

Environmental Management Manual

Clyde Terminal

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Introduction

About this manual

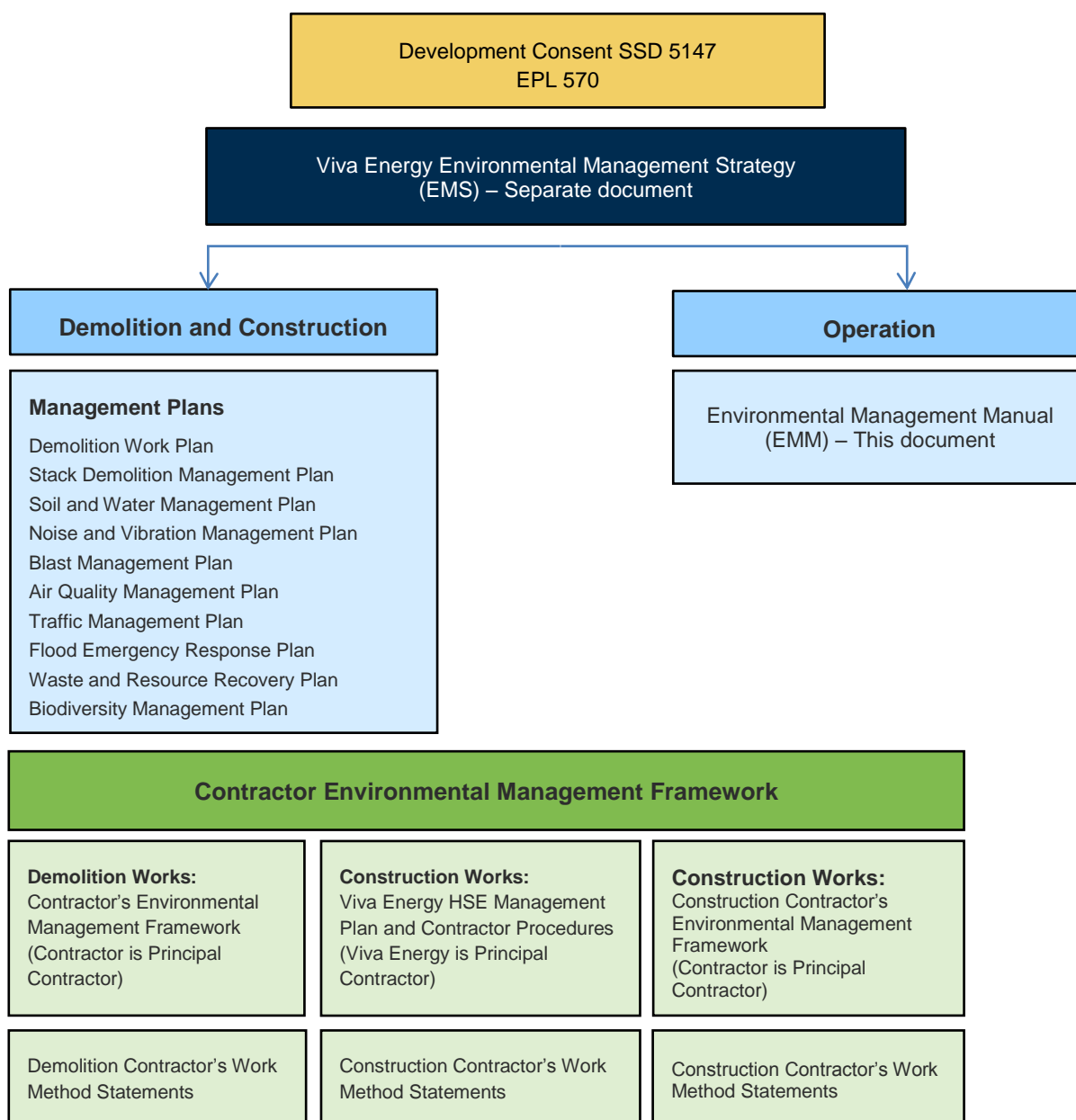
The purpose of this Environmental Management Manual (EMM) is to provide information on essential environmental activities required to maintain environmental compliance at Clyde Terminal (facility).

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 & SP 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.



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 **Sydney 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 & SP Management System

Viva Energy operates in accordance with an integrated Health, Safety, Security, the Environment & Social Performance Management System (HSSE & SP MS). A detailed description of the systematic management approach to HSSE & SP to be used at the facility is available on the Viva Energy intranet.

The key elements of the HSSE & SP 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 & SP MS specific to the facility. The EMM is one of the tools to be used at the facility to achieve Viva Energy's HSSE & SP 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.

