal Contractor and lower-tier subcontractors shall assist and participate when requested by the Vopak Construction Manager in all external regulatory compliance inspections or audits as and when required. The Principal Contractor’s Environmental Lead shall be available for these inspections.

13.5 Nonconformity, Corrective Action Tracking

The Principal Contractor shall maintain a Corrective Action Tracking Register for actions arising throughout the Project’s Scope of Work, i.e. inspections, audits, incidents, and SHE meetings. The Corrective Action Tracking Register will be updated regularly, ensuring all assigned actions are closed out in the given time frame.

The Project’s management team, led by the SHE Manager, will be responsible for closing out actions, regardless of their source (i.e. internal or external) within the agreed timeframe.

14 Communications

Proactive communication with all stakeholders is important for the success of the project. It provides information, direction, and project updates for the purpose of aligning all stakeholders with the goals, schedules and requirements for successful buy-in and project implementation.

14.1 Complaints Handling

Records of all community complaints will be maintained on an up-to-date complaints register. The records will include:

- Date and time of the complaint;
- The means by which the complaint was made (telephone, mail or email);
- Any personal details of the complainant that were provided, or if no details are provided, a note to that effect;
- The nature of the complaint;
- Any actions taken by the Project team in relation to the complaint, including any follow up contact with the complainant and the timing for implementing action; and
- If no action was taken by the Project team in relation to the complaint, the reason why no action was taken.

Community complaints will be allocated to the SHE Manager (or delegate), or in their absence, the Project Manager immediately to facilitate the implementation of corrective actions. The details of the complaint will also be circulated to the applicable construction personnel for action, where required.

The Principal Contractor Project Manager shall be the primary source of contact for all complaints submitted. The Principal Contractor is to notify Vopak immediately of complaints received.

Primary Project Contact (On-Site)	
Name:	Alan Paulsen
Position:	Project Manager
Company	DIALOG (the ‘Principal Contractor’)
Contact Mobile Phone No.	04 0901 3387
Email	alan.paulsen@dialogasia.com

14.2 Community Consultation

This communication plan aims to establish interface protocols between the Vopak Project Team and Community stakeholders. Where required (when invited) the Vopak project team will attend the Port Botany Community Consultative Committee meeting and provide the following information:

- Schedule and progress against schedule
- Completed activities
- Upcoming activities
- Challenges
- Pictures of activities completed

14.3 Consultation with Neighbouring Business

For construction works that are anticipated to affect external stakeholders, the Principal Contractor shall follow the NSW Ports Notification procedure. The following information shall be submitted to NSW Ports for relay onto affected stakeholders:

- Time/Date/Duration of Works/Delivery
- Layout/Diagram showing work location or delivery expected
- Contact Information
- Details of companies involved in works/delivery

The Principal Contractor will aim to provide correspondence to NSW Ports in-line with notification procedure.

In the case where NSW Ports notify Vopak of issues, concerns or complaint from neighbouring businesses, Vopak will be escalated to the Vopak SHE Manager (or delegate) to resolve.

15 Management Review

The B4A Project Management Team (PMT) shall review the Management Plans on a regular basis. As a minimum, this will be conducted every **6 months**. This review shall assess the effectiveness of the Project's management plans in achieving the project objectives, goals and targets. This review shall include consideration of findings from inspections and audits, as well as the outcomes from any incident/accident investigations, or formal risk assessment. The results of this review shall be communicated to Vopak, and the Principal Contractor's project personnel and, subcontractors.

15.1 Review Team

The Vopak management review will include the Vopak Construction Manager, Project Manager, SHE Manager, and relevant Vopak stakeholders. The findings of the management review will be documented, and any corrective actions will be tracked and closed out in a timely manner. The CEMP will be updated accordingly, where required, in line with the CEMP review and approvals process (i.e. DPIE and other required stakeholders).

15.2 Risk Assessments

The basis of the Construction Environmental Management Plan shall be a formal safety assessment (i.e. Environmental Hazard Identification Study) of the scope of work. Risk assessments shall systematically and objectively identify environmental construction-related hazards and risks associated with the scope of work along with the mitigation and controls to bring the risk levels to ALARP.

A formal environmental risk assessment workshop is to be held every quarter (or when required) focussing on the works in the upcoming quarter.

16 Reporting

The Principal Contractor will provide at a minimum the following reports to Vopak:

- Environmental Incident Reports;
- Environmental Complaints;
- Weekly Safety, Health & Environmental Reports (as part of Daily/Weekly/Monthly Reports);
- Report any non-compliance events (Statutory/Environmental) to the Vopak SHE Manager or Vopak Construction Manager; and
- Safety, Health & Environment Close Out Reports for end of Project.

17 Development of CEMP

17.1 Environmental Impact Statement

Vopak engaged AECOM as subject matter experts to assist in performing site assessments, and studies of the B4 site to produce the *Vopak B4 Environmental Impact Statement (EIS)*. The Vopak B4 EIS was submitted to the DPIE for consideration in approving the B4 Expansion Project as a State Significant Development (SSD7000).

The Environmental Impact Statement (EIS) is a publicly available document that provides information on the B4 project, including its environmental impacts and mitigation measures, and is used as the basis of the Construction Environmental Management Plan (this document) and the Construction Traffic Management Plan.

