

# **Environmental Management Manual**

**Clyde Terminal** 

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## Introduction

## About this manual

The purpose of this Environmental Management Manual (EMM) is to provide information on essential environmental activities required to maintain environmental compliance at Clyde Terminal (facility).

The document guides Viva Energy employees and contractors on how to meet the environmental obligations required by Viva Energy's Development Consent (SSD 5147) and Environment Protection License (EPL 570) as well as Viva Energy's internal requirements including the HSSE Control Framework.

This document is aligned with the overarching Environmental Management Strategy developed in compliance with SSD 5147. The overall management framework is depicted in the below figure.

The objectives of this manual are to define:

- Environmental interactions at the facility
- The timeframes, standards and responsibilities for operational tasks required to maintain environmental performance and compliance and
- Internal and external environmental documentation and administration requirements.

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Viva Energy Environmental Management Strategy (EMS) – Separate document

#### **Demolition and Construction**

#### **Management Plans**

Demolition Work Plan

Stack Demolition Management Plan Soil and Water Management Plan Noise and Vibration Management Plan Blast Management Plan Air Quality Management Plan Traffic Management Plan Flood Emergency Response Plan Waste and Resource Recovery Plan Biodiversity Management Plan Operation

Environmental Management Manual (EMM) – This document

#### **Contractor Environmental Management Framework**

Demolition Works: Contractor's Environmental Management Framework (Contractor is Principal Contractor)

#### Construction Works:

Viva Energy HSE Management Plan and Contractor Procedures (Viva Energy is Principal Contractor) Construction Works: Construction Contractor's Environmental Management Framework (Contractor is Principal Contractor)

Demolition Contractor's Work Method Statements Construction Contractor's Work Method Statements Construction Contractor's Work Method Statements

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## How this manual is structured

This EMM has three components:

- Introduction (this section)
- A graphical representation of the Environmental Interactions for the facility (this section is provided in a removable form to aid in the field use)
- A tabular presentation of the environmental compliance requirements for the facility.

### Manual ownership and responsibility

The NSW Operations Manager is the owner of this manual and is accountable for:

- Identifying facility-specific 'Champions' for the manual
- Facilitating interaction with other managers from other business where required
- Ensuring that elements of this manual are consistent with Viva Energy and regulatory requirements with support from the Supply Chain Environment Team
- Coordinating and authorising any EMM revisions
- Disseminating information contained in this manual and in any revisions
- Providing resources for guiding and training on how to use this manual

The Terminal Manager has responsibility for:

- Supporting the facility-specific 'Champions' for the EMM
- Providing resources to achieve the requirements of the EMM
- Setting and monitoring facility specific environmental performance targets
- Maintaining the currency of this EMM.

The Environment Lead has responsibility for:

- Supporting the development of this EMM
- Supporting the Operations team to identify and meet improvement opportunities identified in this EMM
- Providing guidance on the use of this EMM as required by the operations team.

The **Facility Champion** takes on individual custodianship for the EMM at the facility. They assist in identifying where the requirements of the manual do not fit facility activities and to assist drive environmental compliance and performance improvements at each facility.

## The HSSE Management System

Viva Energy operates in accordance with an integrated Health, Safety, Security and Environment Management System (HSSE MS). A detailed description of the systematic management approach to HSSE to be used at the facility is available on the Viva Energy Workplace – Knowledge Library.

The key elements of the HSSE MS are:

- Leadership and Commitment
- Policy and Objectives
- Organisation, Responsibilities and Resources
- Risk Management
- Planning and Procedures
- Implementation, Monitoring and Reporting;
- Assurance
- Management Review.

This EMM provides detail on the environmental requirements of the HSSE MS specific to the facility. The EMM is one of the tools to be used at the facility to achieve Viva Energy's HSSE policy commitments.

## **No Product to Ground**

No Product to Ground is a phrase or conversation theme often used by Viva Energy to describe the environmental component of our commitment to Goal Zero.

No Product to Ground is focused on removing unexpected events from our business. Using this manual and adhering to the requirements within the document is fundamental to achieving No Product to Ground.



### Water Management

*Clyde Terminal Water Management Manual OPS-076-M* provides a more detailed outline of Clyde Water Management. The purpose of the *Water Management Manual* is to provide information essential for water management and interceptor drainage activities to maintain environmental compliance at Clyde Terminal.

The document guides Viva Energy employees and contractors on how to maintain waste water obligations required by regulations and Viva Energy's internal requirements.

Where operational activities involve waste water handling and the release of water from the source (e.g. tank compound bund draining, tank water draining and interceptor operations), site specific operating procedures are included.

Waste water management for non-operational and maintenance activities are managed by exception under the Permit to Work System.