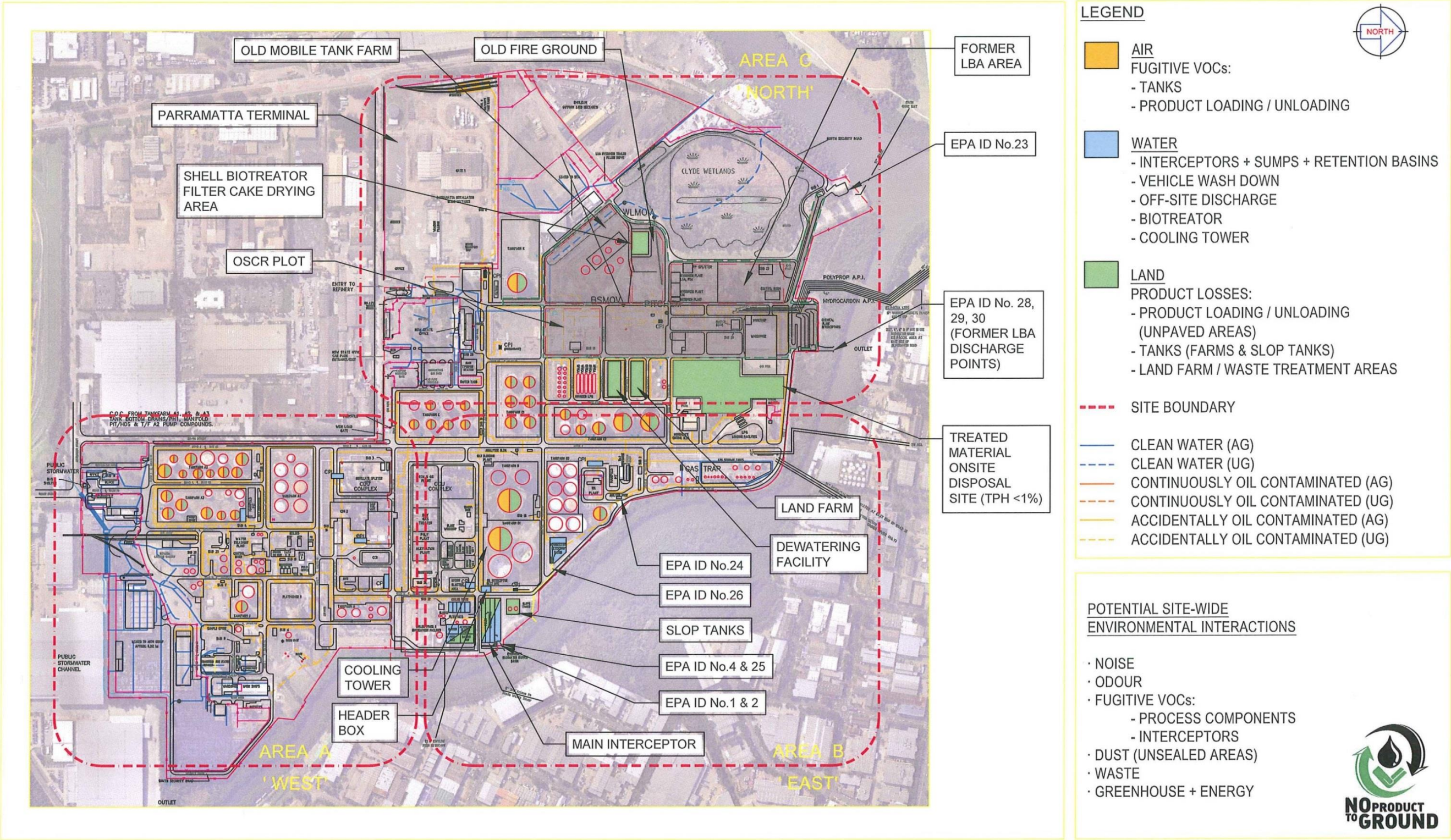
Where operational activities involve waste water handling and the release of water from the source (e.g. tank compound bund draining, tank water draining and interceptor operations), site specific operating procedures are included.

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

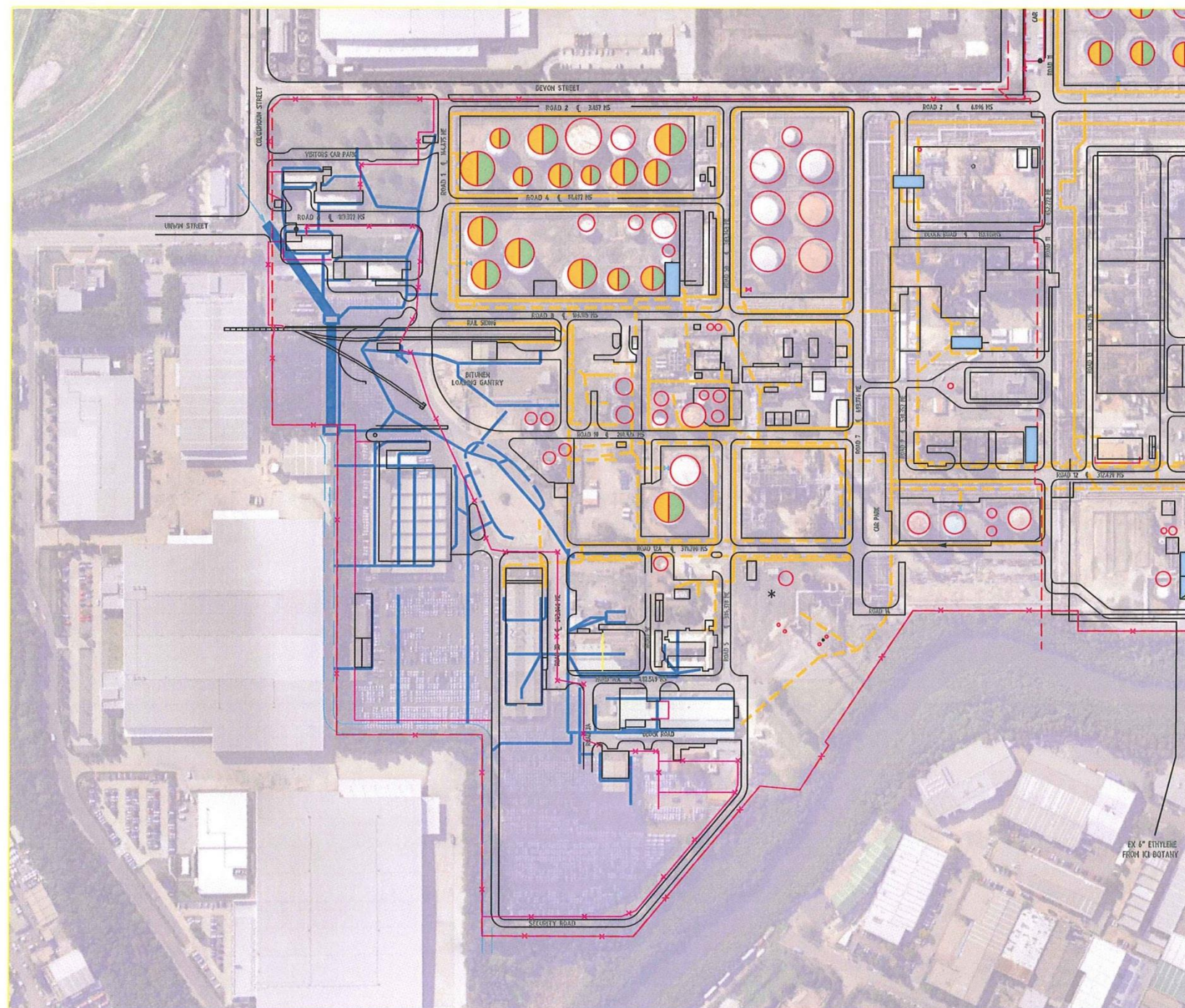
Key Site Environmental Interactions

VIVA EnergyAustralia KEY SITE ENVIRONMENTAL INTERACTIONS

CLYDE TERMINAL



CLYDE TERMINAL



AREA A 'WEST'