The EIS was developed by the following:

Name	Simon Murphy	Scott Jeffries
Company	AECOM Australia Pty Ltd	AECOM Australia Pty Ltd
Qualification	- Grad Dip, Urban and Regional Planning - Master of Social Science (Environmental Planning)	- Master of Environmental Law - Bachelor of Chemical Engineering (Hons Class 1)

17.2 Construction Environmental Management Plan

The Construction Environmental Management Plan has been developed in consultation with Vopak's Safety, Health and Environment team, Environmental consultants, and construction contractors. The CEMP was developed and approved by the following:

Development of the CEMP:

Name	Mark Millevoy
Position	Construction Manager
Company	Vopak Terminals Australia
Qualification	- Lead Auditor - Trainer Assessor - Instrument and Electrical Tradesman - Dip Instrumentation
Experience	15 years Oil and Gas Construction and O&M Experience

Review, and approval of the CEMP:

Name	Jamil Kharoudeh	Alan Chambers
Position	SHEQ and Sustainability Manager	Dept Head Projects and Engineering
Company	Vopak Terminals Australia	Vopak Terminals Australia
Qualification	- Electrical Engineer - Dip Safety, Health and Environment	- Civil Engineer
Experience	14 years Oil and Gas	18 years Oil and Gas Construction Experience

APPENDIX A – ISO 14001:2015 Certification

The management system of

Vopak Terminals Australia Pty Ltd

Gate B47, 20 Friendship Road, Port Botany, NSW 2036
Australia



has been assessed and certified as meeting the requirements of

ISO 14001:2015

For the following activities

Marine cargo transfer operation at the Port Botany and Darwin Bulk Liquids Berths and an integrated logistics service for the storage and handling of bulk and packaged hydrocarbon fuels and specialty chemicals.

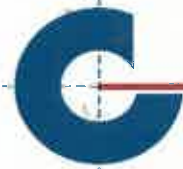
This certificate is valid from 29 July 2019 until 28 June 2022 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 28 May 2022
Issue 3. Certified since April 2009

This is a multi-site certification.
Additional site details are listed on the subsequent page.

Authorised by

SGS Systems & Services Certification Australia Pty Ltd
10/585 Blackburn Road, Notting Hill VIC 3168, Australia
t(61-3) 9574 3200 f (61-3) 9574 3399 www.jst.sgs.com

JAS-ANZ



APPENDIX B – SSD7000 Compliance Matrix

Compliance Matrix

PROJECT NO: 56415055

PROJECT: Vopak B4A Expansion Project, SSD7000

TITLE / SCOPE OF WORK: Construction Environmental Management Plan

OFFICE: Department of Planning, Industry and Environment

CLARIFICATION No.: 1

DATE: 10 February 2020

Table 1, Condition C1

SSD 7000, Condition C1	Section of document addressing condition
The Applicant shall prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Secretary. The Plan shall:	233771-HS-PL-00002 <i>Construction Environmental Management Plan</i>
(a) be approved by the Secretary prior to the commencement of construction;	Section 6.2 Development Consent
(b) be prepared by a suitably qualified and experienced person;	Section 17, Development of CEMP
(c) identify the statutory approvals that apply to the Development;	Section 6.1, Legal and other Requirements
(d) outline all environmental management practices and procedures to be followed during construction works associated with the Development;	Section 10, Project Environmental Control Plans
(e) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages;	Section 5, Project Details
(f) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;	Section 10, Project Environmental Control Plans
(g) describe the roles and responsibilities for all relevant employees involved in construction works associated with the Development; and	Section 8, Roles and Responsibilities
(h) include the management plans under Condition C2 of this consent.	See table 2 below.

Table 2, Condition C2

SSD 7000, Condition C2	Section of document addressing condition
As part of the CEMP for the Development, required under condition C1 of this consent, the Applicant shall include the following:	233771-HS-PL-00002 <i>Construction Environmental Management Plan</i>
(a) Dust Management;	Section 10.1, Dust / Air Quality Control Plan
(b) Construction Traffic Management;	Sub-plan, Appendix A. This document has been previously submitted DPIE for review and approval.
(c) Noise and Vibration Management;	Section 10.6, Noise and Vibration Management
(d) Construction Soil and Water Management;	Section 10.3, Soil and Sediment Management Section 10.4, Groundwater Management
(e) Waste Management; and	Section 10.5, Waste Management
(f) community consultation and complaints handling procedure.	Section 14, Communications

Compliance Matrix

PROJECT NO: 56415055

PROJECT: Vopak B4A Expansion Project, SSD7000

TITLE / SCOPE OF WORK: Construction Environmental Management Plan

OFFICE: Department of Planning, Industry and Environment

CLARIFICATION No.: 1

DATE: 10 February 2020

Table 3, Condition C7

SSD 7000, Condition C7	Section of document addressing condition
The Applicant shall ensure that the environmental management plans required under Condition C1 and C4 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:	<i>233771-HS-PL-00002 Construction Environmental Management Plan</i>
(a) detailed baseline data;	Section 12, Baseline Assessments
(b) a description of:	Section 6.1, Legal and other Requirements
(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 10, Project Environmental Control Plans
(ii) any relevant limits or performance measures/criteria; and	Section 12, Baseline Assessments
(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;	Section 13, Verification and Assurance Section 15.1, Risk Assessment
(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Section 10, Project Environmental Control Plans
(d) a program to monitor and report on the:	Section 12, Baseline Assessments
(i) impacts and environmental performance of the Development;	Section 13, Verification and Assurance
(ii) effectiveness of any management measures (see (c) above);	
(e) a contingency plan to manage any unpredicted impacts and their consequences;	Section 11, Environmental Emergency Management
(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 13, Verification and Assurance Section 15, Management Review
(g) a protocol for managing and reporting any:	Section 16, Reporting
(i) incidents;	
(ii) complaints;	
(iii) non-compliances with statutory requirements; and	
(iv) exceedances of the impact assessment criteria and/or performance criteria; and	
(h) a protocol for periodic review of the plan.	Section 13, Verification and Assurance Section 15, Management Review