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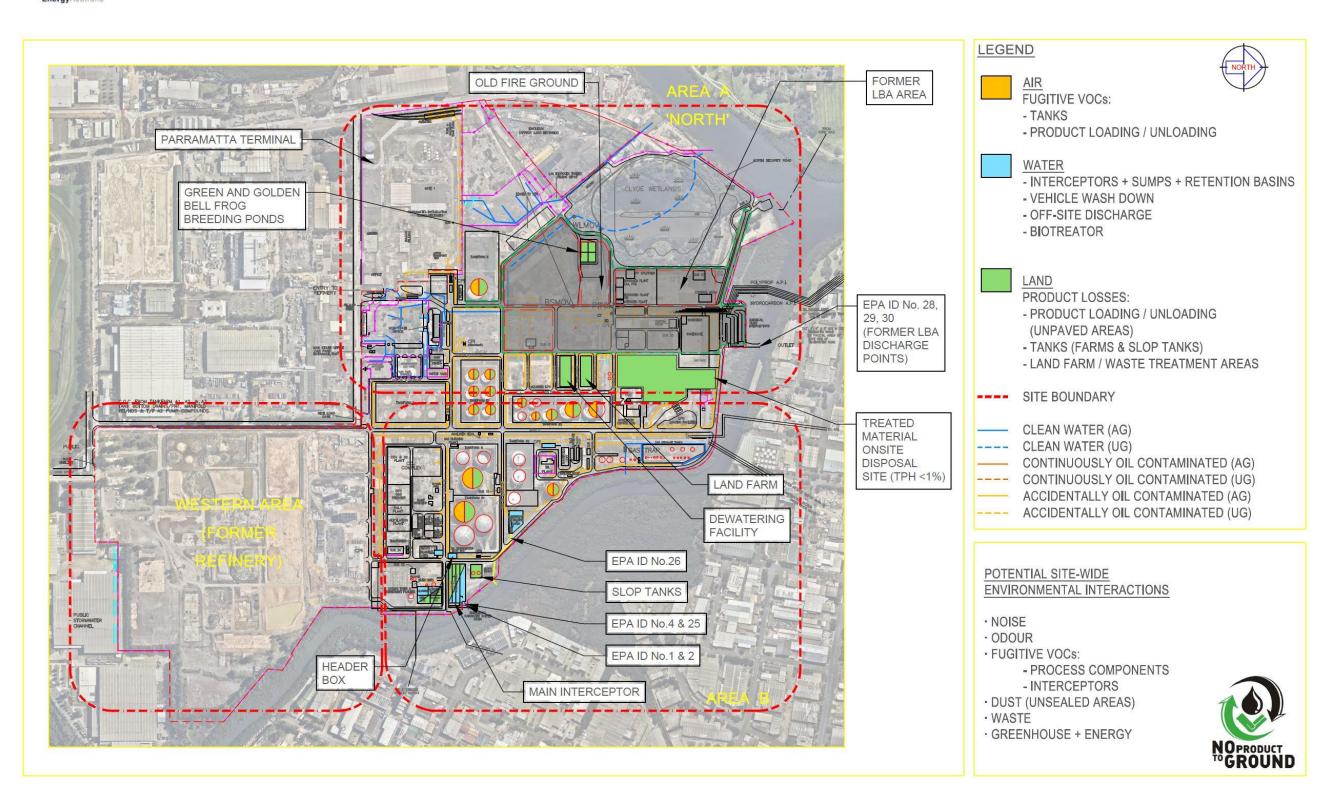
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## **Key Site Environmental Interactions**

#### **VIVA** KEY SITE ENVIRONMENTAL INTERACTIONS EnergyAustral

# **CLYDE TERMINAL**



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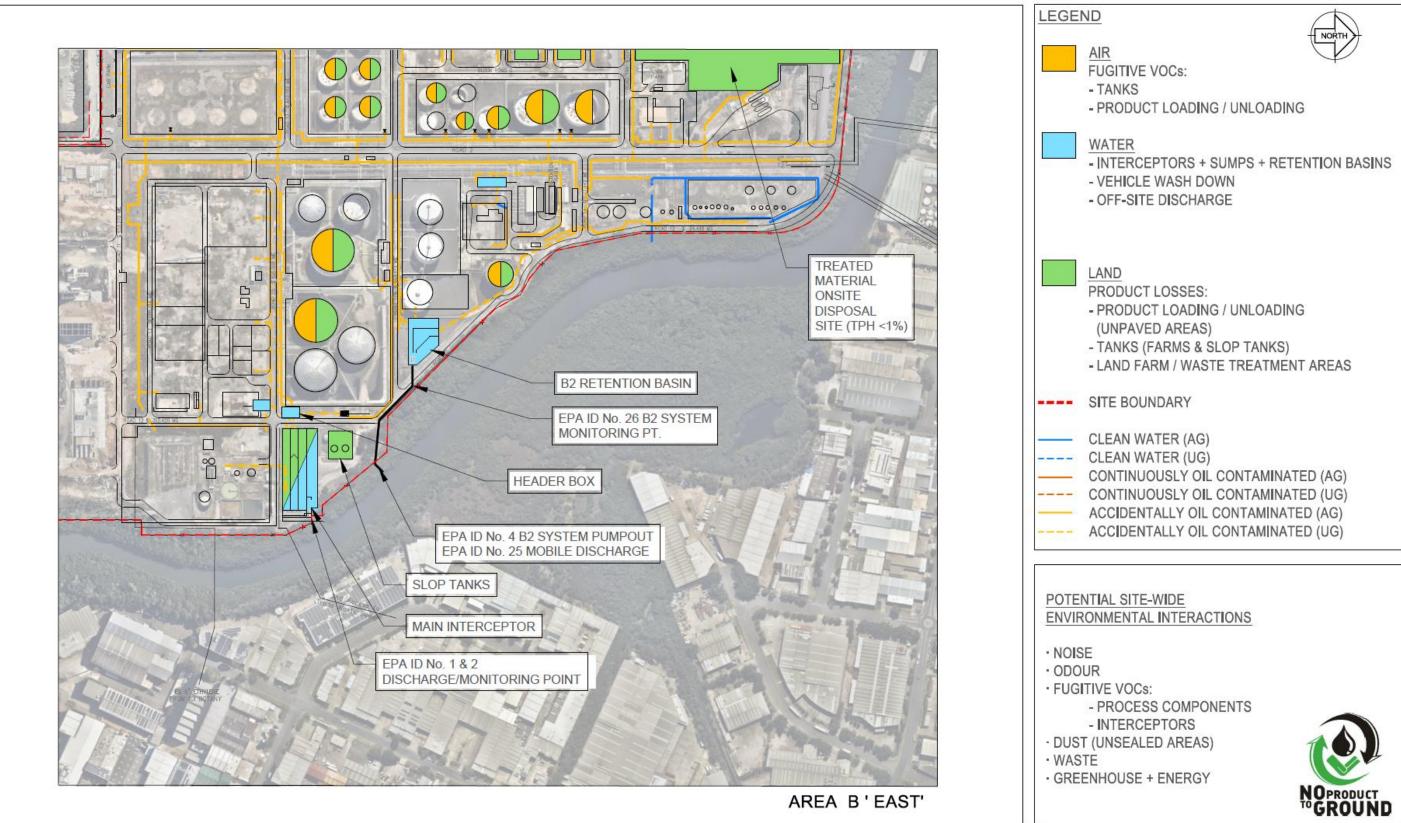
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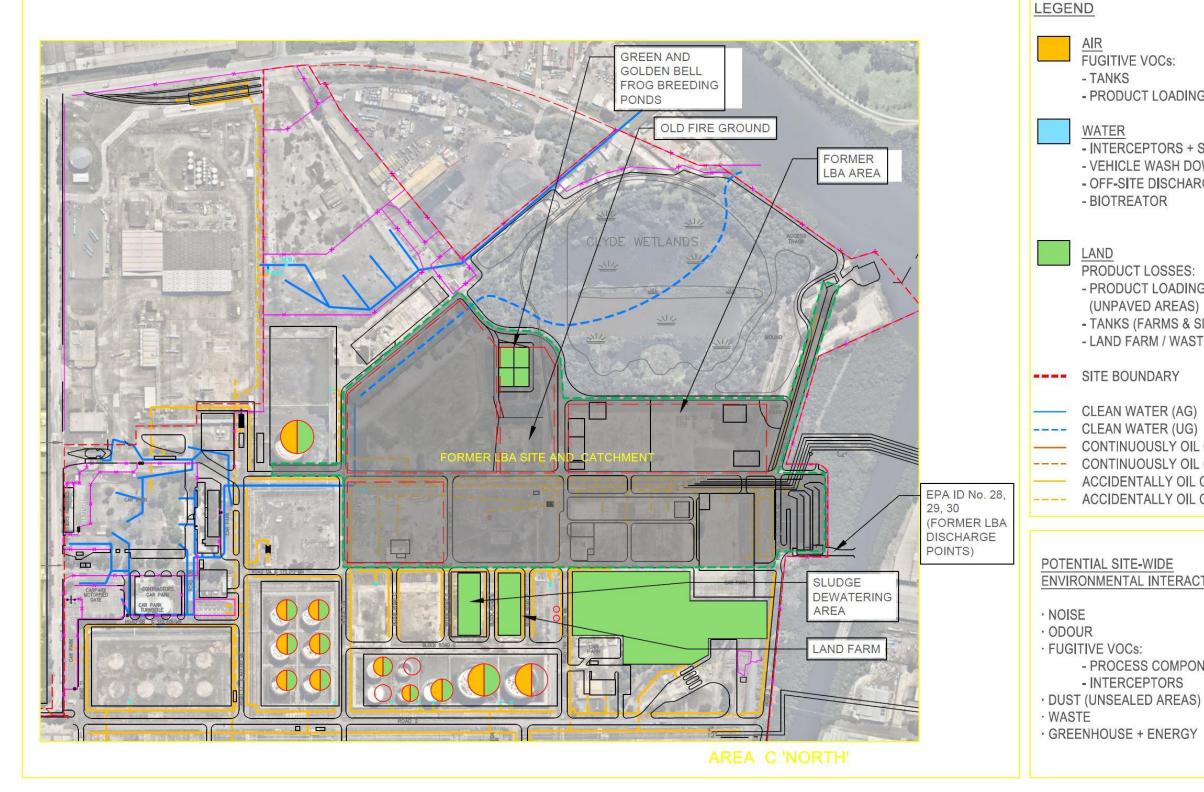
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- PRODUCT LOADING / UNLOADING