LEGEND

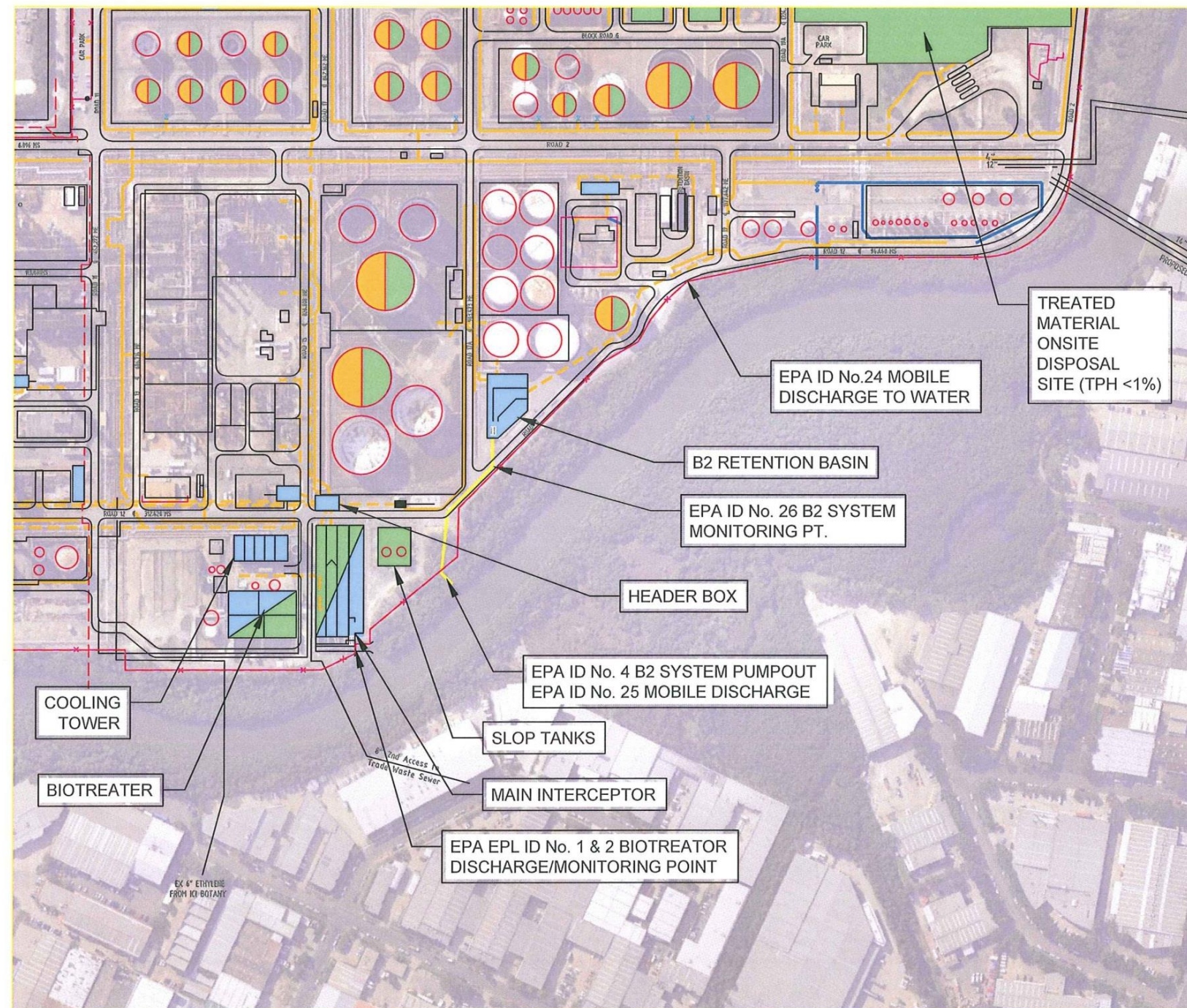
- AIR**
FUGITIVE VOCs:
- TANKS
- PRODUCT LOADING / UNLOADING
- WATER**
- INTERCEPTORS + SUMPS + RETENTION BASINS
- VEHICLE WASH DOWN
- OFF-SITE DISCHARGE
- BIOTREATOR
- COOLING TOWER
- LAND**
PRODUCT LOSSES:
- PRODUCT LOADING / UNLOADING (UNPAVED AREAS)
- TANKS (FARMS & SLOP TANKS)
- LAND FARM / WASTE TREATMENT AREAS
- SITE BOUNDARY
- CLEAN WATER (AG)
- - - CLEAN WATER (UG)
— CONTINUOUSLY OIL CONTAMINATED (AG)
- - - CONTINUOUSLY OIL CONTAMINATED (UG)
— ACCIDENTALLY OIL CONTAMINATED (AG)
- - - ACCIDENTALLY OIL CONTAMINATED (UG)

POTENTIAL SITE-WIDE ENVIRONMENTAL INTERACTIONS

- NOISE
- ODOUR
- FUGITIVE VOCs:
 - PROCESS COMPONENTS
 - INTERCEPTORS
- DUST (UNSEALED AREAS)
- WASTE
- GREENHOUSE + ENERGY



CLYDE TERMINAL



AREA B 'EAST'