- INTERCEPTORS + SUMPS + RETENTION BASINS - VEHICLE WASH DOWN - OFF-SITE DISCHARGE

- PRODUCT LOADING / UNLOADING (UNPAVED AREAS) - TANKS (FARMS & SLOP TANKS) - LAND FARM / WASTE TREATMENT AREAS

CLEAN WATER (AG) CONTINUOUSLY OIL CONTAMINATED (AG) ---- CONTINUOUSLY OIL CONTAMINATED (UG) ACCIDENTALLY OIL CONTAMINATED (AG) ACCIDENTALLY OIL CONTAMINATED (UG)

ENVIRONMENTAL INTERACTIONS

- PROCESS COMPONENTS



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## **Environmental Compliance Requirements and Control Barriers for Operations**

Noise								
Requireme	ent					Control Barrier	Compliance Documentation	Responsibility
Noise Limits The Applicant shall ensure that noise from the operation does not exceed the limits in Table 1. Table 1: Noise Limits (dB(A)		Noise levels to be observed and above normal levels recorded in the daily log during regular site surveillance.	Potential noise exceedances to be logged in MYOSH. Documented routine site surveillance and assurance	Operators				
Noise Receiver Location	Location	Day LAeq (15 min)	Evening LAeq (15 min)	Ni LAeq (15 min)	ght LAeq (1 min)	Non-routine work conducted under permit conditions.	Operational Logs Permit to Work	Permit Issuer Operations Manager
R1-R3	Any residence in the suburb of Rosehill	38	38	35	45		Parramatta and Clyde Terminal	
R4	Any residence in the suburb of Silverwater	37	37	36	45		Industrial Hygiene Noise Survey	Operations Manager and Viva Energy
R5	Any residence in the suburb of Newington	36	36	35	45		Community Complaints Procedure QHSSE-686-G	Health
R6-R7	Any residence in the suburb of Rydalmere	40	40	36	45		Health Risk Assessment (Viva Energy OneHealth IT)	
Developm Hours of V	ent Consent SSD 5147,	14 January	2015, cond	dition C21	11			