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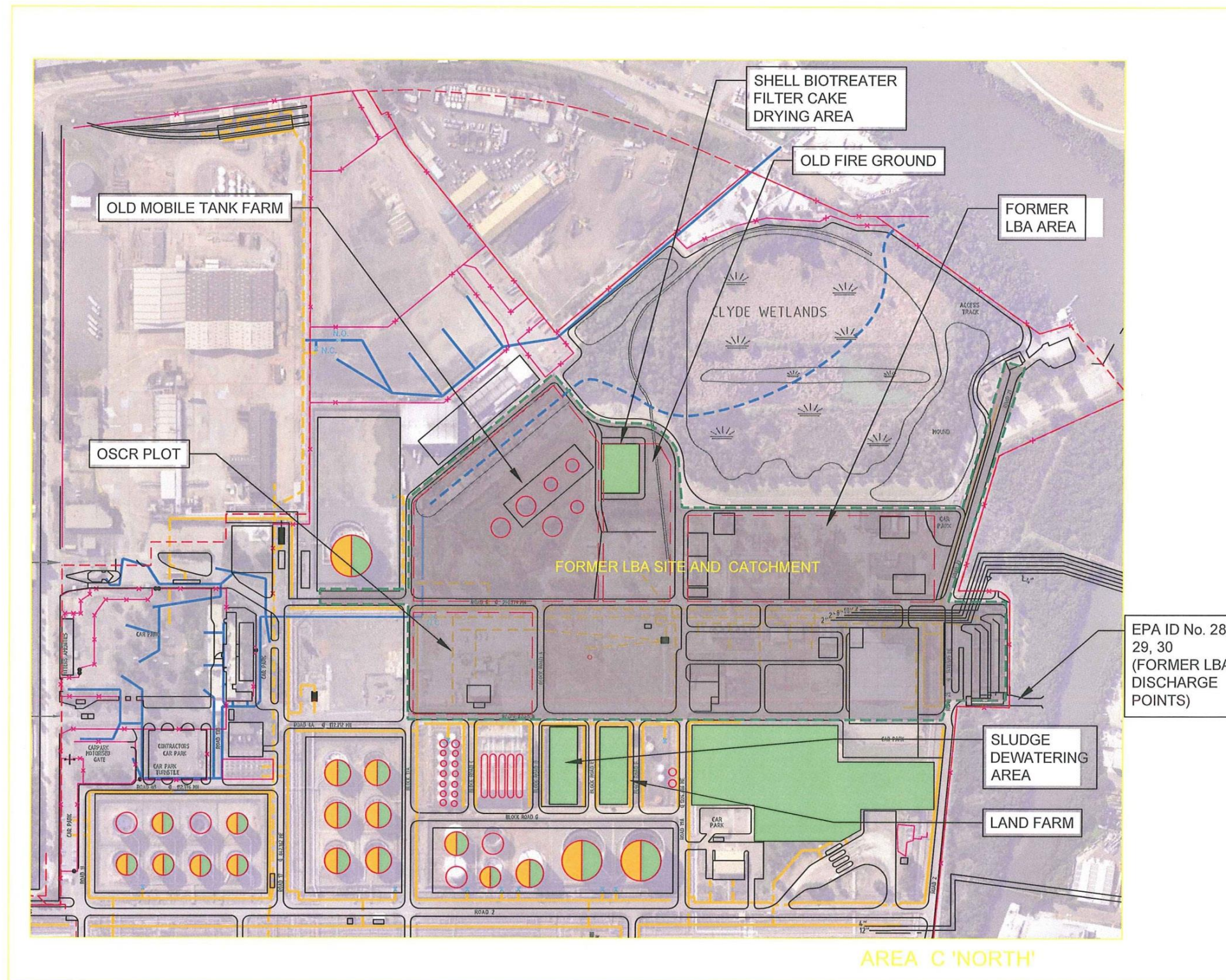
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Environmental Compliance Requirements and Control Barriers for Operations

Noise									
Requirement				Control Barrier		Compliance Documentation	Responsibility		
Noise Limits The Applicant shall ensure that noise from the operation does not exceed the limits in Table 1.				Noise levels to be observed and above normal levels recorded in the daily log during regular site surveillance. Non-routine work conducted under permit conditions.		Documented routine site surveillance and assurance Operational Logs Permit to Work Parramatta and Clyde Terminal Industrial Hygiene Noise Survey Community Complaints Procedure QHSSE-686-G Health Risk Assessment (Viva Energy OneHealth IT)	Operators Permit Issuer Operations Manager Operations Manager and Viva Energy Health		
Table 1: Noise Limits (dB(A))									
Noise Receiver Location	Location	Day LAeq (15 min)	Evening LAeq (15 min)					Night	
								LAeq (15 min)	LAeq (1 min)
R1-R3	Any residence in the suburb of Rosehill	38	38					35	45
R4	Any residence in the suburb of Silverwater	37	37					36	45
R5	Any residence in the suburb of Newington	36	36	35	45				
R6-R7	Any residence in the suburb of Rydalmere	40	40	36	45				
Development Consent SSD 5147, 14 January 2015, condition C21									
Hours of Work The Applicant shall comply with the hours detailed in Table 2, unless otherwise agreed in writing by the EPA and the Secretary.									

Noise

Requirement	Control Barrier	Compliance Documentation	Responsibility														
<table border="1"><thead><tr><th colspan="3">Table 2: Construction, Demolition & Operation Hours</th></tr><tr><th>Activity</th><th>Day</th><th>Time</th></tr></thead><tbody><tr><td rowspan="2">Construction and Demolition</td><td>Monday – Friday</td><td>7:00am to 6:00pm</td></tr><tr><td>Saturday</td><td>8:00am to 5:00pm</td></tr><tr><td>Operation</td><td>Monday to Sunday</td><td>24 hours</td></tr></tbody></table> <p><i>Development Consent SSD 5147, 14 January 2015, condition C22</i></p> <p>The applicant shall:</p> <ul style="list-style-type: none">a) Implement all reasonable and feasible noise management and mitigation measures to prevent and minimise operations, low frequency and traffic noise generated during operation;b) 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; andc) Regularly assess noise monitoring data and relocate, modify and/or stop operations to ensure compliance with the relevant conditions of this consent. <p><i>Development Consent SSD 5147, 14 January 2015, condition C24</i></p>	Table 2: Construction, Demolition & Operation Hours			Activity	Day	Time	Construction and Demolition	Monday – Friday	7:00am to 6:00pm	Saturday	8:00am to 5:00pm	Operation	Monday to Sunday	24 hours			
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Operation	Monday to Sunday	24 hours															