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Requirement			Control Barrier	Compliance Documentation	Responsibility
The Applicant sha agreed in writing b	II comply with the he by the EPA and the s	ours detailed in Table 2, unless otherwise Secretary.			
Table 2: Constr	uction, Demolition	& Operation Hours			
Activity	Day	Time			
Construction and Demolition	Monday – Friday Saturday	7:00am to 6:00pm 8:00am to 5:00pm			
Operation	Monday to Sunday	24 hours			
Development Con	sent SSD 5147, 14	January 2015, condition C22			
he applicant sha	II:				
mitigation	n measures to preve	d feasible noise management and ent and minimise operations, low enerated during operation;			
<ul> <li>Maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant that may generate offensive noise is not used operationally until fully repaired; and</li> </ul>					
offensive		toring data and relocate, modify and/or			
c) Regularly	rations to ensure co	mpliance with the relevant conditions of			

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## **Air Quality**

Requirement	Control Barrier	Compliance Documentation	Responsibility
Dust			
Dust or particulate matter from the operation must not cause nuisance to receptors or exceed prescribed levels.	Potential for dust generation during non-routine activities is to be	Permit to Work (Permit issuers records)	Permit Issuer
Viva Energy Requirement	assessed and managed by the Permit to Work system		
The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Where dust generated from the facility is observed potentially leaving the	Community Complaints Procedure QHSSE-686-G	Operator
EPL 570 (version 22 August 2023) - condition O3.1	facility or an air quality complaint is received from the community, this is reported and investigated according	MYOSH	Operator
Dust Minimisation	to Viva Energy's Incident Notification, Reporting and Investigation		Operations Manager
The applicant shall carry out reasonable and feasible measures to minimise dust generated during operations	procedure (HS-MAS-0001-PR).		
Development Consent SSD 5147, 14 January 2015, condition C28	Non-routine work conducted under permit conditions		

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## **Air Quality**

Requirement	Control Barrier	Compliance Documentation	Responsibility
Odour			
No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997 <i>EPL 570 (version 22 August 2023) - condition L7.1</i> <b>Offensive Odour</b> The applicant shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO act. <i>Development Consent SSD 5147, 14 January 2015, condition C29.</i>	Where odour is observed at the boundary or potentially leaving the facility or an air quality complaint is received from the community, this is reported and investigated according to Viva Energy's Incident Notification, Reporting and Investigation procedure (HS-MAS-0001-PR).	MYOSH Community Complaints Procedure QHSSE-686-G Permit to Work <i>(Permit issuers records)</i>	Operator Operations Manager Operations Manager Permit Issuer
Volatile Organic Compounds	assessed and managed by the Permit to Work system.		
Discharge of pollutants to air must not exceed 26,000 kg Benzene and 1,250,000 kg VOCs, assessed in accordance with the relevant load calculation protocol. EPL 570 (version 22 August 2023) - conditions L2.1 & L2.2	Procedural control and trigger to re- perform load determination at yearly intervals	Monitored via internal reporting, calculated through consultants for EPA Annual Return and NPI reporting ( <i>Environmental data</i> <i>file</i> )	Operations Manager Environmental Advisor

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## **Air Quality**

Require	ement	Control Barrier	Compliance Documentation	Responsibility
Operat	ional Air Quality Monitoring Program			
for the o a) b) c) d) e)	<ul> <li>policant shall prepare and implement an Air Quality Monitoring Program operation. The plan shall:</li> <li>Be prepared and implemented by a suitable qualified and experienced expert;</li> <li>Be prepared in consultation with the EPA;</li> <li>Be submitted to the Secretary for approval within 3 months of the date of this consent;</li> <li>Describe an air quality monitoring program that is capable of evaluating the performance of the operation and determining compliance with key performance indicators agreed in consultation with the EPA;</li> <li>Includes record keeping, a complaints register and response procedure and compliance reporting.</li> <li><i>poment Consent SSD 5147, 14 January 2015, condition C30.</i></li> </ul>	Measures cited in the AQMP Routine site surveillance Non-routine works conducted under permit conditions	Operational Air Quality Monitoring Program (AQMP) (SC-OPS-0137-PL) Documented routine site surveillance and assurance <i>(Operational Logs)</i> Community Complaints Procedure QHSSE-686-G Permit to Work <i>(Permit issuers records)</i>	Operations Manager
During suitable with the	ological Monitoring the life of the Development, the Applicant shall ensure that there is a e meteorological station operating in the vicinity of the site that complies e requirements of the EPA. pment Consent SSD 5147, 14 January 2015, condition C32.	BOM Parramatta North Station	Maintained by BOM, data available from BOM	BOM

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## **Energy Efficiency and Greenhouse Gas Emissions**

Requirement	Control Barrier	Compliance Documentation	Responsibility
The applicant shall implement all reasonable and feasible measures to minimise energy use and greenhouse gas emissions during construction, demolition and operation. Development Consent SSD 5147, 14 January 2015, condition C33.	Annual review of energy use and emissions data	NPI data submission	Operations Manager Environmental Advisor

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Foreshore Management			Перопающи
The Applicant shall ensure the foreshore and inter-tidal areas on the site are fully protected. This includes preventing the storage of any machinery, materials, equipment, supplies, or waste receptacles within or adjacent to the inter-tidal area. Development Consent SSD 5147, 14 January 2015, condition C48.	Designated storage areas outside of inter-tidal area. Non-routine works conducted under permit conditions	Operational Surveillance Permit to Work	Operators Permit issuer

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Discharge Limits			
The Development shall comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters, except as expressly provided in the EPL. Development Consent SSD 5147, 14 January 2015, condition C46.	Scheduled monitoring and maintenance of drains (JDE) Site surveillance to confirm that detergents not in use	Documentation of scheduled monitoring and maintenance of drains	Maintenance Coordinator
The Applicant shall ensure that signs are displayed and maintained adjacent to all stormwater drains on the site clearly indicating "Stormwater Only". <i>Development Consent SSD 5147, 14 January 2015, condition C47.</i>	Operational Surveillance in accordance with Local Operating Procedure	Documented routine site surveillance and assurance (Operational Logs)	Operators
Water and Wastewater Discharges Except as expressly provided in the conditions of EPL 570, the licences must comply with section 120 (site operations must not cause pollution of waters) of the <i>Protection of the Environment Operations Act (POEO Act) 1997 (NSW).</i> <i>EPL 570 (version 22 August 2023) - condition L1.1</i>	Monitoring of discharge through sampling and laboratory analysis	Results to be kept on file (Operational Logs, SGS database)	Operators Environment Lead
Concentration limits in discharges must be within the limits of the licence <i>EPL 570 (version 22 August 2023) - condition L3.4</i>			

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Discharge limits for licensed discharge points can be found in EPL 570. Non-licensed discharge points are subject to POEO Act 1997 regulations.	<ul> <li>Minimise spills to <u>As Low As</u> <u>R</u>easonably <u>P</u>racticable (ALARP)</li> <li>Control Barriers include:</li> <li>Design Engineering Practices/Manuals</li> <li>Operations Surveillance and Assurance</li> <li>Conduct Maintenance</li> <li>Operating within equipment limits</li> <li>Asset integrity programs</li> <li>HiHi level alarms</li> <li>Stock reconciliation</li> <li>Tank bunds</li> </ul>	HSSE Case HEMP ALARP Documentation Stock reconciliation data Maintenance records Emergency Response Manual Pollution Incident Response Management Plan (PIRMP)	Operations Manager Stocks and Admin team Maintenance Manager Operations Manager
Volumes of discharge must be measured and must not exceed the volume specified for that discharge point per <i>EPL 570 (version 22 August 2023) - condition L4.1</i>	Record and monitor flow rates	Flow rate records	Operations Manager

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Surface Water Management Plan Development Consent SSD 5147, 14 January 2015, condition C50.	Describe the surface water management system on site, including plans of the stormwater system and oily/wastewater system	SC-OPS-0005-MA-Clyde Water Management Manual	Operations Manager
<b>Groundwater Monitoring</b> Groundwater Management Plan Development Consent SSD 5147, 14 January 2015, condition C50. EPL 570 (version 22 August 2023) - condition U1.1	Scheduled groundwater monitoring undertaken by ERM and documented in JDE	Annual Progress Report - due to EPA by 31 March annually Groundwater Monitoring Event (GME) reports prepared by ERM Annual Environmental Performance Report (AEPR) – due to DPE by 31 July annually	Environment Lead
Leachate Management Leachate generated from the sludge dewatering facility. Drains to be operating effectively and directing leachate/runoff from sludge dewatering facility to the 2- Bay CPI Development Consent SSD 5147, 14 January 2015, condition C50. EPL 570 (version 22 August 2023) - condition O4.2	Scheduled monitoring and maintenance (JDE) Operational Surveillance in accordance with Local Operating Procedure	Documentation of scheduled monitoring and maintenance of drains Documented routine site surveillance and assurance <i>(Operational Logs)</i>	Maintenance Manager Operations Manager

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## Water/Land

Requirement	Control Barrier	Compliance Documentation	Responsibility
Storage			
Chemical storage onsite to comply with EPL 570	Management of Change (MOC) if	MOC documentation	Operations Manager
The applicant shall not store in excess of:	proposed change to site product storage capacity. QHSSE-001-P –	Annual Environmental	
a) 264 ML of finished petroleum products	Internal processes require MOC. Part of MOC process will require external approval. If received, change may possibly proceed, no external approval = no change to storage quantity limits	Performance Report (AEPR)	
b) 1,550 cubic metres (M <sup>3</sup> ) of petroleum gases;			
On the site at any one time, unless otherwise agreed in writing by the Secretary.			
Development Consent SSD 5147, 14 January 2015, condition B5.			
Tank Storage			
All above ground tanks containing material that is likely to cause environmental harm must be bunded or have alternative spill containment in place.	Management of Change if proposed change to site product storage	MOC documentation	Operations Manager
EPL 570 (version 22 August 2023) - condition O5.2	capacity. QHSSE-001-P		
Suitable measures (e.g. high/low alarms/ control valves with interlock control, one way valves) are installed on all tanks and associated pipes and hoses to prevent the spillage.			
EPL 570 (version 22 August 2023) - condition O5.3			
Bunding			
The Applicant shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's Storing and Handling of Liquids: Environmental Protection – Participants handbook			
Development Consent SSD 5147, 14 January 2015, condition C49.			
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## Water/Land

Requirement	Control Barrier	Compliance Documentation	Responsibility
<ul> <li>Imported Soil</li> <li>The Applicant shall: <ul> <li>a) Ensure that only VENM or ENM or other material approved in writing by the EPA is used as fill on the Site;</li> <li>b) Keep accurate records of the volume and type of fill to be used; and</li> <li>c) Make these records available to the Department upon request.</li> </ul> </li> <li>Development Consent SSD 5147, 14 January 2015, condition C43.</li> </ul>	Appropriate documentation provided by supplier. Sampling and laboratory analysis conducted on imported soil where required	Soil & Water Management Plan (Environmental Management Strategy – Clyde Terminal. Appendix D-2) Supplier records Analytical results Transport and Tracking documentation	Maintenance Manager Operations Manager

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## Waste Management

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Waste Generation and Disposal			
Waste received on the premise must meet all conditions of a resource recovery exemption under Clause 51A of the <i>Protection of the environment Operations (Waste) Regulation 2005.</i>	No waste accepted on site unless from locations specified in Environment Protection Licence 570	Waste Management Manual (QHSSE-307-P) Consignment Authorisation	Operators Maintenance Coordinator
Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the POEO Act, if such a licence is required in relation to that waste.		Electronic waste tracking documentation	Senior Assurance Lead
Development Consent SSD 5147, 14 January 2015, condition C52. After onsite treatment to reduce hydrocarbon contamination of soil or sediment to less than 1% on a weight basis, such treated waste may be disposed of onsite in the area marked "Treated Material Onsite Disposal Site (TPH <1%) as shown on drawing labelled 'Environmental Protection Licence No.570 Licenced Discharge Points' - CLR_0126667_004 Rev I (EPA ref. DOC21/70815-1), or offsite to a facility that can lawfully accept that waste. EPL 570 (version 22 August 2023) - condition L5.6			