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. <i>Viva Energy Requirement</i> The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises. <i>Licence 570 21 Nov 2016 condition O3.1</i>	Dust levels to be observed and above normal levels recorded during regular site surveillance. LOD1 and LOD2 Non-routine work conducted under permit conditions	Documented routine site surveillance and assurance (Operational Logs) Community Complaints Procedure QHSSE-686-G Permit to Work (Permit issuers records)	Operator Operations Manager Permit Issuer
Dust Minimisation The applicant shall carry out reasonable and feasible measures to minimise dust generated during operations <i>Development Consent SSD 5147, 14 January 2015, condition C28</i>			
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>Licence 570 21 Nov 2016 condition L6.1</i>	Odour levels to be observed and above normal levels recorded during regular site surveillance. Non-routine work conducted under permit conditions	Documented routine site surveillance and assurance (Operational Logs) Community Complaints Procedure QHSSE-686-G Permit to Work (Permit issuers records)	Operator Operations Manager Permit Issuer
Offensive Odour 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>			

Air Quality

Requirement	Control Barrier	Compliance Documentation	Responsibility
Volatile Organic Compounds 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. <i>Licence 570 21 Nov 2016 conditions L2.1 & L2.2</i>	Procedural control and trigger to re-perform load determination at yearly intervals	Monitored via internal reporting, calculated through consultants for Annual Return, and NPI reporting (<i>Environmental data file</i>)	Operations Manager Environmental Advisor
Operational Air Quality Monitoring Program The applicant shall prepare and implement an Air Quality Monitoring Program for the operation. The plan shall: <ul style="list-style-type: none"> a) Be prepared and implemented by a suitable qualified and experienced expert; b) Be prepared in consultation with the EPA; c) Be submitted to the Secretary for approval within 3 months of the date of this consent; d) 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; e) Includes record keeping, a complaints register and response procedure and compliance reporting. <i>Development Consent SSD 5147, 14 January 2015, condition C30.</i>	Measures cited in AQMP Routine site surveillance Non-routine works conducted under permit conditions	AQMP 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 Environmental Advisor Operators Permit Issuer

Air Quality

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Meteorological Monitoring</p> <p>During the life of the Development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements of the EPA.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C32.</i></p>	BOM Parramatta North Station	Maintained by BOM, data available from BOM	BOM

Energy Efficiency and Greenhouse Gas Emissions

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

Water

Requirement	Control Barrier	Compliance Documentation	Responsibility
Foreshore Management <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C48.</i></p>	<p>Designated storage areas outside of inter-tidal area.</p> <p>Non-routine works conducted under permit conditions</p>	<p>Operational Surveillance</p> <p>Permit to Work</p>	<p>Operators</p> <p>Permit issuer</p>

Water

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Discharge Limits</p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C46.</i></p> <p>The Applicant shall ensure that signs are displayed and maintained adjacent to all stormwater drains on the site clearly indicating "Stormwater Only".</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C47.</i></p> <p>Water and Wastewater Discharges</p> <p>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>.</p> <p><i>Licence 570 21 Nov 2016 condition L1.1</i></p> <p>Concentration limits in discharges must be within the limits of the licence</p> <p><i>Licence 570 21 Nov 2016 condition L3.4</i></p>	<p>Scheduled monitoring and maintenance of drains (JDE)</p> <p>Site surveillance to confirm that detergents not in use</p> <p>Operational Surveillance in accordance with Local Operating Procedure to record discharge appearance daily. Operator response to observed changes and/or non-compliant discharge</p> <p>Monitoring of discharge through sampling and laboratory analysis</p>	<p>Documentation of scheduled monitoring and maintenance of drains</p> <p>Operational Surveillance in accordance with site specific operating procedure to record discharge appearance daily (<i>Operational Logs</i>)</p> <p>Results to be kept on file (<i>Operational Logs, SGS data base</i>)</p>	<p>Maintenance Coordinator</p> <p>Operators</p>

Water

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Discharge limits for licensed discharge points can be found in EPL 570.</p> <p>Non-licensed discharge points are subject to POEO Act 1997 regulations.</p>	<p>Minimise spills to <u>As Low As Reasonably Practicable</u> (ALARP)</p> <p>Control Barriers include:</p> <ul style="list-style-type: none"> • Design Engineering Practices/Manuals • Operations Surveillance and Assurance • Conduct Maintenance • Operating within equipment limits • Asset integrity programs • HiHi level alarms • Stock reconciliation • Tank bunds 	<p>HSSE Case</p> <p>HEMP ALARP Documentation</p> <p>Stock reconciliation data</p> <p>Maintenance records</p> <p>Emergency Response Manual</p> <p>Pollution Incident Response Management Plan (PIRMP)</p>	<p>Operations Manager</p> <p>Stocks and Admin team</p> <p>Maintenance Manager</p> <p>Operations Manager</p>
<p>Volumes of discharge must be measured and must not exceed the volume specified for that discharge point per Licence 570 21 Nov 2016 condition L4.1</p>	<p>Record and monitor flow rates</p>	<p>Flow rate records</p>	<p>Operations Manager</p>

Water/Land

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Storage</p> <p>Chemical storage onsite to comply with EPL 570</p> <p>The applicant shall not store in excess of:</p> <ul style="list-style-type: none"> a) 264 ML of finished petroleum products b) 1,550 cubic metres (M³) of petroleum gases; <p>On the site at any one time, unless otherwise agreed in writing by the Secretary.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition B5.</i></p>	<p>Management of Change (MOC) if proposed change to site product storage capacity. QHSSE-001-P – 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 qty limits</p>	<p>MOC documentation</p>	<p>Operations Manager</p>
<p>Tank Storage</p> <p>All above ground tanks containing material that is likely to cause environmental harm must be bunded or have alternative spill containment in place.</p> <p><i>Licence 570 21 Nov 2016 condition O5.2</i></p> <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.</p> <p><i>Licence 570 21 Nov 2016 condition O5.3</i></p> <p>Bunding</p> <p>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</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C49.</i></p>	<p>Management of Change if proposed change to site product storage capacity. QHSSE-001-P</p>	<p>MOC documentation</p>	<p>Operations Manager</p>