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## Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
Waste Storage			
The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity must be carried out in a competent manner. <i>EPL 570 (version 22 August 2023) - condition 01.1</i>	Waste stored in designated areas Transport, disposal and treatment conducted according to regulation and procedures Management of Change if proposed change to site waste generation and storage capacity QHSSE-001-P	Waste Management Manual (QHSSE-307-P) Management of Change Documentation (held by Senior Assurance Lead)	Operations Manager
Waste Classification			
<ul> <li>Waste generated or stored at the facility must be assessed and classified in accordance with EPA Waste Classification Guidelines.</li> <li><i>EPL 570 (version 22 August 2023) - condition O4.1</i></li> <li>The Applicant shall assess, classify and manage all liquid and non-liquid wastes generated at the site during construction, demolition and operation in accordance with the EPA's Waste Classification Guidelines Part 1: Classifying Waste, December 2009, or its latest version and dispose of wastes to a facility that may lawfully accept the waste.</li> <li><i>Development Consent SSD 5147, 14 January 2015, condition C51.</i></li> <li>The Applicant shall retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.</li> <li><i>Development Consent SSD 5147, 14 January 2015, condition C56.</i></li> </ul>	Visual observation of waste Sampling and analysis where required Classification according to guidelines and procedure Storage appropriate to classification Segregation of solid wastes	Waste Management Manual (QHSSE-307-P) Consignment Authorisation Electronic waste tracking documentation	Operators Maintenance Coordinator Senior Assurance Lead

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Waste Management On Site			
Only the hazardous and/or liquid and/or restricted solid waste listed below	Visual observation of waste	Consignment Authorisation	Operators
may be treated, processed, reprocessed or disposed of at the Clyde Terminal:	Sampling and analysis where	Electronic waste tracking	Maintenance
<ul> <li>Waste resulting from the surface treatment of metals and plastics;</li> </ul>	required	documentation	Coordinator
<ul> <li>Basic solutions or bases in solid form;</li> </ul>	Classification according to guidelines	Waste Management Manual (QHSSE-307-P)	
Waste oil/water, hydrocarbons/water mixtures or emulsions;	and procedure	(QH33E-307-F)	
<ul> <li>Highly odorous organic chemicals (including mercaptans and acrylates);</li> </ul>	No Treatment activities conducted on site outside of designated areas		
Soils contaminated with a controlled waste;			
Encapsulated, chemically-fixed, solidified or polymerised wastes; and			
Residues from industrial waste treatment/disposal options.			
EPL 570 (version 22 August 2023) - condition L5.5			
<ul> <li>Waste, including soil contaminated with hydrocarbons, treated soil contaminated by hydrocarbons, and dewatered oily sludge may be treated in the areas defined on drawing number CLR_0126667_0004 Rev J titled "Clyde Terminal, EPL No 570, Licensed Discharge Points".</li> <li><i>EPL 570 (version 22 August 2023) - condition O4.2 and O4.3</i></li> <li>The Applicant shall manage the chemical fixation and treatment of organic solvents, contaminated blue metals and empty drums or micro-encapsulation of waste in accordance with the EPA Specific Immobilisation Approval and the EPA Waste Classification Guidelines Part 2: Immobilisation of Waste, April 2008, or its latest version.</li> <li><i>Development Consent SSD 5147, 14 January 2015, condition C53.</i></li> </ul>			

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## Waste Management

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Requirement	Control Barrier	Compliance Documentation	Responsibility
The Applicant shall manage all materials and waste containing Scheduled Chemical Waste and polychlorinated biphenyls in accordance with applicable Chemical Control Order or in accordance with a licence under the Environmentally Hazardous Chemicals Act, 1985.			
Development Consent SSD 5147, 14 January 2015, condition C54.			
The Applicant shall manage all materials and waste containing radioactive substances in accordance with the Radiation Control Act, 1990, Radiation Control Regulations, 2013 and the requirements of the EPA.			
Development Consent SSD 5147, 14 January 2015, condition C55.			
Recycling			
All waste identified for recycling must be stored separately from other wastes.	Waste classification and segregation	Consignment Authorisation	Operators
EPL 570 (version 22 August 2023) - condition O5.1	Induction Process	Electronic waste tracking documentation	Maintenance Coordinator
		Waste Management Manual (QHSSE-307-P)	
Waste Tracking			
Only the following waste products may be received at the Clyde Terminal premises from Gore Bay Terminal or Parramatta Terminal:	No waste accepted on site unless from locations specified in	Consignment Authorisation Electronic waste tracking	Operators Maintenance
<ul> <li>Waste mineral oils unfit for their original intended use;</li> </ul>	Environment Protection Licence 570	documentation	Coordinator
<ul> <li>Waste oil/water, hydrocarbons/water mixtures or emulsions;</li> </ul>	Visual observation of waste	Waste Management Local	
<ul> <li>Highly odorous organic chemicals (including mercaptans and acrylates); and</li> </ul>	Sampling and analysis where required	Waste Management Manual (QHSSE-307-P)	
Soils contaminated with a controlled waste.	Classification according to guidelines and procedure		

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## Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
J120 and N120 wastes may also be received from the Mascot Jet A1 fuel pipeline and/or Clyde to Gore Bay pipeline in the event of an emergency incident for storage at the premises. The storage must be hardstand and bunded.	No disposal of waste soil on site outside of designated areas		
EPL 570 (version 22 August 2023) - condition L5.3			
The Clyde Terminal may receive hazardous and/or liquid and/or restricted solid waste from Gore Bay Terminal without the need for waste tracking but a record of the waste received must be made.			
EPL 570 (version 22 August 2023) - condition L5.4			
Waste Management Plan			
The Applicant shall update and implement the Waste Management Plan for the site for construction, demolition and operation to the satisfaction of the Secretary. This Plan shall:			
(a) be approved by the Secretary prior to the commencement of construction or demolition and be provided to the EPA;			
(b) detail the type and quantity of waste to be generated during construction, demolition and operation;			
(c) detail the materials to be reused or recycled, either on or off site;			
(d) detail the procedures for handling, storage, collection of recycling and disposal of waste;			
(e) N/A			
(f) include the Management and Mitigation Measures included in Appendix C.			
Development Consent SSD 5147, 14 January 2015, condition C57.			

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## **Biodiversity**

Requirement	Control Barrier	Compliance Documentation	Responsibility
<ul> <li>Biodiversity Management Plan The Applicant shall update and implement the Biodiversity Management Plan for the Development to the satisfaction of the Secretary. This plan must: <ul> <li>a) Be prepared in consultation with Council and OEH;</li> <li>b) Be approved by the Secretary prior to the commencement of construction or demolition;</li> <li>c) Include measures taken to minimise impacts on flora and fauna, including inspection of exterior casings and insulations on stacks and buildings to be demolished for the presence of Grey- headed Flying-foxes and microbats and procedures for their safe relocation;</li> <li>d) Include an updated Plan of Management: Restoration of Green and Golden Bell Frog Habitat, Clyde, October 2013 for the construction, demolition and operation, incorporating:</li> <li>Specific measures to be implemented such as frog-proof fences to exclude Green and Golden Bell frogs form construction and on-going management of artificial breeding habitats;</li> <li>Plans for on-going implementation and on-going management of artificial breeding habitats;</li> <li>Monitoring protocols including long-term low frequency frog monitoring and <i>Gambusia</i> monitoring program of the ponds and artificial breeding habitats;</li> <li>Active management procedures for ensuring ponds remain free of <i>Gambusia</i> including manually drying our small and intermediate ponds on an annual basis;</li> <li>e) Include an updated Wetland Management Plan to include the creation of habitat opportunities for the Green and Golden Bell Frog; and</li> <li>f) Include a pest, vermin and noxious weed management plan.</li> </ul> </li> </ul>	Scheduled monitoring and maintenance of wetlands (JDE) Site surveillance to confirm condition of wetlands Operator response to observed changes and/or non-compliant conditions Non-routine works conducted under permit conditions	Biodiversity Management Plan Revised Plan of Management – Restoration of Green and Golden Bell Frog Habitat (dated 14 January 2019) Site surveillance records Permit to work	Operations Manager Maintenance Manager Operators Permit Issuer

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## **Operations & Maintenance**

Requirement	Control Barrier	Compliance Documentation	Responsibility
Equipment Maintenance			
Plant and equipment must be maintained and operated in a proper manner.	Programmed Maintenance (JDE)	Maintenance records	Operations Manager
EPL 570 (version 22 August 2023) - condition O2.1	Maintenance notification system to	(Operational Logs)	
Operation of Plant and Equipment	identify non-programmed maintenance, as required		
The applicant shall ensure that all plant and equipment used for the Development is:	Calibration of maintenance equipment		
a) Maintained in a proper and efficient condition; and			
b) Operated in a proper and efficient manner.			
Development Consent SSD 5147, 14 January 2015, condition B11			
Signage			
The location of EPA point numbers 1, 2, 4, 25, 26, 28, 29 and 30 must be	Programmed maintenance (JDE)	Maintenance records	Operations Manager
clearly marked by signs that indicate the point identification number used the EPL 570 and be located as close as practicable to the discharge point.	Maintenance notification system to	(Operational Logs)	
EPL 570 (version 22 August 2023) - condition G2.1.	identify non-programmed maintenance, as required		
	Calibration of maintenance equipment		

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## **Operations & Maintenance**

Requirement	Control Barrier	Compliance Documentation	Responsibility
Transport and Access			
<ul> <li>The applicant shall ensure that:</li> <li>a) The operation does not result in any vehicles queuing on the public road network;</li> <li>b) Heavy vehicles and bins associated with operation do not park or stand on local roads or footpaths in the vicinity of the site;</li> <li>c) All loading and unloading of materials is carried out on site;</li> <li>d) The proposed turning areas in the car park are kept clear of an obstacles, including parked cars, at all items;</li> <li>e) All trucks entering or leaving the site with loads have their loads covered;</li> <li>f) Trucks associated with operation do not track dirt onto the public road networks; and</li> <li>g) Heavy vehicles use designated routes to minimise impacts on the local and regional road network.</li> </ul> Development Consent SSD 5147, 14 January 2015, condition C34. Car Parking The Applicant shall provide sufficient parking facilities on-site, including for heavy vehicles, for construction, demolition and operational personnel, to ensure that traffic associated with the Development does not utilise public and residential streets or public parking facilities. Development Consent SSD 5147, 14 January 2015, condition C35.	Facility Design Site surveillance Maintenance Induction and training	Environmental Management Strategy – Clyde Terminal (issued 27 April 2015)	Operations Manager

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Obligation to Minimise Harm to the Environment			
The Applicant Shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the	Facility Design	Environmental Management Strategy – Clyde Terminal	Operations Manager
construction, demolition or operation of the Development.		(issued 27 April 2015)	
Development Consent SSD 5147, 14 January 2015, condition B1.	Maintenance		
Compliance	Induction and training		
The applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.			
Development Consent SSD 5147, 14 January 2015, condition B19.			
The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that t invites onto the site, including contractors, sub-contractors and visitors.			
Development Consent SSD 5147, 14 January 2015, condition B20.			
Signage			
The Applicant shall no install any advertising signs on site without the written consent of the Secretary			
Development Consent SSD 5147, 14 January 2015, condition C64			