Water/Land

Requirement	Control Barrier	Compliance Documentation	Responsibility
Imported Soil The Applicant shall: <ul style="list-style-type: none"> a) Ensure that only VENM or ENM or other material approved in writing by the EPA is used as fill on the Site; b) Keep accurate records of the volume and type of fill to be used; and c) Make these records available to the Department upon request. <i>Development Consent SSD 5147, 14 January 2015, condition C43.</i>	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

Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Waste Generation and Disposal</p> <p>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>.</p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C52.</i></p> <p>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 in the area marked "Treated Material Onsite Disposal Site (TPH <1%) on the Licenced Discharge Points Plan (drawing number CLR_0122667_004 Rev F titled "Clyde Terminal, EPL No 570, Licensed Discharge Points").</p> <p><i>Licence 570 21 Nov 2016 condition L5.10</i></p>	<p>No waste accepted on site unless from locations specified in Environment Protection Licence 570</p>	<p>Waste Management Manual (QHSSE-307-P)</p> <p>Consignment Authorisation</p> <p>Electronic waste tracking documentation</p>	<p>Operators</p> <p>Maintenance Coordinator</p> <p>Regional Operations Support Coordinator</p>

Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
Waste Storage <p>The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity must be carried out in a competent manner.</p> <p><i>Licence 570 21 Nov 2016 condition O1.1</i></p>	<p>Waste stored in designated areas</p> <p>Transport, disposal and treatment conducted according to regulation and procedures</p> <p>Management of Change if proposed change to site waste generation and storage capacity QHSSE-001-P</p>	<p>Waste Management Manual (QHSSE-307-P)</p> <p>Management of Change Documentation (held by Regional Operations Support Coordinator)</p>	<p>Operations Manager</p>
Waste Classification <p>Waste generated or stored at the facility must be assessed and classified in accordance with EPA Waste Classification Guidelines.</p> <p><i>Licence 570 21 Nov 2016 condition O4.1</i></p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C51.</i></p> <p>The Applicant shall retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C56.</i></p>	<p>Visual observation of waste</p> <p>Sampling and analysis where required</p> <p>Classification according to guidelines and procedure</p> <p>Storage appropriate to classification</p> <p>Segregation of solid wastes</p>	<p>Waste Management Manual (QHSSE-307-P)</p> <p>Consignment Authorisation</p> <p>Electronic waste tracking documentation</p>	<p>Operators</p> <p>Maintenance Coordinator</p> <p>Regional Operations Support Coordinator</p>

<p>Waste Management On Site</p> <p>Only the hazardous and/or liquid and/or restricted solid waste listed below may be treated, processed, reprocessed or disposed of at the Clyde Terminal:</p> <ul style="list-style-type: none"> • Waste resulting from the surface treatment of metals and plastics; • Basic solutions or bases in solid form; • Waste oil/water, hydrocarbons/water mixtures or emulsions; • Highly odorous organic chemicals (including mercaptans and acrylates); • Soils contaminated with a controlled waste; • Encapsulated, chemically-fixed, solidified or polymerised wastes; and • Residues from industrial waste treatment/disposal options. <p><i>Licence 570 21 Nov 2016 condition L5.7</i></p> <p>Waste, including biotreater filter cake, soil contaminated with hydrocarbons, treated soil contaminated by hydrocarbons, and dewatered oily sludge must be treated in the areas defined on drawing number CLR_0126667_0004 Rev G titled "Clyde Terminal, EPL No 570, Licensed Discharge Points".</p> <p><i>Licence 570 21 Nov 2016 condition O4.2 – 4.5, O5.4</i></p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C53.</i></p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C54.</i></p>	<p>Visual observation of waste</p> <p>Sampling and analysis where required</p> <p>Classification according to guidelines and procedure</p> <p>No Treatment activities conducted on site outside of designated areas</p>	<p>Consignment Authorisation</p> <p>Electronic waste tracking documentation</p> <p>Waste Management Manual (QHSSE-307-P)</p>	<p>Operators</p> <p>Maintenance Coordinator</p>
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Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C55.</i></p>			
<p>Recycling</p> <p>All waste identified for recycling must be stored separately from other wastes.</p> <p><i>Licence 570 21 Nov 2016 condition O5.1</i></p>	<p>Waste classification and segregation</p> <p>Induction Process</p>	<p>Consignment Authorisation</p> <p>Electronic waste tracking documentation</p> <p>Waste Management Local Waste Management Manual (QHSSE-307-P)</p>	<p>Operators</p> <p>Maintenance Coordinator</p>
<p>Waste Tracking</p> <p>Only the following waste products may be received at the Clyde Terminal premises from Gore Bay Terminal or Parramatta Terminal:</p> <ul style="list-style-type: none"> Waste mineral oils unfit for their original intended use; Waste oil/water, hydrocarbons/water mixtures or emulsions; Highly odorous organic chemicals (including mercaptans and acrylates); and Soils contaminated with a controlled waste. <p><i>Licence 570 21 Nov 2016 condition L5.4</i></p> <p>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.</p> <p><i>Licence 570 21 Nov 2016 condition L5.5</i></p>	<p>No waste accepted on site unless from locations specified in Environment Protection Licence 570</p> <p>Visual observation of waste</p> <p>Sampling and analysis where required</p> <p>Classification according to guidelines and procedure</p> <p>No disposal of waste soil on site outside of designated areas</p>	<p>Consignment Authorisation</p> <p>Electronic waste tracking documentation</p> <p>Waste Management Local Waste Management Manual (QHSSE-307-P)</p>	<p>Operators</p> <p>Maintenance Coordinator</p>

Waste Management

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Only waste oil/water, hydrocarbons/water mixtures or emulsions may be received at Clyde Terminal via pipeline only from the Sydney Metropolitan Pipeline or from Sydney JUHI for treatment, processing, reprocessing or disposal at the premises without the need for waste tracking.</p> <p><i>Licence 570 21 Nov 2016 condition L5.6</i></p> <p>Waste Management Plan</p> <p>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:</p> <ul style="list-style-type: none"> (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. <p><i>Development Consent SSD 5147, 14 January 2015, condition C57.</i></p>			

Biodiversity

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Biodiversity Management Plan</p> <p>The Applicant shall update and implement the Biodiversity Management Plan for the Development to the satisfaction of the Secretary. This plan must:</p> <ol style="list-style-type: none"> Be prepared in consultation with Council and OEH; Be approved by the Secretary prior to the commencement of construction or demolition; 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; Include an updated Plan of Management: Restoration of Green and Golden Bell Frog Habitat, Clyde, October 2013 for the construction, demolition and operation, incorporating: <ul style="list-style-type: none"> Specific measures to be implemented such as frog-proof fences to exclude Green and Golden Bell frogs from construction and demolition areas; Plans for on-going implementation and on-going management of artificial breeding habitats; Monitoring protocols including long-term low frequency frog monitoring and <i>Gambusia</i> monitoring program of the ponds and artificial breeding habitats; Active management procedures for ensuring ponds remain free of <i>Gambusia</i> including manually drying our small and intermediate ponds on an annual basis; Include an updated Wetland Management Plan to include the creation of habitat opportunities for the Green and Golden Bell Frog; and Include a pest, vermin and noxious weed management plan. <p><i>Development Consent SSD 5147, 14 January 2015, condition C58</i></p>	<p>Scheduled monitoring and maintenance of wetlands (JDE)</p> <p>Site surveillance to confirm condition of wetlands</p> <p>Operator response to observed changes and/or non-compliant conditions</p> <p>Non-routine works conducted under permit conditions</p>	<p>Wetlands Management Plan (dated 4 March 2007)</p> <p>Site surveillance records</p> <p>Permit to work</p>	<p>Operations Manager</p> <p>Maintenance Manager</p> <p>Operators</p> <p>Permit Issuer</p>

Operations & Maintenance

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Equipment Maintenance</p> <p>Plant and equipment must be maintained and operated in a proper manner.</p> <p><i>Licence 570 21 Nov 2016 condition O2.1</i></p> <p>Operation of Plant and Equipment</p> <p>The applicant shall ensure that all plant and equipment used for the Development is:</p> <ul style="list-style-type: none"> a) Maintained in a proper and efficient condition; and b) Operated in a proper and efficient manner. <p><i>Development Consent SSD 5147, 14 January 2015, condition B11</i></p>	<p>Programmed Maintenance (JDE)</p> <p>Maintenance notification system to identify non-programmed maintenance, as required</p> <p>Calibration of maintenance equipment</p>	<p>Maintenance records (<i>Operational Logs</i>)</p>	<p>Operations Manager</p>
<p>Signage</p> <p>The location of EPA point numbers 1, 2, 4, 23, 24, 25, 26 and 30 must be 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.</p> <p><i>Licence 570 21 Nov 2016 condition G2.1.</i></p>	<p>Programmed maintenance (JDE)</p> <p>Maintenance notification system to identify non-programmed maintenance, as required</p> <p>Calibration of maintenance equipment</p>	<p>Maintenance records (<i>Operational Logs</i>)</p>	<p>Operations Manager</p>

Operations & Maintenance

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Transport and Access</p> <p>The applicant shall ensure that:</p> <ul style="list-style-type: none"> a) The operation does not result in any vehicles queuing on the public road network; b) Heavy vehicles and bins associated with operation do not park or stand on local roads or footpaths in the vicinity of the site; c) All loading and unloading of materials is carried out on site; d) The proposed turning areas in the car park are kept clear of an obstacles, including parked cars, at all items; e) All trucks entering or leaving the site with loads have their loads covered; f) Trucks associated with operation do not track dirt onto the public road networks; and g) Heavy vehicles use designated routes to minimise impacts on the local and regional road network. <p><i>Development Consent SSD 5147, 14 January 2015, condition C34.</i></p> <p>Car Parking</p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C35.</i></p>	<p>Facility Design</p> <p>Site surveillance</p> <p>Maintenance</p> <p>Induction and training</p>	<p>Environmental Management Strategy – Clyde Terminal (issued 27 April 2015)</p>	<p>Operations Manager</p>

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Obligation to Minimise Harm to the Environment</p> <p>The Applicant Shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, demolition or operation of the Development.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition B1.</i></p> <p>Compliance</p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition B19.</i></p> <p>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.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition B20.</i></p> <p>Signage</p> <p>The Applicant shall no install any advertising signs on site without the written consent of the Secretary</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C64</i></p>	<p>Facility Design</p> <p>Site surveillance</p> <p>Maintenance</p> <p>Induction and training</p>	<p>Environmental Management Strategy – Clyde Terminal (issued 27 April 2015)</p>	<p>Operations Manager</p>

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Records</p> <p>Monitoring results must be retained in a legible form for 4 years and made available on request.</p> <p><i>Licence 570 21 Nov 2016 condition M1.2</i></p> <p>Any complaints received must be recorded (as detailed in condition M5.2) and retained in a legible form for 4 years and made available on request.</p> <p><i>Licence 570 21 Nov 2016 condition M5.1 - 5.4</i></p> <p>The Applicant shall retain all sampling and waste classification data for the life of the Development in accordance with the requirements of the EPA.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition C56.</i></p> <p>Details of any samples taken must be recorded as set out in condition M1.3</p> <p><i>Licence 570 21 Nov 2016 condition M1.3</i></p> <p>Copy of annual report must be retained for 4 years.</p> <p><i>Licence 570 21 Nov 2016 condition R1.7</i></p> <p>Copy of licence must be kept on site, accessible to site personnel, and made available to EPA officers on request.</p> <p><i>Licence 570 21 Nov 2016 condition G1.1 - 1.3</i></p>	<p>Completion of documentation at the time of sampling</p> <p>All records retained on site and electronically</p> <p>Records retained by analytical laboratory</p> <p>Licence retained on site and available online</p> <p>Annual returns retained onsite and electronically</p>	<p>Monitoring results incident records, written notification</p> <p>Management of Change process Document QHSSE-001-P</p> <p>Emergency Response procedure</p>	<p>Operations Manager</p>