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Records			
Monitoring results must be retained in a legible form for 4 years and made available on request.	Completion of documentation at the time of sampling	Monitoring results incident records, written notification	Operations Manager
EPL 570 (version 22 August 2023) - condition M1.2	All records retained on site and	Management of Change process	
Any complaints received must be recorded (as detailed in condition M5.2) and	electronically	Document QHSSE-001-P	
retained in a legible form for 4 years and made available on request.	Records retained by analytical laboratory	Emergency Response procedure	
EPL 570 (version 22 August 2023) - condition M5.1 - 5.4	·	procedure	
The Applicant shall retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.	Licence retained on site and available online		
Development Consent SSD 5147, 14 January 2015, condition C56.	Annual returns retained onsite and electronically		
Details of any samples taken must be recorded as set out in condition M1.3			
EPL 570 (version 22 August 2023) - condition M1.3			
Copy of annual report must be retained for 4 years.			
EPL 570 (version 22 August 2023) - condition R1.7			
Copy of licence must be kept on site, accessible to site personnel, and made available to EPA officers on request.			
EPL 570 (version 22 August 2023) - condition G1.1 - 1.3			

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Access to Information			
The Applicant shall, to the satisfaction of the Secretary:			
a) Make the following information publically available on its website:			
• The EIS			
Current statutory approvals for the Development;			
<ul> <li>Approved strategies, plans or programs;</li> </ul>			
<ul> <li>A summary of the monitoring results of the development, which have been reported in accordance with various plans and programs approved under the conditions of this consent;</li> </ul>			
• A complaints register, updated on a quarterly basis;			
• Copies of any annual reviews (over the last 5 years);			
<ul> <li>Any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> </ul>			
Any other matter required by the secretary; and			
b) Keep this information up to date.			
Development Consent SSD 5147, 14 January 2015, condition D9.			

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Requirement	Control Barrier	Compliance Documentation	Responsibility
Notification			
The licensee must notify the EPA if it is unable to calculate the actual pollutant load by the annual return deadline.	according to regulation and procedure	Monitoring results,	Operations Manage
EPL 570 (version 22 August 2023) - condition R1.6		Incident records,	
EPA must be notified of any incidents or potential environmental harm by		Written notification	
immediate telephone and written details within 7 days.		Emergency Response Manual	
EPL 570 (version 22 August 2023) - condition R2.1 and R2.2		Pollution Incident Response Management Plan (PIRMP)	
Incident Reporting		Viva Energy Incident Notification	
ithin 24 hours of the occurrence of an incident that causes (or may cause)		(MYOSH, Workplace)	
harm to the environment, the Applicant shall notify the Secretary and any other relevant agencies of the incident		Document: NSW Supply Chain	
Development Consent SSD 5147, 14 January 2015, condition D5.		Regulatory Notification Guide (QHSSE-677-G)	
Within 7 days of the detection of an incident, the applicant shall provide the Secretary and any other relevant agencies with a detailed report of the incident.			
Development Consent SSD 5147, 14 January 2015, condition D6.			

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Requirement	Control Barrier	Compliance Documentation	Responsibility
<ul> <li>Reporting</li> <li>An annual return must be completed for each reporting period (with exceptions provided for transfers, surrenders and revokings) and submitted within 60 days of the period end.</li> <li>EPL 570 (version 22 August 2023) - condition R1.1 - 1.5</li> <li>Annual return must be certified and signed by the licence holder or person approved by EPA.</li> <li>EPL 570 (version 22 August 2023) - condition R1.8</li> <li>Upon request, a written report must be provided to EPA regarding an event at the premises, and further details where necessary.</li> <li>EPL 570 (version 22 August 2023) - condition R3.1 - 3.4</li> </ul>	Procedural control notification of requirement via JDE Communication from the NSW Environment Protection Authority	Monitoring results, incident records, written notification Annual returns and reviews	Operations Manager Environment Lead

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Requirement			Control Barrier	Compliance Documentation	Responsibility
By the end of July each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the Development to the satisfaction of the Secretary. This review must:		pplicant shall review the environmental performance of the	Procedural control notification of requirement via MYOSH	Monitoring results, incident records, written notification	Operations Manager
a)	out in t	be the construction and demolition activities that were carried he previous calendar year, and the construction and demolition es proposed to be carried out in the coming calendar year;		Annual returns and reviews	Environment Lead
b)	compla	e a comprehensive review of the monitoring results and aints records of the Development over the previous calendar which includes a comparison of these results against:			
	•	The relevant statutory requirements, limits or performance measures/criteria;			
	٠	The monitoring results of previous years; and			
	٠	The relevant predictions in the EIS;			
c)		any non-compliance over the last year, and describe what were (or are being) taken to ensure compliance;			
d)	<ul> <li>Identify any trends in the monitoring data over the life of the Development;</li> </ul>				
e)	of the I	any discrepancies between the predicted and actual impacts Development, and analyse the potential cause of any significant pancies; and			
f)		bed what measures will be implemented over the current ar year to improve the environmental performance of the opment.			
Develo	nment C	onsent SSD 5147, 14 January 2015, condition D6.			

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Requirement	Control Barrier	Compliance Documentation	Responsibility	
Complaints				
The licensee must operate a telephone complaints line and notify the public of its existence.	Procedural control Viva Energy Complaints Hotline	Community Complaints Procedure QHSSE-686-G	Operations Manager	
EPL 570 (version 22 August 2023) - condition M6		MYOSH Incident Management System		
		Records Management System		
		Combined Environmental Document Storage folder		
Competence				
Activities including the processing, handling, movement and storage of materials and wastes must be done in a competent manner.	Communication of Environment Protection Licence requirements to all	Induction records	State Operations Manager	
EPL 570 (version 22 August 2023) - condition O1.1	staff as part of induction			
	Job Competence Profile process	Training records (personnel files)	Training Team	
Emergency Procedures and Response				
The facility must prepare, test, implement and keep a Pollution Incident	Emergency Response, training and	Emergency Response Manual	Operations	
Response Management Plan Part 5.7A of the POEO Act	exercises	Records of PIRMP testing/ Emergency response training records	Coordinator	
		Pollution Incident Response Management Plan (PIRMP)		

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