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Access to Information</p> <p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>a) Make the following information publically available on its website:</p> <ul style="list-style-type: none"> • The EIS • Current statutory approvals for the Development; • Approved strategies, plans or programs; • 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; • A complaints register, updated on a quarterly basis; • Copies of any annual reviews (over the last 5 years); • Any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • Any other matter required by the secretary; and <p>b) Keep this information up to date.</p> <p>Development Consent SSD 5147, 14 January 2015, condition D9.</p>			

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>Notification</p> <p>The licensee must notify the EPA if it is unable to calculate the actual pollutant load by the annual return deadline.</p> <p><i>Licence 570 21 Nov 2016 condition R1.6</i></p> <p>EPA must be notified of any incidents or potential environmental harm by immediate telephone and written details within 7 days.</p> <p><i>Licence 570 21 Nov 2016 condition R2.1-R2.2</i></p> <p>Incident Reporting</p> <p>Within 24 hours of the occurrence of an incident that causes (or may cause) harm to the environment, the Applicant shall notify the Secretary and any other relevant agencies of the incident</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition D5.</i></p> <p>Within 7 days of the detection of an incident, the applicant shall provide the Se4cretay and any relevant agencies with a detailed report of the incident.</p> <p><i>Development Consent SSD 5147, 14 January 2015, condition D6.</i></p>	<p>Communication with regulator according to regulation and procedure</p>	<p>Monitoring results, Incident records, Written notification Emergency Response Manual Pollution Incident Response Management Plan (PIRMP) Viva Energy Incident Notification (Viva Energy intranet) Document: NSW Supply Chain Regulatory Notification Guide (QHSSE-677-G)</p>	<p>Operations Manager</p>
<p>Reporting</p> <p>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.</p> <p><i>Licence 570 21 Nov 2016 condition R1.1 - 1.5</i></p> <p>Annual return must be certified and signed by the licence holder or person approved by EPA.</p> <p><i>Licence 570 21 Nov 2016 condition R1.8</i></p> <p>Upon request, a written report must be provided to EPA regarding an event at the premises, and further details where necessary.</p> <p><i>Licence 570 21 Nov 2016 condition R3.1 - 3.4</i></p>	<p>Procedural control notification of requirement via JDE</p> <p>Communication from Environmental Protection Authority</p>	<p>Monitoring results, incident records, written notification Annual returns and reviews</p>	<p>Operations Manager</p> <p>Environment Lead</p>

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
<p>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:</p> <ol style="list-style-type: none"> Describe the construction and demolition activities that were carried out in the previous calendar year, and the construction and demolition activities proposed to be carried out in the coming calendar year; Include a comprehensive review of the monitoring results and complaints records of the Development over the previous calendar year, which includes a comparison of these results against: <ul style="list-style-type: none"> The relevant statutory requirements, limits or performance measures/criteria; The monitoring results of previous years; and The relevant predictions in the EIS; Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; Identify any trends in the monitoring data over the life of the Development; Identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and Described what measures will be implemented over the current calendar year to improve the environmental performance of the Development. <p><i>Development Consent SSD 5147, 14 January 2015, condition D6.</i></p>	<p>Procedural control notification of requirement via JDE</p>	<p>Monitoring results, incident records, written notification</p> <p>Annual returns and reviews</p>	<p>Operations Manager</p> <p>Environment Lead</p>

Administration

Requirement	Control Barrier	Compliance Documentation	Responsibility
Complaints The licensee must operate a telephone complaints line and notify the public of its existence. This must be in place within 3 months of licence issue. <i>Licence 570 21 Nov 2016 condition M6</i>	Procedural control Viva Energy Complaints Hotline	Community Complaints Procedure QHSSE-686-G myosh Incident Management System Records Management System Combined Environmental Document Storage folder	Operations Manager
Competence Activities including the processing, handling, movement and storage of materials and wastes must be done in a competent manner. <i>Licence 570 21 Nov 2016 condition O1.1</i>	Communication of Environment Protection Licence requirements to all staff as part of induction Job Competence Profile process	Induction records Training records (personnel files)	Regional Operations Manager Training Team
Emergency Procedures and Response The facility must prepare, test, implement and keep a Pollution Incident Response Management Plan <i>Part 5.7A of the POEO Act</i>	Emergency Response, training and exercises	Emergency Response Manual Records of PIRMP testing/ Emergency response training records Pollution Incident Response Management Plan (PIRMP)	Operations Coordinator

Document control table

DOCUMENT CONTROL TABLE		
Issue date	Document changes made and approved by owner	MoC # if change to procedure/process
30-Jun-2014	New Document	n/a
09-Oct-2014	Rebrand to Viva Energy Australia	n/a
07-Jun-2015	Updated based on EPA feedback	n/a
09-May-2018	Updated based on changes to EPL570, water management plan (old document number CGBT-OPS-330-M) OPS-076-M. EMM and OPS-076-M both relocated from local Document Management system and inserted into National Supply Chain Document Management System with new document number (previously CGBT-HSE-037-M) OPS-075-M. Updated document references for Waste Management, Complaints Procedure, Incident Notification. Changed Maintenance system from SAP to JDE.	n/a
Process Owner (Author/SME):	Adam Speers, Environment Lead	
	Responsibilities: <ul style="list-style-type: none">Approves content in consultation with the Document Owner.	
Document Owner (Asset Owner):	Trent Youlten, Terminal Manager	
	Responsibilities: <ul style="list-style-type: none">Ensures updates are made in consultation with the Process Owner if applicableManages and replaces printed copies approved for business useNotifies stakeholders when a new version is issuedEnsures updates are made using our Change Management and Document Control process.	
Distribution - the document will be distributed as follows		
*	Intranet (Clyde > HSSE Documents)	
Next review:		09-May-2023 (Standard 5 Yearly Review)
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